Punjab School Filucation Board



Syllabus -XII Session 2020-21

SCHEME OF STUDIES (ACADEMIC STREAM) FOR Senior Secondary (12th Class) Examination

(a) Compulsory Subjects:

Every candidate shall offer the following subjects:

S. No.	Subject	Theory	Practical	Project work/Internal Assessment	Total Marks
1.	General English	80		20	100
2.	General Punjabi Or Punjab History and Culture	80 80		20 20	100 100
3.	Environmental Education	45		05	50
4.	Computer Science	50	45	5	100

Important Note:

- 1. It is mandatory to get minimum 33% marks in theory and practical separately. No minimum marks are required in internal assessment but it is mandatory to get 33% marks in theory, practical and internal assessment in aggregate.
- 2. Every candidate shall offer Environmental Education and Computer Science as compulsory subjects. Examination of these subjects will be conducted externally at the Board level. Evaluation shall be done at Board level and result in the form of Grades as well as Marks will be reflected on the Certificate.
- 3. Internal Assessment/ Project work will consist of subject related project work/assignment/activities/2 marks for book bank, as per the need of the subject.

Note:

- 1. A candidate who has passed the Matriculation Examination from a Board other than the Punjab School Education Board can opt Punjab History and Culture in lieu of the compulsory General Punjabi subject. Such students furnish proof of not having studied Punjabi at the Matric level.
- 2. A candidate who has passed Matriculation Examination from Punjab School Education Board with 'Punjab History and Culture' as a subject can opt for 'Punjab History and Culture' in lieu of compulsory Punjabi in the 12th class.

(b) Elective Subjects:

In addition to the compulsory subjects, every candidate shall offer any of the following groups:

Group I	Humanities
Group II	Science
Group III	Commerce
Group IV	Agriculture

(c) Additional Subjects:

In addition to the three elective subjects offered by a candidate out of the group, a student may offer one additional subject from the same group.

S.No.	Subject	Theory	Practical	Project work/ Internal Assessment	Total Marks
1. I. Ii. Iii. iv.	Language (any one) Punjabi (Elective) Hindi (Elective) English (Elective) Urdu	80 80 80 80		20 20 20 20	100 100 100 100
2. i.	Classical/Foreign Language (any one) Sanskrit OR	80		20	100
ii. iii.	French German	80 80	20 20		100 100
3.	History	80		20	100
4.	Economics	80		20	100
5.	Mathematics	80		20	100
6.	Business Studies	80		20	100
7.	Accountancy (Syllabus same as Commerce Group)	80	15	5	100
8.	Political Science	80		20	100
9.	Sociology	80		20	100
10.	Public Administration	80		20	100
11.	Philosophy	80		20	100
12.	Religion	80		20	100
13.	Geography	70	25	5	100
14.	Defense Studies	80		20	100
15.	Psychology	70	30		100
16.	History and Appreciation of Art	90		10	100
17.	Computer Application	60	35	5	100
18.	Agriculture	70	20	10	100
19.	Home Science	70	25	5	100
20.	Music (Vocal)	45	50	5	100
21.	Gurmat Sangeet	45	50	5	100
22.	Music (Instrumental)	45	50	5	100
23.	Music (Tabla)	45	50	5	100
24.	Music (Dance)	45	50	5	100

HUMANITIES GROUP Every candidate shall offer any three elective subjects from the following.

25.	Physical Education and Sports	20	75	5	100
26.	Drawing and Painting		80	20	100
27.	Commercial Art		80	20	100
28.	Modeling and Sculpture		80	20	100
29.	Media Studies	80	20		100

Important Note:

- 1. It is mandatory to get minimum 33% marks in theory and practical separately. No minimum marks are required in internal assessment but it is mandatory to get 33% marks in theory, practical and internal assessment in aggregate.
- 2. Internal Assessment will consist of subject related project work/assignment/activities/2 marks for book bank, as per the need of the subject.
- 3. If a candidate wants to appear in a language other than Punjabi, Hindi, English, Sanskrit, Urdu and French he/she will have to take prior permission from the Director (Academics).

Note:

- 1. Candidates opting for Home Science as an Elective Subject may choose at least one subject from Sociology, Psychology and Economics if they wish to seek admission to higher courses in Home Science.
- 2. The syllabus for Computer Application will be the same as prescribed for the Science Group.
- 3. The syllabus for Agriculture will be the same as prescribed for the Agriculture Group.

SCIENCE GROUP

Every candidate shall offer any three elective subjects from the following.

S.No.	Subject	Theory	Practical	Project work/ Internal Assessment	Total Marks
1.	Physics	70	25	5	100
2.	Chemistry	70	25	5	100
3.	Biology Or	70	25	5	100
	Mathematics	80		20	100
A candidate can offer an additional subject out of the following:					
1.	Geography	70	25	5	100
2.	Home Science	70	25	5	100
3.	Agriculture	70	25	5	100
4.	Biology Or	70	25	5	100

	Mathematics	80		20	100
5.	Computer Application	60	35	5	100
6.	Economics	80		20	100

Important Note:

- 1. It is mandatory to get minimum 33% marks in theory and practical separately. No minimum marks are required in internal assessment but it is mandatory to get 33% marks in theory, practical and internal assessment in aggregate.
- 2. Internal Assessment will consist of subject related project work/assignment/activities/2 marks for book bank, as per the need of the subject.

Note:

- 1. In addition to three elective subjects offered by a candidate in the Science Group, a candidate desiring higher studies in Ayurveda may offer Sanskrit as an additional language. The syllabus of Sanskrit will be the same as prescribed in the Humanities Group.
- 2. The Syllabi in subjects of Economics, Geography, Home Science and Mathematics will be the same as prescribed in the Humanities Group.

S. No.	Subject	Theory	Practical	Project work/ Internal Assessment	Total Marks
1.	Business Studies - II	80		20	100
2.	Accountancy - II	80	15	5	100
3.	Economics Or Fundamentals of E- Business	80 80	15	20 5	100 100

COMMERCE GROUP

Important Note:

- 1. It is mandatory to get minimum 33% marks in theory and practical separately. No minimum marks are required in internal assessment but it is mandatory to get 33% marks in theory, practical and internal assessment in aggregate.
- 2. Internal Assessment will consist of subject related project work/assignment/activities/2 marks for book bank, as per the need of the subject.
- 3. A candidate can also offer one additional subject out of the following:
 - a. Computer Application
 - b. Mathematics
 - c. Economics or Fundamentals of E-Business

Note:

- 1. All the three Elective Subjects i.e. S.No. 1 to 3 are compulsory.
- 2. The syllabus of Computer Application will be the same as prescribed in the Science and Humanities Group.
- 3. The syllabus of Mathematics will be the same as prescribed in the Humanities Group.
- 4. The student who opted Economics in Class-XI as compulsory elective subject will have to opt Economics as compulsory elective subject in Class-XII also.
- 5. The student who opted Modern Office Practices in Class-XI as compulsory elective subject will have to opt Fundamentals of E-Business as compulsory elective subject in Class-XII.

S. No.	Subject	Theory	Practical	Project work/ Internal Assessment	Total Marks
1.	Agriculture	70	25	5	100
2 & 3. Any two of the following:					
i.	Physics	70	25	5	100
ii.	Chemistry	70	25	5	100
iii.	Economics	80		20	100
iv.	Geography	70	25	5	100
A candidate can offer one additional subject out of the following:					
a.	Mathematics	80		20	100
b.	Computer Application	60	35	5	100

AGRICULTURE GROUP

Important Note:

- 1. It is mandatory to get minimum 33% marks in theory and practical separately. No minimum marks are required in internal assessment but it is mandatory to get 33% marks in theory, practical and internal assessment in aggregate.
- 2. Internal Assessment will consist of subject related project work/assignment/activities/2 marks for book bank, as per the need of the subject.

Note:

1. The syllabi in the subjects of Physics, Chemistry and Computer Application will be the same as prescribed in the Science Group and that of Geography, Mathematics and Economics will be the same as in the Humanities Group. **Time: 3hrs**

Theory: 80 Marks IA: 20 Marks (Listening and Speaking skills based practical:18 marks Book bank: 2 marks) Total: 100 Marks

SYLLABUS AND THE STRUCTURE OF QUESTION PAPER SECTION A

READING COMPREHENSION

16 marks

- 1. This section will have two passages.
 - a. One unseen passage with a variety of Objective Type Questions, including Multiple Choice questions and Short Answer Questions to test comprehension, interpretation and inference. The length of this passage will be between 200 - 250 words. Six Multiple Choice type question and four Objective Type Questions (total 10 Marks) shall be asked from this passage. 10x1=10
 - b. Unseen passage for Comprehension. (passage of 150-200 words) followed by two M.C.Q, 2 single line comprehension questions, one question on fill in the blank (two), one question on match the words(two).

SECTION B

WRITING SKILLS, GRAMMAR & TRANSLATION 26 Marks

2. Precis writing (passage of about 150 words)

- Letter writing (only official/ business / to the Editors/ Applications) (one out of any two)
 5 marks
- 4. Explaining Newspaper Headline (15-20 words)/ E-mail writing
 - 3 marks

4 marks

5. a) Translation from English to Punjabi/Hindi (2 sentences out of 3)

2 marks

b) Translation from Punjabi/Hindi to English (2 sentences out of 3)

2 marks

6. Grammar items:

- a. Determiners
- b. Use of Non-finites (Infinitives, Gerunds, Participles)
- c. Transformation of Sentences
- d. Voice
- e. Narration

SECTION C

LITERATURE TEXTBOOKS

38 Marks

3+2+2+1=10 Marks

7. It will consist of 6 objective type questions carrying one mark each. Objective type questions may include questions with one word to one sentence answer **or** fill in the blank **or** true/false **or** multiple choice type questions.

- a Lessons meant for intensive study $3 \times 1 = 3$ b Lessons meant for extensive study $3 \times 1 = 3$
- 8. a) Comprehension question on a given stanza from poetry (4 questions including a question on name of the poet/poem/ Rhyme scheme / Simile / Metaphor / Personification/ Alliteration/ Imagery etc).(1 out of two given stanzas to be attempted)
 4 marks
 - b) Central idea of poem (1 out of 2.) 3 marks
 - Three (out of five) short answer questions of about 40 to 50 words from intensive study.
 3×2=6
- Two (out of four) short answer questions of about 40 to 50 words from extensive study.
 2×2=4
- 11. Long answer questions on theme, incident, content, character etc. from intensive study 100 to 120 words) (with internal choice).

5 marks

5 marks

- 12. Long answer type (100-120 words) question from extensive study on Character/incident/theme etc (with internal choice). 5 marks
- 13. Good handwriting

Listening and Speaking Skills Based Practical Exam -18 marks Listening-10

Speaking-8

- For the listening test students will be given a practice sheet containing 10 questions. They will answer all the ten questions on the basis of an audio clip. Each question will carry 1 mark.
- For the speaking test students will speak 8 correct sentences on the basis of picture and cue words provided in the practice sheet. Each correct sentence will carry 1 mark.

SYLLABUS

UNSEEN PASSAGES FOR TESTING READING SKILLS TEXT BOOK

Section A (Lessons for Intensive study)

1. Hassan's Attendance Problem	Sudha Murthy
2. The March King	Katherine Little Bakeless
3. Thinking Out of the Box: Lateral Thinking	(Adapted from the article
	from Internet)
4. On Saying 'Please'	A. G. Gardiner
5. The Story of My Life	Helen Keller
6. Two Gentlemen of Verona	A. J. Cronin

7.	In Celebration of Being Alive	Dr. Christian Barnard
8.	Gadari Babas in Kalapani Jail	Dr. Harish Puri
Se	ction B (Poetry)	
1.	Prayer of the Woods	Anonymous
2.	On Friendship	Khalil Gibran
3.	The Echoing Green	William Blake
4.	Once upon a Time	Gabriel Okara
5.	Father Returning home	Dilip Chitre
6.	The Road Not Taken	Robert Frost
7.	On His Blindness	John Milton
Se	ction C (Lessons for Extensive study)	
1.	The School for Sympathy	E. V. Lucas
2.	A Chamelon	Anton Chekhov
3.	Bholi	K. A. Abbas
4.	The Gold Frame	R. K. Luxman
5.	The Barber's Trade Union	Mulk Raj Anand
6.	The Bull beneath the Earth	K. S. Virk

GRAMMAR, COMPOSITION & TRANSLATION

Grammar

- 1. Determiners
- 2. Use of Non-finites (Infinitives, Gerunds, Participles)
- 3. Transformation of Sentences
- 4. Voice
- 5. Narration

Composition

- 1. Precis writing
- 2. Letter writing (Official/Business/To Editors)
- 3. Applications
- 4. Explaining Newspaper Headlines
- 5. E-Mail writing

Translation from English to Hindi/Punjabi and Translation form Hindi/ Punjabi to English.

(From Chapter 18 The Art of Translation given in the book English Grammar And Composition for XI and XII)

Note:- Following two lessons & one poem have been deleted from the syllabus from academic session 2020-21 onwards.

Robots and People	Isaac Asimov
On Giving Advice	Joseph Addison
Cheerfulness Taught by Reason	Elizabeth Barret Browning

CLASS-XII ਜਮਾਤ-ਬਾਰ੍ਹਵੀਂ ਪੰਜਾਬੀ ਲਾਜ਼ਮੀ

ਸਮਾਂ: 3 ਘੰਟੇ

ਲਿਖਤੀ= 80 ਅੰਕ ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ= 20 ਅੰਕ ਕੁੱਲ ਅੰਕ= 100 ਅੰਕ

ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਅੰਕ-ਵੰਡ

ਲੜੀ	ਪਾਠ-ਕ੍ਰਮ	ਅੰਕ
ਨੰ.		
1.	ਸੁੰਦਰ ਲਿਖਾਈ	05
2.	ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਦੀ ਜਾਣ-ਪਛਾਣ	26
3.	ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਲਿਖਣ ਦਾ ਹੁਨਰ:ਕਾਰ-ਵਿਹਾਰ ਦੇ ਪੱਤਰ,ਸੰਖੇਪ ਰਚਨਾ	12
4.	ਵਿਆਕਰਨ:ਅਖਾਉਤਾਂ,ਸ਼ਬਦ-ਕੋਸ਼,ਤਰਤੀਬ,ਵਾਕ-ਵਟਾਂਦਰਾ	24
5.	ਪੰਜਾਬੀ ਸਾਹਿਤ:ਕਵਿਤਾਵਾਂ ਅਤੇ ਕਹਾਣੀਆਂ	13
	ਕੁੱਲ ਅੰਕ	80

ਪ੍ਰਸ਼ਨ-ਪੱਤਰ ਦੀ ਰੂਪ-ਰੇਖਾ

ਸਮਾਂ: 3 ਘੰਟੇ ਨੋਟ: ਕੁੱਲ ਅੰਕ (ਲਿਖਤੀ)=80

- (1) 05 ਅੰਕ ਸੁੰਦਰ ਲਿਖਾਈ ਲਈ ਨਿਰਧਾਰਿਤ ਕੀਤੇ ਗਏ ਹਨ।ਇਹ ਅੰਕ ਇਸ ਪ੍ਰਸ਼ਨ-ਪੱਤਰ ਦੇ ਕੁੱਲ ਅੰਕਾਂ-80 ਵਿੱਚ ਹੀ ਰਾਖਵੇਂ ਹਨ।ਸੁੰਦਰ ਲਿਖਾਈ ਵਿੱਚ ਅੱਖਰਾਂ ਤੇ ਸ਼ਬਦਾਂ ਦਾ ਸਹੀ ਆਕਾਰ, ਸਪਸ਼ਟਤਾ, ਨਿਸ਼ਚਿਤ ਦੂਰੀ,ਲਿਖਣ 'ਚ ਇਕਸਾਰਤਾ,ਪ੍ਰਵਾਹਯੁਕਤ ਲੇਖਨ , ਸ਼ਬਦ-ਜੋੜ ਸ਼ੁੱਧਤਾ,ਸੁੰਦਰ ਸ਼ਬਦ-ਬਣਤਰ,ਵਿਸਰਾਮ-ਚਿੰਨਾਂਹ ਦੀ ਸਹੀ ਵਰਤੋਂ ਅਤੇ ਲਿਖਾਈ ਦੇ ਸਮੁੱਚੇ ਖ਼ੂਬਸੂਰਤ ਪ੍ਰਭਾਵ ਦੇ ਆਧਾਰ 'ਤੇ ਪਰੀਖਿਅਕ ਸੰਬੰਧਿਤ ਪਰੀਖਿਆਰਥੀ ਦੀ ਲਿਖਾਈ ਦਾ ਮੁਲਾਂਕਣ ਕਰੇਗਾ।
- (2) ਪ੍ਰਸ਼ਨ-ਪੱਤਰ ਦੇ ਕੁੱਲ 09 ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ।
- (3) ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਲਾਜ਼ਮੀ ਹੋਣਗੇ।

ਵਿਸ਼ੇਸ਼ ਹਿਦਾਇਤਾਂ

ਪਰੀਖਿਆ ਪੱਖੋਂ ਅਧਿਆਪਕਾਂ,ਵਿਦਿਆਰਥੀਆਂ,ਪੇਪਰ-ਸੈੱਟਰਾਂ ਅਤੇ ਪਰੀਖਿਅਕਾਂ ਲਈ ਵਿਸ਼ੇਸ਼ ਹਿਦਾਇਤਾਂ

ਪ੍ਰਸ਼ਨ ਨੰ: 1 ਸਮੁੱਚੇ ਪਾਠ-ਕ੍ਰਮ ਦੇ ਆਧਾਰ 'ਤੇ ਸੰਖੇਪ ਉੱਤਰਾਂ ਵਾਲ਼ੇ ਦਸ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।ਹਰੇਕ ਪ੍ਰਸ਼ਨ 1 ਅੰਕ ਦਾ ਹੋਵੇਗਾ।ਅੰਕਾਂ ਦੀ ਵੰਡ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਹੋਵੇਗੀ:

(ð)	ਪੰਜਾਬੀ ਸੱਭਿਆਚਾਰ ਦੀ ਜਾਣ-ਪਛਾਣ:- ਲੇਖਕ ਦੀ ਰਚਨਾ/ਰਚਨਾ ਦਾ	ਲੇਖਕ,ਗ਼ਲਤ/ਠੀਕ,
	ਬਹੁਚੋਣ,ਖ਼ਾਲੀ ਥਾਂਵਾਂ,ਇੱਕ-ਦੋ ਸ਼ਬਦਾਂ ਦੇ ਉੱਤਰ ਵਾਲ਼ੇ 6 ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।	6 ਅੰਕ
(ਅ)	ਕਵਿਤਾਵਾਂ:- ਕਵਿਤਾ ਦਾ ਕਵੀ/ਕਵੀ ਦੀ ਰਚਨਾ	1 ਅੰਕ
(ष्ट)	ਕਹਾਣੀਆਂ:- ਪਾਤਰਾਂ ਬਾਰੇ	1 ਅੰਕ
(म)	ਅਖਾਉਤਾਂ: - 2 ਅਧੂਰੀਆਂ ਅਖਾਉਤਾਂ ਪੂਰੀਆਂ ਕਰਨੀਆਂ	1+1= 2 ਅੰਕ
	6+1+	1+2= 10 ਅੰਕ
ਪ੍ਰਸ਼ਨ	ਨੰ: 2 ਲਾਜ਼ਮੀ ਪੰਜਾਬੀ-12 ਦੇ ਸੱਭਿਆਚਾਰ-ਭਾਗ ਦੇ ਪਾਠਾਂ ਦੇ ਅਭਿਆਸਾਂ ਵਿੱਚ	ਤੋਂ 8 ਪ੍ਰਸ਼ਨ ਪੁੱਛ ਕੇ
	ਕਿਸੇ 5 ਦਾ ਉੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ।	4*5=20 ਅੰਕ
ਪ੍ਰਸ਼ਨ	ਨੰ:3 ਕਾਰ-ਵਿਹਾਰ ਦੇ ਪੱਤਰ ਲਈ ਦੋ ਵਿਸ਼ੇ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਬਾਰੇ ਪੱਤਰ	ਲਿਖਣ ਲਈ ਕਿਹਾ
	ਜਾਵੇਗਾ।	2+4+1= 7 ਅੰਕ

- ਪ੍ਰਸ਼ਨ ਨੰ:4 ਸੰਖੇਪ ਰਚਨਾ ਕਰਨ ਲਈ ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚੋਂ ਇੱਕ ਪੈਰਾ ਦਿੱਤਾ ਜਾਵੇਗਾ।ਲਗ-ਪਗ ਇੱਕ-ਤਿਹਾਈ ਸ਼ਬਦਾਂ ਵਿੱਚ ਸੰਖੇਪ ਰਚਨਾ ਕਰਨੀ ਹੋਵੇਗੀ।ਇਸ ਦਾ ਸਿਰਲੇਖ ਲਿਖਣਾ ਵੀ ਲਾਜ਼ਮੀ ਹੋਵੇਗਾ। ਸਿਰਲੇਖ ਦਾ 1 ਅੰਕ ਅਤੇ ਸੰਖੇਪ ਰਚਨਾ ਦੇ 4 ਅੰਕ ਹੋਣਗੇ। 1+4=5 ਅੰਕ ਪ੍ਰਸ਼ਨ ਨੰ:5 ਪਾਠ-ਪੁਸਤਕ ਅਤੇ ਪਾਠ-ਅਭਿਆਸਾਂ ਵਿੱਚੋ ਦੋ ਪ੍ਰਸ਼ਨ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਨੂੰ ਕੋਸ਼-ਤਰਤੀਬ ਅਨਸੁਾਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 1*6= 6 ਅੰਕ ਪ੍ਰਸ਼ਨ ਨੰ:6 ਪਾਠ-ਪੁਸਤਕ ਅਤੇ ਪਾਠ-ਅਭਿਆਸਾਂ ਵਿੱਚੋ 8 ਵਾਕ ਦੇ ਕੇ ਕੋਈ 6 ਦਾ ਵਾਕ-ਰੂਪਾਂਤਰਨ ਕਰਨ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 1*6= 6 ਅੰਕ ਪ੍ਰਸ਼ਨ ਨੰ:7 ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚੋਂ ਕੋਈ 8 ਅਖਾਉਤਾਂ ਦੇ ਕੇ 5 ਨੂੰ ਵਾਕਾਂ ਵਿੱਚ ਵਰਤਣ ਜਾਂ ਉਹਨਾਂ ਦੀਆਂ ਵਰਤੋਂ ਦੀਆਂ ਸਥਿਤੀਆਂ ਦੱਸਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 2*5= 10 ਅੰਕ ਪ੍ਰਸ਼ਨ ਨੰ:8 ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚੋਂ 3 ਕਵਿਤਾਵਾਂ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਦਾ ਕੇਂਦਰੀ ਭਾਵ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 4 ਅੰਕ
- **ਪ੍ਰਸ਼ਨ ਨੰ:9** ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚੋਂ 2 ਕਹਾਣੀਆਂ ਦੇ ਕੇ ਕਿਸੇ 1 ਦਾ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਸਾਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 7 ਅੰਕ

ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ: 20 ਅੰਕ

ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ ਦੀਆਂ ਹਿਦਾਇਤਾਂ ਅਤੇ ਅੰਕ-ਵੰਡ

ਲੜੀ	ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ ਦੀ ਰੂਪ-ਰੇਖਾ	ਅੰਕ
ਨੰ.		
1.		10 ਅੰਕ(2+4+4)
	ਪੰਜਾਬੀ ਸਭਿਆਚਾਰ ਵਾਲ ਭਾਗ ਦੇ ਲੱਖਾਂ ਦੀ ਵਿਸ਼ਾ-ਸਮਗਰੀ ਨਾਲ	
	ਸ਼ਿਬਾਧਤ ਹਠ ਲਿਖ ਪ੍ਰਜਕਟ ਬਣਾ ਕ ਸਬਾਧਤ ਵਿਸ਼ਾ-ਆਧਆਪਕ	
	ਕਲ ਮੁਲਾਕਣ ਲਈ ਜੰਮ੍ਹਾ ਕਰਵਾਏ ਜਾਣਗ:	
	1. 02 ਚਾਰਟ	2 ਅੰਕ
	2. 01 ਸਕਰਪ ਬੁਕ (ਸਬੀਧਤ ਵਿਸ਼ ਨਾਲ ਸਬੀਧਤ ਤਸਵੀਰਾ	4 ਅੰਕ
	ਆਦਿ ਦੀ ਸਮਗਰੀ ਵਾਲੀ)	
	3. 01 ਮਾਡਲ ਦਾ ਨਿਰਮਾਣ	4 ਅੰਕ
2.	ਭਾਸ਼ਾਈ ਸਮਰੱਥਾ (ਸ਼ੁੱਧ ਉਚਾਰਨ/ਬੋਲਣ-ਯੋਗਤਾ):	03 ਅੰਕ
	ਵਾਕ-ਵਟਾਂਦਰਾ ਅਤੇ ਸ਼ਬਦ-ਕੋਸ਼ ਤਰਤੀਬ ਵਾਲੇ ਭਾਗ ਨਾਲ ਸੰਬੰਧਿਤ।	
3.	ਭਾਸ਼ਾਈ ਸਮਰੱਥਾ (ਸਰਵਣ/ਸੁਣਨ-ਯੋਗਤਾ):	02
	ਵਾਕ-ਵਟਾਂਦਰਾ ਅਤੇ ਸ਼ਬਦ-ਕੋਸ਼ ਤਰਤੀਬ ਵਾਲੇ ਭਾਗ ਨਾਲ ਸੰਬੰਧਿਤ।	
4.	ਭਾਸ਼ਾਈ ਸਮਰੱਥਾ (ਸ਼ੁੱਧ ਪੜ੍ਹਨ-ਯੋਗਤਾ):	03
	ਵਾਕ-ਵਟਾਂਦਰਾ ਅਤੇ ਸ਼ਬਦ-ਕੋਸ਼ ਤਰਤੀਬ ਵਾਲੇ ਭਾਗ ਨਾਲ ਸੰਬੰਧਿਤ।	
5.	ਪੁਸਤਕ - ਬੈਂਕ/ਬੁੱਕ-ਬੈਂਕ:	02
	ਸੰਬੰਧਿਤ ਵਿਸ਼ੇ ਦੀਆਂ ਪਸਤਕਾਂ ਦੇ ਬੱਕ-ਬੈਂਕ ਵਿੱਚ ਯੋਗਦਾਨ ਪਾੳਣ	
	ਅਤੇ ਉਹਨਾਂ ਦੀ ਸਾਂਭ-ਸੰਭਾਲ ਵਿੱਚ ਕਿਰਿਆਸ਼ੀਲ ਭੂਮਿਕਾ ਨਿਭਾਉਣ	
	ਦੇ ਆਧਾਰ 'ਤੇ ਇਹ ਅੰਕ ਸੰਬੰਧਿਤ ਵਿਸ਼ਾ-ਅਧਿਆਪਕ ਵੱਲੋਂ ਦਿੱਤੇ	
	ਜਾਣਗੇ।	
	ਕੁੱਲ ਅੰਕ	20

ਪੰਜਾਬ ਸਕੂਲ ਸਿੱਖਿਆ ਬੋਰਡ ਵੱਲੋਂ ਨਿਰਧਾਰਿਤ ਪਾਠ-ਪੁਸਤਕ: ਲਾਜ਼ਮੀ ਪੰਜਾਬੀ-12

PUNJAB HISTORY AND CULTURE (2020-21)

Time : 3 Hrs

Theory : 80 Marks Project work/ IA : 20 Marks Total:100 Marks

STRUCTURE OF QUESTION PAPER

- 1. All questions are compulsory.
- The question paper will comprises 5 questions in section A, B, C, D and E with sub parts . The question paper will carry:

SECTION- A

 Objective Type Question: This sectioncomprises questions with one word to one sentence answer/ Fill in the blank/ True or false/ Multiple choice type questions. Question No. 1 comprises of 20 sub parts (questions I to XX) carry 1 mark each.
 20×1=20

SECTION- B

2. Short Answer type Question: This question comprises of 4 sub parts (question i to iv) carry 3 marks each. Answer to each question should be in about 35-40 words.
 4×3=12

SECTION- C

3.Source Based Question:This sectioncomprises 2 sub parts I to II (based on a passage given) carry 5 marks **2*5=10**

SECTION- D

4.Long answer Question: This question comprises of 7 sub parts (question no. i to vii) carry 6 marks each. Students have to attempt any 4 question out of 7. Answer to each question should be about 100-150 words.
4*6= 24 SECTION- E

5. Map Question:This section comprises one question of map carries 14 marks

(10marks for showing 4 places and 4 marks for explanation of those places to

be written in 20 to 25 words) with 100% internal choice. 10+4=14

QUESTION WISE BREAK UP

Type of Question	Marks Per Question	Total no. of Questions	Total Marks
Objective Type	1	20	20
(Learning checks)			
Short answer Type	3	4	12
(VSA)			
Source Based	5	2	10
question			
Long Answer Type	6	4(7)	24
(LA)			
Map Skill Based	10+4	1	14
Total			80

WEIGHTAGE OF DIFFICULTY LEVEL

Estimated Difficulty Level	Percentage
(i) Easy (E)	30%
(ii) Average (AV)	50%
(iii)Difficult (D)	20%

WEIGHTAGE OF MARKS UNIT WISE

	Objective. T Q 1 Mark	Short Answer 3 Marks	Source Based 5 Marks	Long Answer 6 Marks	Map Question 14 marks	Project work/IA 20 marks
Unit -1	1(5)	3(1)	Passage	6(1)		
Unit – 2	1(5)	3(1)	prescibed	6(1)		
Unit- 3	1(5)	3(1)	Source	6(1)		
Unit- 4	1(5)	3(1)	5*2	6(1)		
MapWork					1(10+4)	
Total	1x20=20	3x4=12	5x2=10	6x4=24	1(10+4)=14	20 marks

Course structure Unit I

The Great Mughals and their legacy to the Punjab.

Shri Guru Nanak DevJi.

Successors of Shri Guru Nanak DevJi.

Unit II

Banda Singh Bahadur and his Martyrdom.

Sikhs became the Masters of the Punjab.

Unit III

The Punjab under Maharaja Ranjit Singh.

The British occupation of the Punjab.

Unit IV

Some Famous Legends of the Punjab:-

- a. PuranBhagat b. HeerRanjha
- c. SohniMahiwal

Classical Literature of the Medieval period.

PART-C MAP QUESTION TOPICS

- 1. Banda Singh Bahadur
- 2. Shri Guru Gobind Singh
- 3. Maharaja Ranjit Singh
- 4. First Anglo-Sikh War
- 5. Second Anglo Sikh war

CLASS-XII ENVIRONMENT EDUCATION

Time: 2 Hrs

Theory: 45 Marks IA: 05 Marks Total: 50 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

- 1. There will be one theory paper comprising of 17 questions. All questions will be compulsory.
- 2. Question No.1-5 are very short answer type questions carrying 1 mark each. Answer to each question will be in one line or few words only.
- 3. Question No. 6-10 are short answer type questions carrying 2 marks each. Answer to each queation will be in 20-30 words.
- 4. Question No. 11-15 are long/medium answer type questions carrying 4 marks each. Answer to each question will be 50-60 words.
- 5. Question NO.16 and 17 long answer type question carrying 5 marks. Answer to this question will be in 80 -100 words.
- 6. In Question no: 16 and 17, there will be 100% internal choice.
- There will be no objective type question such as yes/ No/ Tick/cross, fill in the blanks, multiple choice, true/ false etc.
- 8. The question paper should be strictly from the prescribed syllabus based on above mentioned guide lines.

Unit wise distribution of marks will be as follows.

Unit	1 Mark questions	2 Mark questions	4 Mark questions	5 Mark Questions
Unit-1 Biodiversity	1	1	1	1
Unit-II Environmental Management	1	1	1	or 1
Unit-III Sustainable Development	1	1	1	_
Unit-IV Sustainable Agriculture	1	1	1	1 or
Unit-V Environmental Actions	1	1	1	1
Total Maks	5 marks	10 marks	20 marks	10 marks

UNIT WISE DISTRIBUTION OF MARKS

INSTRUCTIONS FOR PAPER SETTER

- 1. There will be 17 questions in theory paper.
- 2. Questions No. 1-5 are of 1 mark each and there should be one question from each unit.

- 3. Question 6-10 are of 2 marks each and there should be one question from each unit.
- 4. Question 11-15 are of 4 marks each and there should be one question from each unit.
- 5. Question 16 will be of 5 marks and to be set from unit I and choice question should be set from unit II.
- 6. Question 17 will be of 5 marks and to be set from unit IV and choice Question should be set from unit V.

SYLLABUS

Unit-1 Biodiversity

- Concept and value of biodiversity
- Levels of biodiversity species, eco and genetic.
- Balance in nature.
- Biodiversity for sustenance of mankind.
- Resource limitation.
- Ecological role of biodiversity.
- Interdependence among different species.
- India as a mega diversity nation.
- Economic potential of biodiversity.
- Loss of biodiversity- threatened, endangered and extinct.
- Strategies for conservation of biodiversity in situ and ex situ.
- Mitigating the people- wildlife conflict.

Unit-II Environmental Management

- Need for environment management vis-a-vis development.
- Aspects of environmental management-ethical, economic, technological and social.
- Legal provisions for environmental management.
- Approaches for environmental management- economic policies, environmental indicators, setting of standards, information exchange and surveillance.
- Problem of stubble and its management (study material uploaded on website)

Unit-III Sustainable Development

- Concept of sustainable development.
- Concept of sustainable consumption.

- Need for sustainable development for improving the quality of life for the present and future.
- Challenges for sustainable development-political and administrative will, dynamic and flexible polices, appropriate technologies, comprehensive review and revision mechanism, human approach.
- Development of skilled manpower.
- Role of individual and community.
- Role of nationa and international agencies(both governmental and non-governmental)

Unit-IV Sustainable Agriculture

- Need for sustainable agriculture.
- Green revolution-impact on environment.
- Importance of soil for crops, Irrigation systems, use of manure and fertilizers.
- Crop protection-major plant pests and diseases (wheat, rice, cotton, sugarcane, potato), measures for their control-agrochemicals.
- Impact of agrochemicals on environment.
- Elements of sustainable agriculture-mixed farming, mixed cropping, crop rotation, biological and economic consideration, use of biofertilizers and bio pesticides, biological pest control, integrated pest management.
- Application of biotechnology in crop improvement.
- Management of agricultural produces- storage, preservation, transportation and processing.

Unit-V Environmental Actions

- Meeting basic human need, food, water, shelter and fuel for all.
- Population control
- Changing consumption patterns.
- Prevention and control of environmental pollution.
- Waste management- reduce, reuse and recycle;
- Community movement for ecological restoration and conservation of environment like joint forest Management (JFM),student's participation in tree rearing, social and agro- forestry.
- Drugs-ill effects(Part-II) Consequences of use of different dugs, The narcotic drugs and psychotropic substances Act-1985 offences as penalties.(study material uploaded on website)

Example projects and Activities:

It is expected that student will undertake two projects or activities. These projects should be undertaken individually and student will prepare a report in each case. Teacher may plan and design projects and activities depending upon the local situations, available resources and environmental issues of concern. The projects and activities given below are only suggestive and not prescriptive.

- To study the status of an endangered spacies listed for region by collecting information through different sources and observation and to assesss the reasons for its diminishing number.Suggest ways and means to protect the species.
- To conduct a survery of plants and trees in the locality and collect information about their cultural, economic and medicinal values from the local people and available literature. To prepare an action plan for afforestion and planting of trees as trees are most valuable in terms of their cultural, economic importance and medicial use.
- To study the practices followed in the region for storage, preservation, transportation and processing of perishable or non perishable farm products and to assess the extent of their wastage due to faulty practices.
- To make a list of raw materials used by the family for preparing different types of dishes. To identify the plants and their parts from which food material is obtained. To make a list of plants on which the animals depend for their food.To prepare a report supported by diagrams/photographs/pictures/graphs to focus on the importance of biodiversity in providing food to human population.
- To study the impact of changes in agricultural practices of animal husbandry including poultry, piggery, fishery and apiculture over a period of time in the local environment or in a given locality or village. The components for analysis may include; types of crop, land area under cultivation, mechanization, use of electricity, mode of irrigation and agrochemicals, agro wastes and their diposal, types of animal breed and their feed, types of shelter and health care,method of preservation and processing of products and animal wastes and their disposal. To suggest an action plan for modifiying the prevailing practices so as to make them environment friendly and sustainable.

Internal Assessment	05 Marks
Book Bank	2 Marks
Project work	3 Marks

ਸ੍ਰੇਣੀ−ਬਾਰ੍ਹਵੀ ਕੰਪਿਊਟਰ ਸਾਇੰਸ

ਸਮਾਂ : 3 ਘੰਟੇ

ਲਿਖਤੀ : 50 ਅੰਕ ਅੰਤਰਿਕ ਮੁਲਾਂਕਣ : 05 ਅੰਕ ਪ੍ਰਯੋਗੀ : 45 ਅੰਕ ਕੁੱਲ : 100 ਅੰਕ

<u>ਅਗਵਾਈ ਲੀਹਾਂ (ਲਿਖਤੀ ਪ੍ਰੀਖਿਆ)</u>

- ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਚਾਰ ਭਾਗਾਂ (ਭਾਗ ੳ, ਭਾਗ ਅ, ਭਾਗ ੲ ਅਤੇ ਭਾਗ ਸ) ਵਿੱਚ ਵੰਡਿਆ ਹੋਵੇਗਾ।
- 2. ਭਾਗ ੳ ਆਬਜੈਕਟਿਵ ਟਾਇਪ ਹੋਵੇਗਾ ਜਿਸ ਵਿੱਚ 1 ਤੋਂ 6 ਤੱਕ 1−1 ਅੰਕ ਦੇ 6 ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ।
- 3. ਭਾਗ ਅ ਵਿੱਚ ਪ੍ਰਸ਼ਨ ਨੰ 7 ਤੋਂ 12 ਤੱਕ 2−2 ਅ<mark>ੰ</mark>ਕ ਦੇ 6 ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ।
- 4. ਭਾਗ ੲ ਵਿੱਚ ਪ੍ਰਸ਼ਨ ਨੰ 13 ਤੋਂ 17 ਤੱਕ 4-4 ਅੰਕ ਦੇ 5 ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ।
- 5. ਭਾਗ ਸ ਵਿੱਚ ਪ੍ਰਸ਼ਨ ਨੰ 18 ਤੋਂ 19 ਤੱਕ 6-6 ਅੰਕ ਦੇ 2 ਪ੍ਰਸ਼ਨ ਹੋਣਗ।
- ਭਾਗ ੳ, ਅ, ੲ ਅਤੇ ਭਾਗ ਸ ਦੇ ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਜਰੂਰੀ ਹੋਣਗੇ। ਭਾਗ ੲ ਅਤੇ ਸ ਵਿੱਚ ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਦੋ ਜਾਂ ਦੋ ਤੋਂ ਵੱਧ ਭਾਗ ਵੀ ਹੋ ਸਕਦੇ ਹਨ। ਭਾਗ ਸ ਵਿੱਚ ਅੰਦਰੁਨੀ ਛੋਟ ਹੋਵੇਗੀ।

ਲੜੀ	ਅਧਿਆਇ ਦਾ ਨਾਂ	ਕੁੱਲ	1 ਅੰਕਾਂ	2 ਅੰਕਾਂ	4 ਅੰਕਾਂ	6 ਅੰਕਾਂ
ਨੰ		ਅੰਕ	ਵਾਲੇ ਪ੍ਰਸ਼ਨ	ਵਾਲੇ ਪ੍ਰਸ਼ਨ	ਵਾਲੇ ਪ੍ਰਸ਼ਨ	ਵਾਲੇ ਪ੍ਰਸ਼ਨ
1.	ਗਿਆਰ੍ਹਵੀਂ ਕਲਾਸ ਦੀ	3	1	1		
	ਦੁਹਰਾਈ					
2.	ਸਟਰਿੰਗ ਫੰਕਸ਼ਨ ਦੀ ਵਰਤੋਂ	6		1	1	
3.	ਯੂਜ਼ਰ ਡਿਫਾਇੰਨਡ ਫੰਕਸ਼ਨਜ਼	7	1	1	1	
4.	ਵਿੰਡੋ ਮੂਵੀ ਮੇਕਰ−1	7	1	1	1	
5.	ਵਿੰਡੋ ਮੂਵੀ ਮੇਕਰ-2	5	1		1	
6.	ਨੈੱਟਵਰਕਿੰਗ ਸਕਲਪ	9	1	1		1
7.	ਲਾਈਬ੍ਰੇਰੀ ਫੰਕਸ਼ਨਜ਼	6		1	1	
8.	ਈ−ਗਵਰਨੈਂਸ	7	1			1
	ਕੁੱਲ ਜੋੜ	50	6	12	20	12

<u>ਪਾਠ ਕ੍ਮ (ਲਿਖਤੀ ਪ੍ਰੀਖਿਆ)</u>

ਗਿਆਰ੍ਹਵੀਂ ਕਲਾਸ ਦੀ ਦੁਹਰਾਈ

- ਸੀ ਭਾਸ਼ਾ ਵਿੱਚ ਪ੍ਰੋਗਰਾਮਿੰਗ ਲਈ ਭੂਮਿਕਾ
- ਕਮਪਾਇਲਰ ਨਿਰਦੇਸ਼
- ਐਰੇ :- ਐਰੇ ਵਿੱਚ ਡਾਟਾ ਭਰਨਾ, ਐਰੇ ਦੇ ਮੁੱਲਾਂ ਦੀ ਪਹੁੰਚ ਕਰਨੀ, ਦੋ ਡਾਇਮੈਸ਼ਨਲ ਐਰੇ ਦੀ ਡਿਕਲੇਅਰੇਸ਼ਨ
- ਨੈਟਵਰਕਿੰਗ ਸੰਕਲਪ
- 1. ਸਟਰਿੰਗ ਫੰਕਸ਼ਨ ਦੀ ਵਰਤੋਂ
 - ਭੂਮਿਕਾ
 - ਡਿਕਲੇਰੇਸ਼ਨ ਅਤੇ ਸਟਰਿੰਗ ਵੇਗੇਏਬਲ
 - ਪ੍ਰੋਗਰਾਮ ਸਟਰਿੰਗ ਦੀ ਪ੍ਰਿੰਟਿੰਗ ਪ੍ਰਦਰਸ਼ਿਤ ਕਰਨੀ
 - ਸਟਰਿੰਗ ਪੜ੍ਹਨਾ ਅਤੇ ਲਿਖਣਾ : ਸਟਰਿੰਗ ਪੜ੍ਹਨਾ, ਸਟਰਿੰਗ ਲਿਖਣਾ, ਮੋਨੀਟਰ ਤੋਂ ਸਟਰਿੰਗ ਪੜ੍ਹਨਾ
 - ਸਧਾਰਣ ਇਨਪੁੱਟ ਆਊਟਪੁੱਟ
 - ਸਟਰਿੰਗ ਉਪਰੇਸ਼ਨ : ਸਟਰਕਟ ਫੰਕਸ਼ਨ (streat () function)
 - ਸਟਰਕਮਪ ਫੰਕਸ਼ਨ (strcmp () function)
 - ਸਟਰਲਵਰ ਫੈਕਸ਼ਨ (strlwr () function)
 - ਸਟਰਰੀਵ ਫੰਕਸ਼ਨ (strrev () function)
 - ਸਟਰਅਪਰ ਫੈਕਸ਼ਨ (strupr () function)

ਪ੍ਰੋਗਰਾਮ ਪਰਿਭਾਸ਼ਾ –1

ਇਕ ਪ੍ਰੋਗਰਾਮ ਸਟਰਿੰਗ ਫੰਕਸ਼ਨਜ਼ ਦੀ ਵਰਤੋਂ ਬਿਨਾਂ ਦੋ ਸਟਰਿੰਗ ਨੂੰ ਕਨਕੇਟੀਨੇਟ (concatenate) ਕਰਨ ਲਈ

ਅਤੇ ਇੱਕ ਨਵੀਂ ਸਟਰਿੰਗ ਬਣਾਉਣ ਲਈ।

ਪ੍ਰੋਗਰਾਮ ਪਰਿਭਾਸ਼ਾ – 2

ਇਕ ਪ੍ਰੋਗਰਾਮ ਸਟਰਿੰਗ ਫੈਕਸ਼ਨਜ਼ ਦੀ ਵਰਤੋਂ ਦੇ ਬਿਨਾਂ ਦੋ ਸਟਰਿੰਗਜ਼ ਦੀ ਤੁਲਨਾ ਲਈ।

ਪ੍ਰੋਗਰਾਮ ਪਰਿਭਾਸ਼ਾ – 3

ਇਕ ਪ੍ਰੋਗਰਾਮ ਸਟਰਿੰਗ ਦੀ ਵਰਤੋਂ ਬਿਨਾਂ ਦਿੱਤੇ ਗਏ ਟੈਕਸਟ ਨੂੰ ਉਲਟਾਉਣ ਲਈ।

2. ਯੂਜਰ ਡਿਫਾਇੰਡ ਫੰਕਸ਼ਨ÷

- ਭੂਮਿਕਾ
- ਬਿਲਟ ਇੰਨ ਫੰਕਸ਼ਨ / ਲਾਇਬਰੇਰੀ ਫੰਕਸ਼ਨ ਯੂਜਰ ਡੀਫਾਈਨ ਫੰਕਸ਼ਨਜ਼, ਫੰਕਸ਼ਨਜ਼ ਦੀ ਜ਼ਰਰਤ
- ਆਰਗੂਮੈਂਟ ਅਤੇ ਪੈਰਾਮੀਟਰ
- ਕੋਡ ਲਾਈਨ
- ਮਲਟੀਫੰਕਜ਼ਨ ਪ੍ਰੋਗਰਾਮ
- ਫੰਕਸ਼ਨ ਦੀ ਬਣਤਰ
- ਰਿਟਰਨ ਮੁੱਲ ਅਤੇ ਉਹਨਾਂ ਦੇ ਟਾਈਪਸ, ਸਿੰਪਲ ਰਿਟਰਨ
- ਫੰਕਸ਼ਨ ਨੂੰ ਕਾਲ ਕਰਨਾ
- ਫੰਕਸ਼ਨ ਨਾਲ ਆਰਗੂਮੈਂਟ, ਬਗੈਰ ਰਿਟਰਨ ਮੁੱਲ
- ਸਟੋਰੇਜ ਸ਼੍ਰੇਣੀਆਂ
- ਸਟੈਟਿਕ ਵੇਰੀਏਬਲ
- ਐਕਸਟਰਨਲ ਵੇਰੀਏਬਲ
- ਫੰਕਸ਼ਨ ਬਗੈਰ ਆਰਗੂਮੈਂਟ, ਰਿਟਰਨ ਮੁੱਲ ਨਾਲ
- 3. ਵਿੰਡੋ ਮੂਵੀ ਮੇਕਰ -1
 - ਭੂਮਿਕਾ
 - ਫਾਈਲ ਦੀਆਂ ਕਿਸਮਾਂ : ਆਡੀਓ ਫਾਈਲ, ਵੀਡੀਓ ਫਾਈਲ, ਪਿਕਚਰ ਫਾਈਲ
 - ਕੋਲੈਕਸ਼ਨਜ਼, ਪ੍ਰੋਜੈਕਟ ਅਤੇ ਮੁਵੀਜ਼ ਨੂੰ ਜਾਨਣਾ
 - ਸੋਰਸ ਫਾਈਲ
 - ਵੀਡੀਓ ਕੈਪਚਰ ਡੀਵਾਈਸਜ਼
 - ਆਡੀਓ ਕੈਪਚਰ ਡੀਵਾਈਸਜ਼
 - ਕੈਪਚਰ ਡੀਵਾਈਸ ਦੀ ਸੂਚੀ : ਵੈਬ ਕੈਮਰਾ, ਐਨਾਲਾਗ ਕੈਮਰਾ ਜਾਂ ਵੀ. ਸੀ. ਆਰ. (V.C.R) ਦਾ ਐਨਾਲਾਗ ਕੈਪਚਰ (capture) ਕਾਰਡ ਨਾਲ ਜੋੜ
 - ਡਿਜੀਟਲ ਵੀਡੀਓ ਕੈਮਰਾ ਜਾਂ ਵੀ ਸੀ. ਆਰ ਦਾ IEEE 1394 ਪੋਰਟ ਨਾਲ ਜੋੜ, ਮਾਈਕਰੋਫੋਨ ਦਾ ਸਾਉਂਡ ਕਾਰਡ ਜਾਂ ਯੂ. ਐਸ. ਬੀ ਪੋਰਟ ਨਾਲ ਜੋੜ
 - ਵਿੰਡੋਜ਼ ਮੂਵੀ ਮੇਕਰ ਇੰਨਟਰਫੇਸ : ਮੀਨੂੰ ਬਾਰ ਅਤੇ ਟੂਲ-ਬਾਰ, ਪੇਨਜ਼, ਸਟੋਰੀ-ਬੋਰਡ ਜਾਂ ਟਾਈਮ ਲਾਈਨ ਪੇਨਜ਼, ਕੋਲੈਕਸ਼ਨ ਪੇਨ, ਕਾਨਟੈਂਟਸ ਪੇਨ, ਡੀਟੇਲਜ਼, ਥੰਬ ਨੇਲ, ਮੋਨੀਟਰ
 - ਸਟੋਰੀਬੋਰਡ : ਸਟੋਰੀ ਬੋਰਡ ਦੀ ਵਰਤੋਂ, ਸਟੋਰੀ ਬੋਰਡ ਦਾ ਨਿਰਮਾਣ
 - ਵਿੰਡੋਜ਼ ਮੂਵੀਮੇਕਰ ਦੀ ਵਰਤੋਂ : ਮੂਵੀ ਟਾਸਕ ਪੇਨ, ਵੀਡੀਓ ਕੈਪਚਰ, ਐਡਿਟ ਵੀਡੀਓ, ਫਿਨਿਸ਼ ਵੀਡੀਓ
 - ਕੋਲੈਕਸ਼ਨ, ਸਪਲਿਟ ਬਟਨ, ਸਕਰੀਨ ਸ਼ਾਟ ਬਟਨ, ਵੀਡੀਓ ਟਰੈਕ, ਆਡੀਓ ਟਰੈਕ, ਟਾਈਟਲ ਟਰੈਕ
 - ਹੈਂਡਜ ਆਨ ਵਿੰਡੋਜ਼ ਮੂਵੀਮੇਕਰ (hands on windows movie maker) : ਨਿਊ ਪ੍ਰੋਜੈਕਟ ਖੋਲ੍ਹਣਾ, ਆਪਣੇ, ਕੰਪਿਊਟਰ ਤੋਂ ਵੀਡੀਓ ਇਮਪੋਰਟ ਕਰਨਾ,ਪਿਕਚਰ ਇੰਪੋਰਟ ਕਰਨਾ
 - ਵੀਡੀਓ ਸਕਰੀਨ / ਮੋਨੀਟਰ : ਕਲਿਪ ਨੂੰ ਦੇਖਣਾ, ਨਿਊ ਕੋਲੈਕਸ਼ਨ ਬਣਾਉਣਾ, ਆਡੀਓ ਜਾਂ ਵੀਡੀਓ ਨੂੰ ਦੋ ਭਾਗਾਂ ਵਿੱਚ ਵੰਡਣਾ, ਸਪਲਿਟ ਕੀਤੀ ਹੋਈ ਆਡੀਓ ਜਾਂ ਵੀਡੀਓ ਨੂੰ ਜੋੜਨਾ, ਕਲਿਪ ਨੂੰ ਕੋਲੈਕਸ਼ਨ ਵਿੱਚ ਕਾਪੀ ਕਰਨਾ, ਇਕ ਵੀਡੀਓ ਤੋਂ ਮੋਨੀਟਰ ਰਾਹੀਂ ਪਿਕਚਰ ਲੈਣੀ
- 4. ਵਿੰਡੋ ਮੂਵੀ ਮੇਕਰ 2
 - ਭੂਮਿਕਾ
 - ∙ ਟਾਈਮ-ਲਾਈਨ ਵਿਊ
 - ਸਟੋਰੀ ਬੋਰਡ ਵਿੱਚ ਵੀਡੀਓ ਕਲਿੱਪ ਜੋੜਨਾ

- ਸਟੋਰੀ ਬੋਰਡ ਵਿੱਚ ਦੁਬਾਰਾ ਤੋਂ ਤਰਤੀਬ ਵਾਰ ਕਰਨਾ, ਟਾਈਮ ਲਾਈਨ ਦਾ ਪ੍ਰਯੋਗ ਕਰਦੇ ਹੋਏ ਕਲਿਪਸ ਤੋੜਨਾ, ਇਕ ਵੀਡੀਓ ਨੂੰ ਤੋੜਨਾ
- ਕਲਿਪਸ ਦੀ ਟਰੀਮਿੰਗ : ਕਲਿਪਸ ਦੀ ਛਟਾਈ ਕਰਨਾ, ਇਕ ਕਲਿਪ ਦੀ ਟਰਿਮ ਜਾਂ ਛਾਂਟੀ ਕਰਨਾ, ਟਰਿਮ ਪੁਆਇੰਟ ਨੂੰ ਸਾਫ਼ ਕਰਨਾ, ਟੁੱਟੇ ਹੋਏ ਵੀਡੀਓ ਕਲਿਪਸ ਨੂੰ ਆਪਸ ਵਿੱਚ ਜੋੜਨਾ, ਮੂਵੀ ਨੂੰ ਐਡਿਟ ਕਰਨਾ, ਵੀਡੀਓ ਟਰਾਂਜਿਸ਼ਨ, ਵੀਡੀਓ ਇਫੈਕਟਸ, ਟਾਈਟਲ ਅਤੇ ਕਰੈਡਿਟਸ, ਵੀਡੀਓ ਟਰਾਂਜਿਸ਼ਨ ਨੂੰ ਲਾਗੂ ਕਰਨਾ, ਵੀਡਿਓ ਇਨਫੈਕਟਸ ਜੋੜਨਾ, ਟਾਈਟਲ ਤੇ ਕਰੈਡਿਟ, ਪ੍ਰੀ-ਵਿਊ ਮੂਵੀ ਟਾਈਟਲ, ਆਡੀਓ ਐਡ ਕਰਨਾ, ਆਡੀਓ ਨੂੰ ਪਿਕਚਰ ਨਾਲ ਅਲਾਈਨ ਕਰਨਾ, ਆਡੀਓ ਕਲਿਪ ਦਾ ਟਾਈਮ ਲਾਈਨ ਵਿਊ, ਐਡਟਿੰਗ ਆਡੀਓ, ਵੀਡੀਓ ਦਾ ਆਡੀਓ ਘੱਟ ਜਾਂ ਵੱਧ ਕਰਨਾ।

5. ਨੈਟਵਰਕਿੰਗ ਸੰਕਲਪ

- ਭੂਮਿਕਾ
- ਨੈੱਟਵਰਕਰ ਕੀ ਹੁੰਦਾ ਹੈ; ਨੈੱਟਵਰਕਿੰਗ ਲਈ ਲੋੜ, ਨੱਟਵਰਕਿੰਗ ਟਰਮੀਨੋਲੋਜੀ
- ਨੈੱਟਵਰਕ ਦੀਆਂ ਕਿਸਮਾਂ
- ਨੈੱਟਵਰਕ ਟੋਪੋਲੋਜੀ : ਟੋਪੋਲੋਜੀ ਕੀ ਹੁੰਦੀ ਹੈ, ਭੌਤਿਕ ਟੋਪੋਲੋਜੀ ਦੀਆਂ ਮੁੱਖ ਕਿਸਮਾਂ, ਲੀਨੀਅਰ ਬੱਸ ਟੋਪੋਲੋਜੀ, ਸਟਾਰ -ਟੋਪੋਲੋਜੀ, ਟ੍ਰੀ- ਟੋਪੋਲੋਜੀ, ਮੈਸ਼- ਟੋਪੋਲੋਜੀ, ਪਾਰਸ਼ਲ ਮੈਸ਼- ਟੋਪੋਲੋਜੀ
- ਪ੍ਰੋਟੋਕੋਲਜ਼ : ਯੂਨੀਫਾਰਮ ਰਿਸੋਰਸ ਲੋਕੇਟਰ (ਯੂ.ਆਰ.ਐਲ) ਫਾਈਲ ਟਰਾਂਸਫਰ ਪ੍ਰੋਟੋਕੋਲ ਅਤੇ ਹਾਈਪਰਟੈਕਸਟ ਟਰਾਂਸਫਰ ਪ੍ਰੋਟੋਕੋਲ (ਫਾਈਲ ਟਰਾਂਸਫਰ ਪ੍ਰੋਟੋਕੋਲ, ਹਾਈਪਰਟੈਕਸਟ ਟਰਾਂਸਫਰ ਪ੍ਰੋਟੋਕੋਲ), ਪ੍ਰਾਈਵੇਟ ਨੈੱਟਵਰਕਸ
- ਚੈਨਲ ਦੀ ਵਿਚਾਰਧਾਰਾ : ਸੰਚਾਰ ਚੈਨਲ ਕੀ ਹੁੰਦਾ ਹੈ, ਡਾਟਾ ਬਦਲੀ ਦਰ
- ਸੰਚਾਰ ਮਾਧਿਅਮ : ਗਾਈਡਿਡ ਮੀਡੀਆ, ਅਨਗਾਈਡਿਡ ਮੀਡੀਆ, ਆਰ.ਐਫ ਪ੍ਰਸਾਰ
- ਨੈਟਵਰਕਿੰਗ ਡਿਵਾਇਸ : ਹੱਬ ਅਤੇ ਮੋਡਮ

6. ਲਾਈਬ੍ਰੇਰੀ ਫੰਕਸ਼ਨ÷

- ਫੰਕਸ਼ਨ
- ਸਟਰਲੇਨ ਫੰਕਸ਼ਨ (Strlen ())
- ਸਟਰੇਪੀ ਫੰਕਸ਼ਨ (Strcpy())
- ਸਟਰੀਟ ਫੰਕਸ਼ਨ (Streat())
- ਸਟਰੈਮਪ ਫੰਕਸ਼ਨ (Strcmp())
- ਗੈਟਚਰ ਫੰਕਸ਼ਨ (getchar())
- ਪੁਟਚਰ ਫੰਕਸ਼ਨ (putchar())
- ਪ੍ਰਿੰਟਐਫ ਫੰਕਸ਼ਨ (Printf())
- ਸਕੈਨਐਫ ਫੰਕਸ਼ਨ (Scanf())
- ਕੋਸ ਫੰਕਸ਼ਨ (Cos())
- ਐਕਸਪ ਫੰਕਸ਼ਨ (Exp())
- ਪੋਵ ਫੰਕਸ਼ਨ (Pow())
- ਸਕਰਟ ਫੰਕਸ਼ਨ (Sqrt())
- ਐਫਮੋਡ ਫ ਫੰਕਸ਼ਨ (fmod())
- ਫੇਬਸ ਫੰਕਸ਼ਨ (Fabs())
- ਸੀਲ ਫੰਕਸ਼ਨ (Ceil ())
- ਫਲੋਰ ਫੰਕਸ਼ਨ (floor())
- ਇਜ਼ਲੋਅਰ ਅਤੇ ਇਜ਼ਅਪਰ ਫੰਕਸ਼ਨ (islower() and isupper())
- ਟੂਲੋਅਰ ਅਤੇ ਟੂਅਪਰ ਫੈਕਸ਼ਨ (tolower()) and (toupper ())
- ਫੰਕਸ਼ਨ ਦੇ ਲਾਭ

7. ਈ–ਗਵਰਨੈਂਸ (e-Governance)

- ਈ-ਗਵਰਨੈਂਸ ਦਾ ਪ੍ਰਯੋਗ:
- ਘੱਟ ਖਰਚ, ਤੇਜ ਰਫ਼ਤਾਰ,ਕਿਤੇ ਵੀ ਕਿਸੇ ਵੀ ਟਾਇਮ,ਆਸਾਨ ਪ੍ਰਬੰਧ
- ਈ–ਗਵਰਨੈਂਸ ਦੇ ਅੱਲਗ–ਅੱਲਗ ਖੇਤਰ:ਇੰਟਰਨੈੱਟ ਬੈਂਕਿੰਗ,ਆਨ–ਲਾਈਨ ਰੇਲਵੇ ਅਤੇ ਹਵਾਈ ਟਿਕਟਿੰਗ, ਆਈ– ਟਿਕਟਿੰਗ,ਈ–ਟਿਕਟਿੰਗ, ਪਾਸਪੋਰਟ ਸੇਵਾਵਾਂ
- ਸੁਵਿਧਾ ਸੈਂਟਰ

ਕੰਪਿਊਟਰ ਸਾਇੰਸ <u>ਅਗਵਾਈ ਲੀਹਾਂ (ਪ੍ਯੋਗੀ ਪ੍ਰੀਖਿਆ)</u>

ਅੰਕ: 45

ਪ੍ਰੀਖਿਆ ਲਈ ਅੰਕ ਵੰਡ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਹੋਵੇਗੀ:

- ਸੈਕਸ਼ਨ – ਏ	ਵਾਇਵਾ- ਵੋਸ	10
ਸੈਕਸ਼ਨ - ਬੀ	ਰਿਕਾਰਡ ਫਾਇਲ	10
ਸੈਕਸ਼ਨ – ਸੀ	ਛੋਟੇ ਪ੍ਰੋਗਰਾਮ	25

- ਸੈਕਸ਼ਨ ਏ ਵਿੱਚ ਪ੍ਰੀਖਿਆਰਥੀ ਤੋਂ ਪਾਠ ਕ੍ਰਮ ਵਿੱਚੋਂ ਪੰਜ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਪ੍ਰਸ਼ਨ ਦੋ ਦੋ ਅੰਕ ਦਾ ਹੋਵੇਗਾ। ਇਹ ਪ੍ਰਸ਼ਨ ਓਬਜੈਕਟਿਵ ਟਾਈਪ ਜਾਂ ਵਿਆਖਿਆ ਦੱਸਣੀ ਜਾਂ ਕੰਪਿਊਟਰ ਦੇ ਵੱਖ ਵੱਖ ਹਿੱਸਿਆਂ ਅਤੇ ਇਸ ਨਾਲ ਜੁੜੇ ਸਹਾਇਕਾਂ ਦੇ ਬਹੁਤ ਛੋਟੇ ਅਭਿਆਸ ਹੋਣਗੇ। 5×2=10 ਅੰਕ
- 3. ਸੈਕਸ਼ਨ ਸੀ ਵਿੱਚ ਛੇ ਪ੍ਰਸ਼ਨ /ਪ੍ਰੋਗਰਾਮ ਸੈੱਟ ਕੀਤੇ ਜਾਣਗੇ ਜਿਨ੍ਹਾਂ ਵਿੱਚੋਂ ਪ੍ਰੀਖਿਆਰਥੀ ਨੂੰ ਪਜ ਪ੍ਰੋਗਰਾਮ / ਪ੍ਰਸ਼ਨ ਕਰਨ ਦੀ ਖੁੱਲ ਹੋਵੇਗੀ। ਹਰ ਪ੍ਰੋਗਰਾਮ/ਪ੍ਰਸ਼ਨ ਪੰਜ ਪੰਜ ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ, ਹਰੇਕ ਪ੍ਰੋਗਰਾਮ/ ਪ੍ਰਸ਼ਨ ਲਈ ਅੰਦਰੂਨੀ ਅੰਕ ਵੰਡ ਪੇਪਰ ਸੱਟਰ ਕਰਕੇ ਦੇਵੇਗਾ। 5×5=25 ਅੰਕ

ਪਾਠ ਕ੍ਰਮ (ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ)

1. ਸਟਰਿੰਗ ਫੰਕਸ਼ਨ ਦੀ ਵਰਤੋਂ

ਸਮਾਂ : 3 ਘੰਟੇ

- ਸਟਰਿੰਗ ਫੰਕਸ਼ਨ : ਡੇਕਲੇਰੇਸ਼ਨ, ਇਨਿਸ਼ਿਯਲਾਈਜ਼ੇਸ਼ਨ
- ਪ੍ਰੋਗਰਾਮ ਸਟਰਿੰਗ ਦੀ ਪ੍ਰਿੰਟਿੰਗ ਪ੍ਰਦਰਸ਼ਿਤ ਕਰਨੀ
- ਸਟਰਿੰਗ ਪੜ੍ਹਨਾ ਅਤੇ ਲਿਖਣਾ
- ਸਾਧਾਰਣ ਇੰਨਪੁਟ / ਆਊਟਪੁੱਟ ਗੈਟਚਰ, ਪੁੱਟਚਰ, ਪ੍ਰਿੰਟਐਫ (I/O getchar(), putchar(), printf())
- ਸਟਰਿੰਗ ਔਪਰੇਸ਼ਨ (string.h)
- 2. ਯੂਜ਼ਰ ਡਿਫਾਇੰਡ ਫੰਕਸ਼ਨਜ਼
 - -● ਬਿਲਟ−ਇੰਨ ਫੰਕਸ਼ਨਜ਼∕ਲਾਈਬ੍ਰੇਰੀ ਫੰਕਸ਼ਨਜ਼
 - ਆਰਗੂਮੈਂਟਸ ਅਤੇ ਪੈਰਾਮੀਟਰਜ
 - ਕੋਡ ਲਾਈਨ
 - ਮਲਟੀਫੰਕਸ਼ਨ
 - ਫੰਕਸ਼ਨ ਦੀ ਬਣਤਰ
 - ਫੰਕਸ਼ਨ ਨੂੰ ਕਾਲ ਕਰਨਾ
- 3. ਵਿੰਡੋ ਮੂਵੀ ਮੇਕਰ-1
 - ∙ ਆਡੀਓ-ਵੀਡੀਓ ਫਾਈਲ
 - ਪ੍ਰੋਜੈਕਟ, ਮੂਵੀ, ਕੈਪਚਰਿੰਗ, ਸਪਲਿੰਟਿੰਗ
- 4. ਵਿੰਡੋ ਮੂਵੀ ਮੇਕਰ-2
 - ਟਾਈਮ ਲਾਈਨ ਵਿਊ
 - ਪ੍ਰੋਜੈਕਟ ਨੂੰ ਚਲਾਊਣਾ
 - ਟ੍ਰੀਮਿੰਗ
 - ਐਡਿਟਿੰਗ
 - ਵੀਡਿਓ ਟਰਾਂਜਿਸ਼ਨ
 - ਵੀਡਿਓ ਇਫੈਕਟ
 - ਵੀਡਿਓ ਟਾਈਟਲ
 - ਵੀਡਿਓ ਕਰੈਟਿਡ
 - ਵੀਡਿਓ ਪ੍ਰੀਵਿਓ
- 5. ਲਾਈਬ੍ਰੇਰੀ ਫੰਕਸ਼ਨਜ਼
 - ਫੰਕਸ਼ਨ
 - ਸਟਰਲੇਨ ਫੰਕਸ਼ਨ (Strlen ())
 - ਸਟਰੇਪੀ ਫੰਕਸ਼ਨ (Strcpy())
 - ਸਟਰੀਟ ਫੰਕਸ਼ਨ (Strcat())
 - ਸਟਰੈਮਪ ਫੰਕਸ਼ਨ (Strcmp())
 - ਗੈਟਚਰ ਫੰਕਸ਼ਨ (getchar())
 - ਪੁਟਚਰ ਫੈਕਸ਼ਨ (putchar())

- ਪ੍ਰਿੰਟਐਫ ਫੰਕਸ਼ਨ (Printf())
- ਸਕੈਨਐਫ ਫੰਕਸ਼ਨ (Scanf())
- ਕੋਸ ਫੰਕਸ਼ਨ (Cos())
- ਐਕਸਪ ਫੰਕਸ਼ਨ (Exp())
- ਪੋਵ ਫੰਕਸ਼ਨ (Pow())
- ਸਕਰਟ ਫੰਕਸ਼ਨ (Sqrt())
- ਐਫਮੋਡ ਫ ਫੰਕਸ਼ਨ (fmod())
- ਫੇਬਸ ਫੰਕਸ਼ਨ (Fabs())
- ਸੀਲ ਫੰਕਸ਼ਨ (Ceil ())
- ਫਲੋਰ ਫੰਕਸ਼ਨ (floor())
- ਇਜ਼ਲੋਅਰ ਅਤੇ ਇਜ਼ਅਪਰ ਫੰਕਸ਼ਨ (islower() and isupper())
- ਟੂਲੋਅਰ ਅਤੇ ਟੂਅਪਰ ਫੈਕਸ਼ਨ (tolower()) and (toupper ())
- ਫੰਕਸ਼ਨ ਦੇ ਲਾਭ



ਸਮਾਂ: 3 ਘੰਟੇ

ਲਿਖਤੀ ਪੇਪਰ= 80 ਅੰਕ ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ= 20 ਅੰਕ ਕੁੱਲ ਅੰਕ= 100 ਅੰਕ

ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਅੰਕ-ਵੰਡ

ਲੜੀ ਨੰ.	ਪਾਠ-ਕ੍ਰਮ	ਅੰਕ
1.	ਸੁੰਦਰ ਲਿਖਾਈ	05
2.	ਮੱਧ-ਕਾਲੀਨ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ): ਸੂਫ਼ੀ- ਕਾਵਿ,ਗੁਰਮਤਿ-ਕਾਵਿ,ਕਿੱਸਾ-ਕਾਵਿ ਅਤੇ ਬੀਰ-ਕਾਵਿ	31
3.	ਆਪ-ਬੀਤੀਆਂ: ਪੰਜਾਬੀ ਸ੍ਵੈ-ਜੀਵਨੀਆਂ ਵਿੱਚੋਂ ਲਏ ਅੰਸ਼	18
4.	ਸਾਹਿਤ-ਬੋਧ (ਸਾਹਿਤ ਰੂਪ): ਕਵਿਤਾ,ਨਿਬੰਧ,ਨਾਵਲ,ਨਿੱਕੀ ਕਹਾਣੀ,ਜੀਵਨੀ,ਸਵੈ-ਜੀਵਨੀ,ਸਫ਼ਰਨਾਮਾ,ਇਕਾਂਗੀ,ਨਾਟਕ	11
5.	ਸਾਹਿਤ-ਬੋਧ :ਛੰਦ,ਅਲੰਕਾਰ,ਰਸ	15
	ਕੁੱਲ ਅੰਕ	80

ਪ੍ਰਸ਼ਨ-ਪੱਤਰ ਦੀ ਰੂਪ-ਰੇਖਾ

ਸਮਾਂ: 3 ਘੰਟੇ ਕੁੱਲ ਅੰਕ (ਲਿਖਤੀ) =80 ਨੋਟ: 5 ਅੰਕ ਸੁੰਦਰ ਲਿਖਾਈ ਲਈ ਨਿਰਧਾਰਿਤ ਕੀਤੇ ਗਏ ਹਨ।ਇਹ ਅੰਕ ਇਸ ਪ੍ਰਸ਼ਨ-ਪੱਤਰ ਦੇ ਕੁੱਲ ਅੰਕਾਂ-80 ਵਿੱਚ ਹੀ ਰਾਖਵੇਂ ਹਨ।ਸੁੰਦਰ ਲਿਖਾਈ ਵਿੱਚ ਅੱਖਰਾਂ ਤੇ ਸ਼ਬਦਾਂ ਦਾ ਸਹੀ ਆਕਾਰ, ਸਪਸ਼ਟਤਾ, ਨਿਸ਼ਚਿਤ ਦੂਰੀ,ਲਿਖਣ 'ਚ ਇਕਸਾਰਤਾ,ਪ੍ਰਵਾਹਯੁਕਤ ਲੇਖਨ , ਸ਼ਬਦ-ਜੋੜ ਸ਼ੁੱਧਤਾ, ਸੁੰਦਰ ਸ਼ਬਦ-ਬਣਤਰ,ਵਿਸਰਾਮ-ਚਿੰਨ੍ਹਾਂ ਦੀ ਸਹੀ ਵਰਤੋਂ ਅਤੇ ਲਿਖਾਈ ਦੇ ਸਮੁੱਚੇ ਖ਼ੂਬਸੂਰਤ ਪ੍ਰਭਾਵ ਦੇ ਆਧਾਰ 'ਤੇ ਪਰੀਖਿਅਕ ਸੰਬੰਧਿਤ ਪਰੀਖਿਆਰਥੀ ਦੀ ਲਿਖਾਈ ਦਾ ਮੁਲਾਂਕਣ ਕਰੇਗਾ।

- (1) ਪ੍ਰਸ਼ਨ-ਪੱਤਰ ਦੇ ਕੁੱਲ 10 ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ।
- (2) ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਲਾਜ਼ਮੀ ਹੋਣਗੇ।

ਵਿਸ਼ੇਸ਼ ਹਿਦਾਇਤਾਂ

ਪਰੀਖਿਆ ਪੱਖੋਂ

ਅਧਿਆਪਕਾਂ,ਵਿਦਿਆਰਥੀਆਂ,ਪੇਪਰ-ਸੈੱਟਰਾਂ ਅਤੇ ਪਰੀਖਿਅਕਾਂ ਲਈ ਵਿਸ਼ੇਸ਼ ਹਿਦਾਇਤਾਂ **ਪ੍ਰਸ਼ਨ ਨੰ: 1** ਸਮੁੱਚੇ ਪਾਠ-ਕ੍ਰਮ ਦੇ ਆਧਾਰ 'ਤੇ ਸੰਖੇਪ ਉੱਤਰਾਂ ਵਾਲ਼ੇ ਦਸ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।ਹਰੇਕ ਪ੍ਰਸ਼ਨ 1 ਅੰਕ ਦਾ ਹੋਵੇਗਾ।ਇਹ ਪ੍ਰਸ਼ਨ ਗ਼ਲਤ/ਠੀਕ,ਬਹੁਚੋਣ,ਖ਼ਾਲੀ ਥਾਂਵਾਂ,ਇੱਕ-ਦੋ ਸ਼ਬਦਾਂ ਦੇ ਉੱਤਰ ਦੇਣ ਵਾਲ਼ੇ ਹੋਣਗੇ।

ਅੰਕਾਂ ਦੀ ਵੰਡ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਹੋਵੇਗੀ:

(ੳ) ਮੱਧ-ਕਾਲੀਨ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ):- 4 ਅੰਕ

ਗੁਰਮਤਿ-ਕਾਵਿ,ਕਿੱਸਾ-ਕਾਵਿ ਅਤੇ ਬੀਰ-ਕਾਵਿ ਵਿੱਚੋਂ 1-1 ਪ੍ਰਸ਼ਨ ਪੁੱਛਿਆ ਜਾਵੇਗਾ।ਇਹ ਪ੍ਰਸ਼ਨ ਰਚਨਾ ਦੇ ਕਵੀ/ਕਵੀ ਦੀ ਰਚਨਾ ਅਤੇ ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚ ਦਿੱਤੀ ਪਾਠ-ਸਮੱਗਰੀ 'ਤੇ ਆਧਾਰਿਤ ਹੋਣਗੇ।

(ਅ) **ਆਪ-ਬੀਤੀਆਂ:-** 2 ਅੰਕ

ਇੱਕ ਪ੍ਰਸ਼ਨ ਸਵੈ-ਜੀਵਨੀ ਅੰਸ਼ ਦੇ ਲੇਖਕ ਸੰਬੰਧੀ/ਲੇਖਕ ਦੇ ਸਵੈ-ਜੀਵਨੀ ਅੰਸ਼ ਸੰਬੰਧੀ ਅਤੇ ਦੂਜਾ ਪ੍ਰਸ਼ਨ ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚ ਨਿਰਧਾਰਿਤ ਪਾਠ-ਸਮੱਗਰੀ 'ਤੇ ਆਧਾਰਿਤ ਹੋਵੇਗਾ। (ੲ) ਸਾਹਿਤ-ਬੋਧ:- 4 ਅੰਕ ਇੱਕ-ਇੱਕ ਪ੍ਰਸ਼ਨ ਕ੍ਰਮਵਾਰ ਸਾਹਿਤ-ਰੂਪ, ਅਲੰਕਾਰ , ਛੰਦ ਅਤੇ ਰਸ ਨਾਲ ਸੰਬੰਧਿਤ ਹੋਵੇਗਾ। 4+2+4= 10 ਅੰਕ

- **ਪ੍ਰਸ਼ਨ ਨੰ: 2 ਮੱਧ-ਕਾਲੀਨ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ)** ਦੇ ਸੂਫ਼ੀ-ਕਾਵਿ, ਗੁਰਮਤਿ-ਕਾਵਿ, ਕਿੱਸਾ-ਕਾਵਿ ਅਤੇ ਬੀਰ-ਕਾਵਿ ਭਾਗ ਵਿੱਚੋਂ ਚਾਰ ਕਾਵਿ-ਅੰਸ਼ਾਂ/ਕਾਵਿ-ਸਤਰਾਂ ਵਾਲ਼ੇ ਬੰਦ ਦੇ ਕੇ ਕਿਸੇ **ਦੋ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ** ਕਰਨ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ।ਹਰੇਕ ਪ੍ਰਸੰਗ ਲਈ 2 ਅਤੇ ਵਿਆਖਿਆ ਲਈ 3 ਅੰਕ ਹੋਣਗੇ। 5+5=10 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ:3 ਮੱਧ-ਕਾਲੀਨ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ) ਦੇ ਕਿੱਸਾ-ਕਾਵਿ ਅਤੇ ਬੀਰ-ਕਾਵਿ ਭਾਗ ਵਿੱਚੋਂ ਇੱਕ ਕਾਵਿ-ਅੰਸ਼/ਕਾਵਿ-ਸਤਰਾਂ ਵਾਲ਼ਾ ਬੰਦ ਦੇ ਕੇ ਉਸ ਨਾਲ਼ ਸੰਬੰਧਿਤ 3 ਅਤਿ-ਸੰਖੇਪ ਉੱਤਰਾਂ ਵਾਲ਼ੇ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ।ਇਸ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਉਸ ਕਾਵਿ-ਅੰਸ਼ ਦੇ ਕਵੀ ਦਾ ਨਾਂ ਲਿਖਣ ਅਤੇ 2 ਪ੍ਰਸ਼ਨ ਉਸ ਕਾਵਿ-ਅੰਸ਼ ਦੀ ਵਿਸ਼ਾ-ਸਮੱਗਰੀ ਨਾਲ ਸੰਬੰਧਿਤ ਹੋਣਗੇ।ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦਾ ਉੱਤਰ 2 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ। 2+2+2=6 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ:4 ਮੱਧ-ਕਾਲੀਨ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ) ਦੇ ਸੂਫ਼ੀ-ਕਾਵਿ ਅਤੇ ਗੁਰਮਤਿ-ਕਾਵਿ ਭਾਗਾਂ ਵਿੱਚੋਂ ਕੋਈ ਤਿੰਨ ਰਚਨਾਵਾਂ ਦੇ ਨਾਂ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਦਾ ਕੇਂਦਰੀ ਭਾਵ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 4 ਅੰਕ
- **ਪ੍ਰਸ਼ਨ ਨੰ:5 ਮੱਧ-ਕਾਲੀਨ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ)** ਦੇ ਸੂਫ਼ੀ-ਕਾਵਿ,ਗੁਰਮਤਿ-ਕਾਵਿ,ਕਿੱਸਾ-ਕਾਵਿ ਅਤੇ ਬੀਰ-ਕਾਵਿ ਭਾਗ ਨਾਲ਼ ਸੰਬੰਧਿਤ ਪਾਠਾਂ ਅਤੇ ਪਾਠ-ਅਭਿਆਸ ਵਿੱਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਦੇ ਕੇ ਕਿਸੇ **ਇੱਕ ਪ੍ਰਸ਼ਨ** ਦਾ ਉੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 7 ਅੰਕ
- **ਪ੍ਰਸ਼ਨ ਨੰ:6 ਆਪ-ਬੀਤੀਆਂ** ਪਾਠ-ਪੁਸਤਕ ਅਤੇ ਪਾਠ-ਅਭਿਆਸਾਂ ਉੱਤੇ ਆਧਾਰਿਤ ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲ਼ੇ ਅੱਠ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ ਅਤੇ ਉਹਨਾਂ ਵਿੱਚੋਂ ਕੋਈ **ਚਾਰ ਪ੍ਰਸ਼ਨਾਂ** ਦੇ ਉੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 4*4=16 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ:7 ਸਾਹਿਤ-ਬੋਧ ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚੋਂ ਕਿਸੇ ਤਿੰਨ ਸਾਹਿਤ-ਰੂਪਾਂ ਦੇ ਨਾਂ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਬਾਰੇ ਨੋਟ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। ਇਸ ਵਿੱਚ 2 ਅੰਕ ਸੰਬੰਧਿਤ ਸਾਹਿਤ ਰੂਪ ਦੀ ਅਤਿ-ਸੰਖੇਪ ਢੰਗ ਨਾਲ ਮੌਲਿਕ ਪਰਿਭਾਸ਼ਾ (ਜੋ ਸੰਬੰਧਿਤ ਸਾਹਿਤ ਰੂਪ ਦੀ ਮੁੱਢਲੀ ਜਾਣਕਾਰੀ/ਜਾਣ-ਪਛਾਣ ਦੇਣ ਨਾਲ ਸੰਬੰਧਿਤ ਹੋਵੇਗੀ।) ਦੇਣ,6 ਅੰਕ ਉਸ ਦੇ ਲੱਛਣ/ਵਿਸ਼ੇਸ਼ਤਾਈਆਂ/ਤੱਤਾਂ ਦੀ ਜਾਣਕਾਰੀ ਦੇਣ ਅਤੇ 2 ਅੰਕ ਸੰਬੰਧਿਤ ਸਾਹਿਤ ਰੂਪ ਦੇ ਕੋਈ ਅਹਿਮ 2-2 ਪੰਜਾਬੀ ਲੇਖਕਾਂ/ਰਚਨਾਵਾਂ ਦੇ ਨਾਂ ਲਿਖਣ ਦੇ ਹੋਣਗੇ। 2+6+2=10 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ:8 ਸਾਹਿਤ-ਬੋਧ ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚੋਂ ਦੋ ਛੰਦਾਂ ਬਾਰੇ ਪੁੱਛ ਕੇ ਕਿਸੇ ਇੱਕ ਛੰਦ ਬਾਰੇ ਉਦਾਹਰਨਾਂ ਸਹਿਤ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 4 ਅੰਕ
- **ਪ੍ਰਸ਼ਨ ਨੰ:10 ਸਾਹਿਤ-ਬੋਧ** ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚੋਂ ਦੋ **ਰਸਾਂ** ਬਾਰੇ ਪੁੱਛ ਕੇ ਕਿਸੇ **ਇੱਕ ਰਸ** ਬਾਰੇ ਉਦਾਹਰਨਾਂ ਸਹਿਤ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 4 ਅੰਕ

ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ: 20 ਅੰਕ

ਆਂਤਰਿਕ ਮਲਾਂਕਣ ਦੀਆਂ ਹਿਦਾਇਤਾਂ ਅਤੇ ਅੰਕ-ਵੰਡ

ਲੜੀ	ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ ਦੀ ਰੂਪ-ਰੇਖਾ	ਅੰਕ
ਨੰ.		
1.	ਪ੍ਰੋਜੈਕਟ:	10 ਅੰਕ(2+4+4)
	ਆਪ-ਬੀਤੀਆਂ ਪੁਸਤਕ ਵਿੱਚੋਂ ਵੱਖ-ਵੱਖ ਸ੍ਵੈ-ਜੀਵਨੀ ਅੰਸ਼ਾਂ ਦੀ ਵਿਸ਼ਾ-	
	ਸਮੱਗਰੀ ਨਾਲ ਸੰਬੰਧਿਤ ਹੇਠ ਲਿਖੇ ਪ੍ਰੋਜੈਕਟ ਬਣਾ ਕੇ ਸੰਬੰਧਿਤ ਵਿਸ਼ਾ-	
	ਅਧਿਆਪਕ ਕੋਲ ਮੁਲਾਂਕਣ ਲਈ ਜਮ੍ਹਾਂ ਕਰਵਾਏ ਜਾਣਗੇ:	
	1. 02 ਚਾਰਟ	2 ਅੰਕ
	2. 01 ਸਕਰੈਪ ਬੁੱਕ (ਸੰਬੰਧਿਤ ਵਿਸ਼ੇ ਨਾਲ ਸੰਬੰਧਿਤ ਤਸਵੀਰਾਂ	4 ਅੰਕ
	ਆਦਿ ਦੀ ਸਮੱਗਰੀ ਵਾਲੀ)	
	3. 01 ਮਾਡਲ ਦਾ ਨਿਰਮਾਣ	4 ਅੰਕ
2.	ਭਾਸ਼ਾਈ ਸਮਰਥਾ (ਸ਼ੁੱਧ ਉਚਾਰਨ/ਬੋਲਣ-ਯੋਗਤਾ):	03 ਅੰਕ
	ਮੱਧ-ਕਾਲੀਨ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ) ਦੇ ਕਾਵਿ-ਅੰਸ਼ਾਂ	
	ਦੇ ਆਧਾਰ 'ਤੇ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ।	
3.	ਭਾਸ਼ਾਈ ਸਮਰਥਾ (ਸਰਵਣ/ਸੁਣਨ-ਯੋਗਤਾ):	02
	ਮੱਧ-ਕਾਲੀਨ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ) ਦੇ ਕਾਵਿ-ਅੰਸ਼ਾਂ	

	ਦੇ ਆਧਾਰ 'ਤੇ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ।	
4.	ਭਾਸ਼ਾਈ ਸਮਰੱਥਾ (ਸ਼ੁੱਧ ਪੜ੍ਹਨ-ਯੋਗਤਾ):	03
	ਮੱਧ-ਕਾਲੀਨ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ) ਦੇ ਕਾਵਿ-ਅੰਸ਼ਾਂ	
	ਦੇ ਆਧਾਰ 'ਤੇ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ।	
5.	ਪੁਸਤਕ ਬੈਂਕ/ਬੁੱਕ-ਬੈਂਕ:	02
	ਸੰਬੰਧਿਤ ਵਿਸ਼ੇ ਦੀਆਂ ਪੁਸਤਕਾਂ ਦੇ ਬੁੱਕ-ਬੈਂਕ ਵਿੱਚ ਯੋਗਦਾਨ ਪਾਉਣ	
	ਅਤੇ ਉਹਨਾਂ ਦੀ ਸਾਂਭ-ਸੰਭਾਲ ਵਿੱਚ ਕਿਰਿਆਸ਼ੀਲ ਭੂਮਿਕਾ ਨਿਭਾਉਣ	
	ਦੇ ਆਧਾਰ 'ਤੇ ਇਹ ਅੰਕ ਸੰਬੰਧਿਤ ਵਿਸ਼ਾ-ਅਧਿਆਪਕ ਵੱਲੋਂ ਦਿੱਤੇ	
	ਜਾਣਗੇ।	
	ਕੁੱਲ ਅੰਕ	20

ਪੰਜਾਬ ਸਕੂਲ ਸਿੱਖਿਆ ਬੋਰਡ ਵੱਲੋਂ ਨਿਰਧਾਰਿਤ ਪਾਠ-ਪੁਸਤਕਾਂ:

- 1. ਮੱਧ-ਕਾਲੀਨ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ) 2. ਆਪ-ਬੀਤੀਆਂ
- 3. ਸਾਹਿਤ-ਬੋਧ

HINDI

पाठ्यकम (2020-21)	
विषय : हिंदी पूर्णांक (लिखिन)	-75+5(सुदर ॉलखाई) =80
ममय 3 घंटे कक्का : बारहवी	आंतरिक मूल्यांकन= 20
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	and the control of the second
विषय वस्तु	31ंক
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भाग-क : अति लघुत्तर प्रइन (वस्तुनिष्ठ प्रइन)	20
समास (अव्ययीभाव, तत्पुरुष, बहुब्रीहि तथा द्वंद्व)	
पाठ्य-पुस्तक	
हिंदी साहित्य का इतिहास (रीतिकाल एवं आधुनिक काल	
इंद	
अलंकार	
भाग-गव : पाठय -पस्तक (हिंदी पुस्तक-12)	23
second and second second second but shows	
भाग-ग -हिंदी साहित्य का इतिहास (रीतिकाल एवं आधुनिक काल) 8
NAME OF GROAD A SECOND OF SHORE OF STATUS	
भाग-घ - रचनात्मक लेखन : निबंध लेखन	
and the second	9
भाग-ङ - व्यावहारिक ज्ञान	(3)
1.प्रजाबा गद्यांश का हिंदा अनुवाद	(3)
2.पारिभाषिक शब्दावला (J स लेकेर Z तेक)	(3)
3.विज्ञापन लेखन, सूचना लेखन	
	8
भाग-च - छद् एव अलकार	
। फ्रंट (टोहा सोरठा सबैया कवित्त चौपाई)	(4)
१ अलंकार (अनुपास उपमा रूपक युनक, श्लेष)	(4)

4

हिंदी भाषा बोध और व्याकरण (ग्यारहवी और बारहवी कक्षा के लिए)

हिंदी साहित्य का इतिहास (ग्यारहवीं और बारहवी कक्षा के लिए)

2. 001101 (0132003-017)

पंजाब स्कूल शिक्षा बोर्ड द्वारा निर्धारित पाठ्य - पुस्तके 1. हिंदी पुस्तक-12

प्रश्न-पत्र की रूपरेखा कक्षा : बारहवीं

समय : 3 घंटे

प्रश्न पूछे जायेंगे।

वस्तुनिष्ठ प्रश्न पूछे जायेंगे।

जायेगा।

पूर्णांक (लिखित) -80

20

 $4 \times 1 = (4)$

5×1= (5)

 $5 \times 1 = (5)$

 $2 \times 1 = (2)$

 $2 \times 1 = (2)$

23

1+3=(4)

1+3=(4)

2×1 (2)

विषय : हिदा

लिखाई का मूल्यांकन करेगा। • प्रश्न-पत्र में कुल 15 प्रश्न होंगे । • सभी प्रश्न हल करने अभिवार्ध होंगे ।

• प्रश्न-पत्र के छह भाग (क से च तक) होंगे ।

(v-vi) पद परिचय से सम्बन्धित दो वस्तुनिष्ठ प्रइन पूछे जाएंगे ।

(xvii-xviii) छंद से सम्बन्धित दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे।

अंक तथा व्याख्या के लिये 3 अंक निधारित है।

(xvii-xviii) अलंकार से सम्बन्धित दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे।

लिये 1 अंक तथा व्याख्या के लिये 3 अंक निधारित है।

नोट : (i) 05 अंक सुंदर लिखाई के लिए निर्धारित किए गए हैं। अक्षरों व शब्दों के सामान्य

भाग-क : अति लघूत्तर प्रश्न (वस्तुनिष्ठ प्रश्न)

प्रश्न-1 में (i) से (X) तक वस्तुनिष्ठ प्रश्न पूछे जायेंगे । प्रत्येक प्रश्न एक अंक का होगा। ये प्रश्न एक शब्द से एक वाक्य तक के उत्तर वाले अथवा हाँ/नहीं अथवा रिक्त स्थानों की पूति करो अथवा सही/गलत अथवा बहुवैक लिपक उल्तरों वाले,किसी भी प्रकार के हो सकते है।

(i-iv) तक समास (अव्ययीभाव, तत्पुरुष, बहुब्रीहि तथा द्वंद्व) से सम्बन्धित चार वस्तुनिष्ठ

(vii-xi) तक पाठ्य-पुस्तक (हिंदी पुस्तक-12) में से पाँच वस्तुनिष्ठ प्रश्न पूछे जायेंगे।

(xji-xvi) तक हिंदी साहित्य का इतिहास (रीतिकाल एवं आधुनिक काल) में से पाँच

भाग-ख (पाठ्य -पुस्तक)

(ii) हिंदी पुस्तक-12 में संकलित 'आधुनिक कान्य' में से दो पद्धांश दिये जायेंगे

प्रश्न-4 पाठ्य - पुस्तक में संकलित गद्य भाग की विषय वस्तु से सम्बन्धित तीन

प्रश्न-2 (i) हिंदी पुस्तक-12 में संकलित 'प्राचीन काव्य' में से दो पद्यांश दिये जायेंगे जिनमें से एक पद्यांश की सप्रसंग व्याख्या लिखने के लिये कहा जायेगा। प्रसंग के लिये 1

जिनमें से एक पद्यांश की सप्रसंग व्याख्या लिखने के लिये कहा जायेग ।।प्रसंग के

प्रश्न-3 'प्राचीन काव्य' तथा 'आधुनिक काव्य' की विषय वस्तु में सम्बन्धित दो लघूत्तर प्रश्न

पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 50 शब्दों में लिखने के लिये कहा

निबन्धात्मक प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 80 शब्दों में

आकार, अक्षरों की सुस्पष्टता, अक्षरों व शब्दों के बीच की निश्चित दूरी , लिखने में एकसारता, व प्रवाहयुक्त लेखन आदि के आधार पर अध्यापक परीक्षार्थी की

	लिखने के लिये कहा जायेगा।	(5)
-: 5	प्रइन-पत्र निर्माता पाठ्य-पुस्तक में संकलित गद्य भाग (निवन्ध, का	हानी एवं
	एकांकी) की सभी विधाओं को पूर्ण प्रतिनिधित्व दे।	

से एक प्रश्न का उत्तर लगभग 50 शब्दों में लिखने के लिये कहा जायेगा।

प्रश्न-5

पाठ्य - पुस्तक में संकलित 'निबन्ध' भाग में से दो लघूत्तर प्रश्न पूछे जायेंगे जिनमें

21/2

 प्राष्ट्रम-6
 पाठ्य - पुस्तक में संकलित 'कहानी' भाग में से दो लघूत्तर प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 50 शब्दों में लिखने के लिये कहा जायेगा।
 21/2

 प्राष्ट्रन-7
 पाठ्य - पुस्तक में संकलित 'एकांकी' भाग में से दो लघूत्तर प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 50 शब्दों में लिखने के लिये कहा जायेगा।
 21/2

 भाग-ग
 हिंदी साहित्य का इतिहास (रीतिकाल एवं आधुनिक काल) 08
 भाग-ग
 हिंदी साहित्य का इतिहास (रीतिकाल एवं आधुनिक काल) 08

प्रइन-8 इस प्रइन में हिंदी साहित्य के 'रीतिकाल'की प्रमुख परिस्थितियों , प्रमुख प्रवऊत्तियों एवं प्रमुख कवियों से सम्बन्धित दो निबन्धात्मक प्रइन पूर्छ जायेंगे जिनमें से एक प्रइन का उत्तर लगभग 70-80 शब्दों में लिखने के लिये कहा जायेगा। (4) प्रइन-9 इस प्रइन में हिंदी साहित्य के 'आधुनिककाल'की प्रमुख परिस्थितियों , प्रमुख प्रवृत्तियों एवं प्रमुख कवियों से सम्बन्धित दो निबन्धात्मक प्रइन पूर्छ जायेंगे जिनमें से एक प्रइन का उत्तर लगभग 70-80 शब्दों में लिखने के लिये कहा जायेगा। (4)

	2	गग-घ (रचनात्मक लेखन)		7
प्रश्न-	10 यह प्रश्न निबंध रचना	से सम्बन्धित होगा।कोइ च	ार विषय देकर उनमें से	किसी
9	एक विषय पर लगभग	230-250 शब्दों में निबंध	लिखने के लिये कहा उ	जायेगा।
	भूमिका के 2 अंक,विष	य वस्तु के 4 अंक और उप	संहार के 1 अंक निधारि	त है।
			2+4+	1= (7)
	भाग-ड	(व्यावहारिक ज्ञान)		9
प्रान-	11 इस प्रश्न में लग्धग 4	0-50 ज़ब्दों का पंजाबी में	एक गढ्यांश दिया जाये	गा.

प्रशन-11 इस प्रशन म लगगन 40-50 शब्दा का पंजाबा न एक पद्वारा प्रधा जावन, जिसका अनुवाद हिंदी में लिखना होगा। (3) प्रशन-12 अंग्रेज़ी के पाँच पारिभाषिक शब्द दिये जायेंगे जिनमें से किन्हों तीन शब्दों के हिंदी रूप लिखने के लिये कहा जायेंगरे (3)

प्रइन-13 विज्ञापन और सूचना से सम्बन्धित के प्रइन पूछे जायेंगे जिनमें से एक प्रइन का उत्तर लिखने के लिये कहा जायेगा। (3)

भाग-च (छंद एवं अलंकार)

प्रहन-14 कोई दो छंद देकर किसी एक छंद का लक्षण एवं उदाहरण लिखने के लिये कहा जायेगा। 1+3= (4) प्रहन-15 कोई दो अलंकार देकर किसी एक अलंकार की परिभाषा एवं उदाहरण लिखने के लिये कहा जायेगा। 1+3= (4)

कक्षा बारहवीं आंतरिक मूल्यांकन

आंतरिक मूल्यांकन की रूपरेखा

(क) श्रवण कौशल		(3)
(ख) वाचन कौशल		(3)
(ग) पठन कौशल		(3)
(घ) लेखन कौशल		(3)

पुस्तक बैंक

1. भाषायी कौशलों का मूल्यांकन

2 अंक

20 अंक

12 अंक

8

विद्यार्थी द्वारा स्कूल के पुस्तकालय में हिंदी दिषय की पुस्तकों के संग्रह में योगदान देने के आधार पर मूल्यांकन किया जाए। स्कूल में बने पुस्तक बैंक में समय पर पुस्तकें जमा करवाने व पुस्तकों का रखरखाव करने आदि के आधार पर मूल्यांकन किया जाए। 3. परियोजना कार्यः 6 अंक

इसके अंतर्गत निर्धारित पाठ्यक्रम के आधार पर अध्यापक द्वारा विद्यार्थियों को परियोजना तैयार करने को कहा जाएगा , जिसका मार्गदर्शन अध्यापक करेगा। विद्यार्थी परियोजना लिखते समय उसे रुचिपूर्ण बनाने के लिए चित्रों का प्रयोग कर सकता है। इसके अंक निम्नलिखित प्रकार से निर्धारित होंगे।

विषय वस्तु की समझ एवं प्रस्तुतिकरण

2+4=6

CLASS-XII ENGLISH ELECTIVE

Time: 3Hrs

Theory: 80 Marks IA: 20 Marks (Assessment based on periodic tests:9 marks *Project/Assignment:9 marks Book bank: 2 marks) **Total: 100 Marks**

STRUCTURE OF QUESTION PAPER Part -A

Objective type question No.1 will be compulsory

I. It will consist of 10 objective type questions carrying one mark each. type questions may include questions with one word to one Objective sentence answer **or** fill in the blank **or** true/false **or** multiple choice type questions. 3 Dear to All the Muses • 3 The Literary Petals Select One Act Plays/ Pride and Prejudice 2 • Grammar 2 PART B- DEAR TO ALL THE MUSES Text for detailed study (16 marks) II. Comprehension of a passage: 10 Comprehension to be tested with the help of the following techniques: 3 (i) Three short- answer questions (ii) Matching exercise (three words to be matched out of four words)3 (iii) Fill in the blanks (Two sentences) 2 Finding one word for a given expression from the passage. 2 (iv) III. 3 out of 4 short answer type questions based on the contents of different lessons (to be answered in 30-40 words each). $2 \times 3 = 6$ Along with the Exercises, the questions can be asked from content also. **PART C- THE LITERARY PETALS** (18 marks) Text for detailed study IV. (a) Four short answer type questions (to be answered in 30-40 word stories and 2 from poems as suggested at the end each) 2 from of each lesson, with internal choice in each question. $2 \times 4 = 8$ One essay type (long answer type) comprehension question (with (b) internal choice) as suggested in the exercises at the end of each

V. Explanation with Reference to the Context (POEMS ONLY) of a given stanza/lines.

story.

OR

A question on summary/substance/development of thought etc. of a poem (with internal choice) 5

(10 marks)

5

	PART D-SELECT ONE-ACT PLAYS/PRIDE AND PREJUDIC	CE .
	Text for non-detailed study (10 ma	arks)
SEL	CT ONE-ACT PLAYS	
VI) Character – Sketch (with internal choice)	5
) Question on theme/incident/episode etc.	5
	OR	
PRI	E AND PREJUDICE	
) Character sketch (with internal choice)	5
) Theme/Incident/Episode (with internal choice)	5
	PART-E COMPOSITION & VOCABULARY (21)	marks)
VII	Paragraph Writing (one out of five)	5
VIII	To as directed type questions covering the following items:	
	i. Change of Voice	2
	ii. Change of Narration	2
	iii. Combining two simple sentences into one use linkers etc	z. 2
	iv. Use of Modals	2
	v. Transformation of sentences (use of gerunds, te	o-infinitive,
	participles, adverbials)	2
Not	The above question will be based as far as possible, on the text	t books.
IX.	TRANSLATION (Need not be text based, should be simple, ca	an be from
	anywhere outside text books.)	6
	From Vernacular into English	
	A small running passage of about 5/6 sentences.	
Not	A special question in lieu of translation for foreign	students:
Para	raph/Composition	
X.	ood Handwriting-	5 Marks
	SYLLABUS	
DE/	PART-A TO ALL THE MUSES	
LES	ON	
1.	Varrior against Weeds	

- 2. A Most Forgiving Ape
- 3. A Young Turkish Catastrophe
- 4. A Tiny Sanctuary
- 5. Mano Majra
- 6. Jamaican Fragment
- 7. The Heritage of India
- 8. Gold in the North
- 9. My Greatest Olympic Prize
- 10. The Green Revolution
- 11. The Snob
- 12. Most Dear to All the Muses

13. The Case For the Defence

LITERARY PETALS:

LESSON:

- 1. Hind ki Chadar Sri Guru Teg Bahadur
- 2. Border Guards (Poem)
- 3. My Heart Leaps when I Behold (Poem)
- 4. The Gambling Match
- 5. The Quality of Mercy (Poem)
- 6. The Fancy Dress Show (Poem)
- 7. The Eternal Why
- 8. The Song of India (Poem)
- 9. After Twenty Years
- 10. The Tree Fell down (Poem)
- 11. The World Today is Wild with the Delirium of Hatred (Poem)
- 12. Attacked by Pit Bulls
- 13. Slave ? No Master (Poem)
- 14. The Unrest of Desire (Poem)
- 15. The Boy Who Broke the Bank
- 16. Is This The End? (Poem)
- 17. The Conjuror's Revenge
- 18. Guru (Poem)
- 19. A River Tern on the Ganga (Poem)

SELECT ONE-ACT PLAYS

- 1. The Bishop's Candlesticks
- 2. The Miracle-Merchant
- 3. The King's Warrant
- 4. The Monkey's Paw

Novel: Pride & Prejudice

PART-B

COMPOSITION, VOCABULARY, APPLIED GRAMMAR

Paragraph Writing/ Extended Compostion

Translation : 1 Paragraph from Hindi/Punjabi to English.

APPLIED GRAMMAR: Do as directed type questions covering the following

items

- (i) Change of Narration
- (ii) Change of Voice
- (iii) Joining two simple sentences into one using linkers etc
- (iv) Use of Modals
- (v) Transformation of Sentences (Use of gerunds, Infinities, Participles adverbials)

The books Prescribed & Published by the Punjab School Education Board.

- 1. Dear to All the Muses
- 2. The Literary Petals
- 3. Select One Act Plays
- 4. Pride and Prejudice

*Project/ Assignment will be based on biography of any two author and two poets in reference to the syllabys.

पाठ्यकम (2020-21)

कक्षा : बारहवीं

विषय : संस्कृत

- प्रश्नपत्र में कुल 13 प्रश्न होंगे।
- प्रश्न पत्र में तीन भाग (क से ग तक) होंगे '

भाग - क

अति लघूत्तर प्रश्न (वस्तुनिष्ठ प्रश्न)

प्रश्न-1 में (i) से (x) तक वस्तुनिष्ठ प्रश्न पूछे जायेंगे । प्रत्येक प्रश्न एक अंक का होगा ।ये प्रश्न एक शब्द से एक वाक्य तक के उत्तरों वाले अथवा हाँ/नहीं अथवा सही/गलत अथवा बहुवैकल्पिक उत्तरों वाले, किसी भी प्रकार के हो सकते हैं ।यह प्रश्न पाठ्यक्रम से ही पूछे जायें। (i) से (ii) तक शब्द रूप (पुल्लिंग ,स्त्री लिंग तथा नपुंसकलिंग) से सम्बन्धित दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे ।

(iii) से (iv) तक धातुरूप (लट्लकार, लोट्लकार्,लङ्लकार् , लृट्लकार विधिलिङ् लकार्,) से सम्बन्धित

दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे ।

(v) से (vi) तक समास तत्पुरुष (सप्तमी विभिक्त तक) नञ्।, अलुक से सम्बन्धित दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे

(vii) से (viii) तक कृदन्त प्रत्यय से सम्बन्धित दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे

(ix) से (x) तक अलंकार/छन्द से सम्बन्धित दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे

भाग -ख

(पाठ्य पुस्तक के 1 से 19 तक पाठ)

- 2 गद्यांशों का हिन्दी या पंजाबी या अंग्रेज़ी में अनुवाद ।
- 3 पद्यों का हिन्दी या पंजाबी या अंग्रेज़ी में प्रसंग सहित अर्थ ।
- 4 पाठों के अभ्यासों में से हिन्दी में प्रश्न ।
- 5 पाठों के अभ्यासों में से संस्कृत लघु प्रश्न ।
- 6 पाठों के अभ्यासों में से संस्कृत शब्दों का वाक्यों में प्रयोग । अथवा व्यावहारिक संस्कृत शब्दों का हिन्दी में अनुवाद ।
- 7 पाठों के अभ्यासों में से यथानिर्दिष्ट परिवर्तन ।
- 8 प्राचीन लेखकों/कवियों का साहित्यिक परिचय ।

भाग-ग

(व्याकरण भाग)

9 (क) शब्द रूप : (पु.) गो, पितृ , राजन् , चन्द्रमस् , । (नपुं.) मित्र, अक्षि, पयस् । (स्त्री.) बाला, स्त्री, वधू, ।

(ख) धातु रूप : (लट्लकार, लोट्, लङ्, विधिलिङ्, लृटलकार्) भ्वादिगण : (परस्मैपद) भू, व्रज्, खाद्,घ्रा। अदादिगण : (प.) अस्, हन्। चुरादिगण : (प.) दण्ड्। तनादिगण : (प.) कृ। क्यादिगण : (प.) ज्ञा, ग्रह्।

10 कारक : अशुद्ध- शुद्ध वाक्यों पर आधारित ।

समास : तत्पुरुष (सप्तमी विभिक्त तक) नञ्।, अलुक् ।
 अथवा
 प्रत्यय: कृदन्त प्रत्यय- तव्यत्, अनीयर्, यत्, ल्युट्, तुमुन् ।

- अलंकार: और छंद
 (i) शब्दालंकार अनुप्रास, यमक।
 (ii) अर्थालंकार रूपक, उत्प्रेक्षा, उपमा, अर्थान्तरन्यास।
 अथवा
 छन्द :- अनुष्टुप्, वंशस्थ, मालिनी, शिखरिणी, पंचचामरम्, वसन्ततिलका ।
- 13 निबन्ध : नीचे लिखे विषयों पर संस्कृत में सरल निबन्ध (लगभग 100 शब्दों में) सत्संगति, परोपकार:, आदर्श - छात्र:, मम प्रिय- पुस्तकम्, कश्चिद् महापुरुष:, कश्चिद् उत्सव:, समाचार पत्राणां लाभा:।

अथवा

हिन्दी वाक्यों का संस्कृत में अनुवाद (1 से 15 अभ्यास तक)

निर्धारित पाठ्य पुस्तक : संस्कृत सौरभम्- 12 पंजाब स्कूल शिक्षा बोर्ड द्वारा प्रकाशित

आन्तरिक मूल्यांकन

आन्तरिक मूल्यांकन के कुल 20 अंक हैं, जो दो भागों में विभक्त किया गया है।

भाग- क (गतिविधियां) अंक 10

यह मूल्यांकन विद्यार्था द्वारा पूर्ण साल में की गई गतिविधियों पर आधारित होगा ।

- (क) विद्यार्थों की कक्षा में उपस्थिति = 2 अंक
- (ख) गृहकार्य = 2 अंक
- (ग) घरेलू परीक्षाओं पर आधारित मूल्यांकन = 4 अंक
- (घ) पुस्तक बैंक = 2 अंक (विद्यार्था पुस्तकालय में संस्कृत विषय की पुस्तकों के संग्रह में योगदान देगा जिससे पुस्तकालय में संस्कृत विषय की पुस्तकों के भण्डार में वृद्धि होगी)

भाग- ख (परियोजनाकार्यम्) अंक 10

यह मूल्यांकन संस्कृत भाषा के प्रति विद्यार्थी के सामान्य ज्ञान पर आधारित होगा । निम्नलिखित

विषयों पर विद्यार्था के ज्ञान का परीक्षण किया जाये।

(1) वाचन कौशल- वाचन कौशल के अंतर्गत विद्यार्थियों की वाचन कुशलता को विकसित करने के लिए पठ्य-पुस्तक में दिए गए गद्य- पद्य भाग में कोई एक अनुच्छेद पढ़ने को दिया जायेगा ।

- **लाभ-** 1. हाव- भाव सहित शुद्ध उच्चारण कौशल का विकास । **अंक= 3**
 - 2. व्याकरणिक दूष्टि से उच्चारण में शुद्धता का विकास ।
 - 3. विद्यार्थियों में भाषण कौशल का विकास ।
 - 8. प्राचीन संस्कृत साहित्य पढ़ने की रूचि का विकास
- (2) अवण कौशल- अवण कौशल के अंतर्गत विद्यार्थियों की अवण कुशलता को विकसित करने के लिए पठित सामग्री को सुनकर अर्थ ग्रहण करना,वार्तालाप करना, वाद-विवाद, संस्कृत गीतों को सुनने की कुशलता का विकास करना ।
- लाभ-
- 1. श्रवण के माध्यम से विद्यार्थियों में एकाग्रता विकसित होगी ।
- 2. मनन शक्ति का विकास होगा।
- 3. प्राचीन संस्कृत साहित्य सुनने की रूचि का विकास होगा ।

(3) अध्यापक परियोजनाकार्य भाग में स्वतन्त्र रूप से भी कक्षा में कार्य करवा सकता है। परियोजनाकार्य का उद्देश्य संस्कृत भाषा में विद्यार्था के लेखन कौशल का विकास करना है । इसके अंतर्गत निर्धारित पाठ्यØम के आधार पर अध्यापक द्वारा विद्यार्थिओं को परियोजना तैयार करने को कहा जाएगा, जिसका मार्गदर्शन अध्यापक करेगा । परियोजना लिखते समय उसे रुचिपूर्ण बनाने के लिए विद्यार्थी चित्रों का प्रयोग भी कर सकता है ।

अंक=4
विषय : संस्कृत कक्षा : बारहवीं प्रश्न- पत्र की रूपरेखा

कुल अंक : (लिखित=75+5 सुन्दर लिखाई) =80 आन्तरिक मुल्यांकन = 20

समय : 3 घण्टे

भाग क

1 अति लघूत्तर प्रश्न (वस्तुनिष्ठ प्रश्न)

1x10=10

भाग ख

(पाठ्य पुस्तक)

नोट : दो तथा तीन प्रश्न का उत्तर हिन्दी या पंजाबी या अंग्रेज़ी में दिया जा सकता है ।

2 4x2=8 तीन गद्यांश दिए जाएं जिनमें से दो का अनुवाद करने को कहा जाए । तीन पद्य दिए जाएं जिनमें से दो का प्रसंग सहित अर्थ लिखने को कहा जाए।दो 3 4x2=8 अंक प्रसंग के तीन अंक अर्थ के निधारित है । 4 पाठों के अभ्यासों में से पांच प्रश्न हिन्दी में पृछे जाएं, जिनमें से तीन का उत्तर 2x3=6 हिन्दी में लिखने को कहा जाए । 5 पाठों के अभ्यासों में से संस्कृत में पांच लघु प्रश्न दिए जाएं। जिनमें से तीन का 1x3=3 उत्तर संस्कृत में लिखने को कहा जाए। पाठों के अभ्यासों में से छ: संस्कृत शब्द दिए जाएं जिनमें से चार शब्दों का 6 वाक्यों में प्रयोग करने को कहा जाए। अथवा 4x1=4 आठ व्यावहारिक संस्कृत शब्द दिए जाएं जिनमें से चार शब्दों का हिन्दी में अनुवाद करने को कहा जाए। यथानिर्दिष्ट परिवर्तन के पाँच वाक्य दिए जाएं जिनमें से तीन वाक्यों में परिवर्तन 7 3 x1=3 करने को कहा जाए। प्राचीन लेखकों/कवियों के साहित्यिक परिचय से संबंधित सात प्रश्न पृछे जाएं 8 5x1=5 जिनमे से पाँच का उत्तर लिखने को कहा जाएं। भाग=ग (व्याकरण भाग) (क) पाठ्यकम में दिए गये शब्द रूपों में से छ: शब्दों के रूप किसी एक 9 विभक्ति के तीनों वचनों में पूछे जायें जिनमें से केवल चार शब्दों के रूप लिखने $4x1\frac{1}{2}=6$ हों ।

 (ख) पाठ्यक्रम में दिए गये धातु रूपों में से छ: धातुओं के रूप किसी एक लकार के एक पुरुष के तीनों वचनों में पूछे जायें जिनमें से केवल चार धातुओं के रूप लिखने हों।
 4x1½=6

10 कारक सम्बन्धी अशुद्धि वाले सात वाक्य दिये जायें जिनमें से चार वाक्यों को

4x1=4

शुद्ध करने को कहा जाये।

पाठ्यकम में दिए गए समासों से संबंधित पाँच समस्त पद दिए जाएं जिनमें से 11 तीन का विग्रह करने को कहा जाए।

अथवा

पाठ्यकम में दी गई धातुओं के साथ प्रत्यय लगाने के लिए पाँच धातुएं तथा 3x1=3प्रत्यय दिए जाएं जिनमें से तीन करने को कहा जाए ।

पाठ्यकम में दिए भेद रहित अलंकारों से संबंधित चार प्रश्न दिए जाएं जिनमें से 12 दो शब्दालंकार तथा दो अर्थालंकार हों तो उचित है । चार अलंकारों में से केवल दो की परिभाषा तथा उदाहरण लिखने अपेक्षित हो । परिभाषा तथा उदाहरण का एक-एक अंक निष्टिचत है।

अथवा

पाठ्यकम में निश्चित छंदों से संबंधित चार प्रश्न दिए जाएं जिनमें से दो मात्रिक तथा दो वर्णिक छंद हों तो उचित है । चार छंदों में से केवल दो की परिभाषा तथा उदाहरण लिखने अपेक्षित हो ।परिभाषा तथा उदाहरण का एक-एक अंक 2x2=4 निश्चित है।

13 पाठ्यकम में निश्चित् तीन निबंध देकर किसी एक विषय पर लगभग 100 शब्दों में निबंध लिखने को कहा जाए ।

अथवा

10 हिन्दी वाक्य दिए जाएं जिनमें से पाँच वाक्यों का संस्कृत में अनुवाद करने 5 को कहा जाए ।

CLASS-XII HISTORY (2020-21)

Time : 3 Hrs

Theory : 80 Marks Project work/ IA : 20 Marks Total:100 Marks

STRUCTURE OF QUESTION PAPER

- 1. All questions are compulsory.
- The question paper will comprises 5 questions in section A, B, C, D and E with sub parts . The question paper will carry:

SECTION- A

 Objective Type Question: This section comprises questions with one word to one sentence answer/ Fill in the blank/ True or false/ Multiple choice type questions. Question No. 1 comprises of 20 sub parts (questions I to XX) carry 1 mark each.
 20×1=20

SECTION- B

2. Short Answer type Question: This question comprises of 4 sub parts (question i to iv) carry 3 marks each. Answer to each question should be in about 35-40 words.
 4×3=12

SECTION- C

3 . Source Based Question:This section comprises 2 sub parts I to II (based on a passage given) carry 5 marks **2*5=10**

SECTION- D

4.Long answer Question: This question comprises of 7 sub parts (question no. i to vii) carry 6 marks each. Students have to attempt any 4 question out of 7 Answer to each question should be in about 100-150 words.
4*6= 24

SECTION- E

5. Map Question: This section comprises one question of map carries 14 marks (10marks for showing 4 places and 4 marks for explanation of those places to be written in 20 to 25 words) with 100% internal choice.
10+4=14

QUESTION WISE BREAK UP

Type of Question	Marks Per Question	Total no. of Questions	Total Marks
Objective Type	1	20	20
(Learning checks)			
Short	3	4	12
answerType(VSA)			
Source	5	2	10
Basedquestion			
Long AnswerType	6	4(7)	24
(LA)			
Map Skill Based	10+4	1	14
Total			80

WEIGHTAGE OF DIFFICULTY LEVEL

Estimated Difficulty Level	Percentage
(i) Easy (E)	30%
(ii) Average (AV)	50%
(iii)Difficult (D)	20%

WEIGHTAGE OF MARKS UNIT WISE

	Objective. T Q 1 Mark	Short Answer 3 Marks	Source Based 5 Marks	Long Answer 6 Marks	Map Question 14 marks	Project work/IA 20 marks
Unit 1	1(5)	3(1)	Passage	6(1)		
Unit - 2	1(5)	3(1)	From	6(1)		
Unit- 3	1(5)	3(1)	Source	6(1)		
Unit- 4	1(5)	3(1)	5*2	6(1)		
MapWork					1(10+4)	
Total	1x20=20	3x4=1 2	5x2=10	6x4=24	1(10+4)=14	20 marks

COURSE STRUCTURE:

Sr. No.	Unit	Name of the Lesson	
1	Unit 1	Physical features of the Punjab and their influence on its history	
2		Sources of the History of the Punish	
2		Political Social and Economic conditions of the	
3		Punjab in the beginning of the 16th Century.	
4		Guru Nanak DevJi's life and his teachings.	
5		Development of Sikhism under Guru Angad	
		DevJi, Guru Amar Das Ji and Guru Ram Das	
		Ji.	
6		Guru Arjan DevJi and his martyrdom.	
7	Unit 2	Guru Hargobind Ji and transformation of	
		Sikhism.	
8		Guru Teg BahadurJi and his martyrdom.	
9		Guru Gobind Singh Ji, The foundation of	
		Khalsa, His battles and his personality.	
10		Banda singhBahadur.	
11	Unit 3	Abdus Samad Khan, Zakaria Khan and Mir	
		Mannu, their relations with the Sikhs.	
12		Rise of the Dal Khalsa and its mode of fighting.	
13		Social and Economic conditions of the Punjab	
		under the Mughals.	
14		Invasions of Ahmed Shah Abdali and	
		disintegration of Mughal rule in the Punjab.	
15		Origin and growth of the Sikh Misls and their	
		nature of organization.	
16	Unit 4	Maharaja Ranjit Singh's career and conquests.	
17		Anglo-Sikh Relations (1800-1839).	

18	Maharaja	Ranjit	Singh's	relations	with
	Afganistan	and his N	.W.F. Poli	cy.	
19	Civil and	Military	administ	ration of	Ranjit
	Singh.				
20	Character	and Pers	onality of	Maharaja	Ranjit
	Singh.				
21	First Anglo	-Sikh War	· – causes	and result	s.
22	Second An	glo-Sikh	War – ca	uses and a	results,
	annexation	of the Pu	njab.		

Map Question

Topics

Sr. No.	Topics	
1.	Battles of Guru Gobind Singh ji	
2.	Important battles of Banda Singh Bahadur	
3.	Maharaja Ranjit Singh's Kingdom	
4.	First-Anglo-Sikh War	
5.	Second Anglo-Sikh War	

Mode of presentation/submission of the Project:

At the end of the stipulated term, each learner will present the research work in the Project. The questions should be asked from the Research Work/ Project File of the learner. The Internal Examiner should ensure that the study submitted by the learner is his/her own original work. In case of any doubt, authenticity should be checked and verified.

Practical Examination

Allocation of Marks (20)

The marks will be allocated under the following heads:

Α	Project (as per syllabus)	10 Marks
	Research Design	
	i. Overall format	1 Mark
	ii. Research question/Hypothesis	1 Mark
	iii. Choice of the technique	2 Marks
	iv. Detailed procedure for implementation of	2 Marks
	technique	
	v. Limitations of the above technique	2 Marks
	vi. Viva	2 Marks
В	Subject Enrichment Activities / practical work	8 Marks
С	Book bank	2 Marks
	Total	20 Marks

ECONOMICS (HUMANITIES/COMMERCE GROUP)

CLASS – XII

Time Allowed: 3 Hrs

Theory: 80Marks Project Work: 20 Marks Total: 100 Marks

STRUCTURE OF QUESTION PAPER

There will be 17 Questions in all. All Questions will be compulsory.(Use of simple calculator will be allowed for Numerical questions)

Section A.

Question No. 1 consist of 10 sub parts (a to j) carrying 1 mark each. Objective type questions may include questions with one word to one sentence answer/fill in the blank/true or false/multiple choice type questions/Numerical questions.

1*10=10

Question no 2 to 4 will carry 2 marks each (out of which 1 question will be theoretical and 2 numericals). Answer to theoretical question should be in about 30-35 words.

3*2=6

Question no 5 Consist of 4 sub parts (i,- iv) out of which 2 questions will be Numerical and 2 will be theoretical. Each question will carry 4 marks (Attempt any 3 questions out of 4). Answer to the theoretical should be in about 60-70 words . 3*4=12

Question no 6 consist of 4 sub parts, (i and ii) questions will be Numerical from Unit no 1. and 1 theoretical question from unit no. 2 and unit no. 3 and 1 question from Unit no 4 and unit no. 5 (iii to iv) (Attempt 2 questions ;(1 questions (Numerical) from question no. i and ii and 1 theoretical question from questions no iii to question no. iv) Each question will carry 6 marks Answer to the theoretical should be in about 150-200 words . 2*6=12

Section B.

Question No 7 consist of 6 sub parts (a to f) carrying 1 mark each. Objective type questions may include questions with one word to one sentence answer/fill in the blank/true or false/multiple choice type questions.

Question no 8 to 11 will carry 2 marks each. Answer to each question should be in about 30-35 words.

2*4=8

1*6=6

Question no 12 Consist of 2 sub parts (i-ii) (Attempt any 1 questions out of 2). Each question will carry 4 marks Answer to the theoretical should be in about 60-70 words . 1*4=4

Question no 13 consist of 2 sub parts (i-ii) 1 theoretical Question each from unit no 6 and 7. Each question will carry 6 marks Answer to the theoretical should be in about 150-200 words .

1*6=6

Section C.

Question No 14 consist of 4 sub parts (a to d) carrying 1 mark each. Objective type questions may include questions with one word to one sentence answer/fill in the blank/true or false/multiple choice type questions.

Question no 15 consist of 2 sub parts (a to b) will carry 2 marks each 1 questions will be Numerical and 1 question will be theoretical question .Attempt any one . Answer to the theoretical question should be in about 30-35 words.

Question no 16 will consist of 2 sub parts .(i-ii) and will carry 4 marks . 2 questions will be Numerical Questions .(Attempt any 1 out of 2 questions)

1*4=4

2*1=2

Question no 17 will consist of 2 sub parts .(i-ii) and will carry 6 marks , will be 2 Numerical Questions .(Attempt any 1 out of 2 questions).

1*6=6

1*4=4

Question wise Break up

Type of Question	Marks Per	Total no. of	Total Marks
	Question	Questions	
Learning checks	1	20	20
very short	2	8	16
answere(VSA)	_		
Short Answere (SA)	4	5	20
Long Answere (LA)	6	4	24
Total			80

Unit-wise Weightage to Content

Unit No	Name of the Unit	1 mark	2 Marks	4 Marks	6 Marks
		Questio	Questio	Questions	Questions
		n	ns		
Section-A	Introductory	Attempt	Attempt	Attempt	Attempt any 2
	Macroeconomics	all (10)	all (3)	any 3	
Unit 1	National Income	2		1	1 Numerical
	Related Aggregates				Question out
	Measurement.				of 2
Unit 2	Money and Banking	2	1	1	
Unit 3	Determination of	2	1	1	1
	Income and				
	Employment	•			
Unit 4	Government Budget	2		1	
	and the Economy				
	Delawas of Dermonto	•	1		1
Unit 5	Balance of Payments	2		1	
Section-B	Indian Economia	Attomp	Attomnt	Attompt	Attempt any
Section-D	Indian Economic	t all (6)	all (4)	any(1)	
	Development			any(n)	(1)
Unit 6	Experience (1947-90)	3	2	1	1
	Reforms since 1991				
Unit 7	Current Challenges	3	2	1	1
	facing Indian	J	-	•	•
	Economy				
	I	T	1	1	Γ
Section-C	Statistics in	Attempt	Attempt	Attempt	Attempt any
	Economics	all(4)	any (1)	any (1)	(1)
Unit 8	Correlation	2	1	1	1
Unit 9	Index Numbers -	2	1	1	1
	Total	20*1=20	8*2=16	5*4=20	4*6=24
				_	
	G total				80

SYLLABUS

ECONOMICS CLASS - XII (2020-21)

Theory: 80 Marks

20 Marks,		<u>3 Hou</u>
Part A	Marks	Periods
Introductory Macroeconomics		
National Income and Related Aggregates	10	
Money and Banking	10	
Determination of Income and Employment	6	
Government Budget and the Economy	8	
Balance of Payments	6	
-	40	
Part B		
Indian Economic Development		
Development Experience (1947-90) and Economic Reforms since 1991	12	
Current Challenges facing Indian Economy; Poverty- , Rural development: Human Capital Formation: Unemployment: Infrastructure: Sustainable Economic Development: Sustainable Economic Development	12	
	24	
Part C (statistics in Economic	.s)	
	16	
Correlation	8	
Introduction to Index Numbers	8	
	80	
Proiect Work	20	
Total Marks	100	
	20 Marks, Part A Introductory Macroeconomics National Income and Related Aggregates Money and Banking Determination of Income and Employment Government Budget and the Economy Balance of Payments Part B Indian Economic Development Development Experience (1947-90) and Economic Reforms since 1991 Current Challenges facing Indian Economy; Poverty- , Rural development: Human Capital Formation: Unemployment: Infrastructure: Sustainable Economic Development: Sustainable Economic Development Part C (statistics in Economic Development Part C (statistics in Economic Development Porject Work Total Marks	Part A Marks Introductory Macroeconomics 10 National Income and Related Aggregates 10 Money and Banking 10 Determination of Income and Employment 6 Government Budget and the Economy 8 Balance of Payments 6 Part B Indian Economic Development Development Experience (1947-90) and Economic Reforms since 1991 12 Current Challenges facing Indian Economy; Poverty- , Rural development: Human Capital Formation: Unemployment: Infrastructure: Sustainable Economic Development 16 Part C (statistics in Economic) Development 16 Correlation 8 Introduction to Index Numbers 8 Project Work 20 Total Marks 100

SYLLABUS

ECONOMICS CLASS - XII (2020-21)

Part A: Introductory Macroeconomics

Unit 1: National Income and Related Aggregates

What is Macro economics?

Basic concepts in macro economics: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation.

Circular flow of income (two sector model),

Aggregates related to National Income: Gross National Product (GNP), Net National Product (NNP), Gross and Net Domestic Product (GDP and NDP) - at market price, at factor cost.

Methods of calculating National Income - Value Added or Product method,

Expenditure method, Income method.

Unit 2: Money and Banking

Money - meaning and supply of money , Function of Money

Banking; Functions of commercial banking , Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Govt. Bank, Banker's Bank, Control of Credit through Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.

Unit 3: Determination of Income and Employment

Aggregate demand and its components. Propensity to consume and propensity to save (average and marginal). Short-run equilibrium output;

Investment multiplier and its mechanism. Meaning of full employment and involuntary unemployment.

Problems of excess demand and deficient demand; measures to correct them - changes in government spending, taxes and money supply.

Unit 4: Government Budget and the Economy

Government budget - meaning, objectives and components. Classification of receipts - revenue receipts and capital receipts; classification of expenditure - revenue expenditure and capital expenditure. Measures of government deficit - revenue deficit, fiscal deficit, primary deficit their meaning.

Unit 5: Balance of Payments;

Balance of payments account - meaning and components; balance of payments deficit- meaning.

Foreign exchange rate - Meaning of fixed and flexible rates and managed floating. Determination of exchange rate in a free market.

Part B: Indian Economic Development

Unit 6: Development Experience (1947-90) and Economic Reforms since 1991: A brief introduction of the state of Indian economy on the eve of independence.

Five Year Plans and NITI Ayog ; Rational behind the adoption of five years economic plan ,common goals of five year economic plans. NITI AYOG; A brief introduction, structure and its working.

Main features, problems and policies of agriculture (*institutional aspects and new agricultural strategy.*),

Industry (industrial licensing, etc.).

Economic Reforms since 1991:Features of Liberalisation , Globalisation and Privatisation (LPG policy)

Unit 7: Current challenges facing Indian Economy

Poverty- absolute and relative; Main programmes for poverty alleviation: A critical assessment;

Rural development: Key issues - credit and marketing - role of cooperatives; agricultural diversification; - organic farming

Human Capital Formation: How people become resource; Role of human capital in economic development; Growth of Education Sector in India Unemployment: its types and its causes **Infrastructure:** Meaning and Types: Energy and Health: Problems and Policies-A critical assessment;

Sustainable Economic Development: Meaning, Effects of Economic Development on Resources and Environment, including global warming. Part-C Statistics in Economics

- Unit 8 Correlation meaning and properties, scatter diagram; Measures of correlation Karl Pearson's method (only by direct method) (two variables ungrouped data) Spearman's rank correlation.(in case of untied ranks only)
- Unit 9 Introduction to Index Numbers Meaning, methods of constructing ;Unweighted Index (Simple aggregative and simple average of reletives), weighted Index Numbers; (Weighted aggregative methods including only Laspeyre's, Paasche's and Fisher's Ideal Index). wholesale price index, consumer price index and index of industrial production, uses of index numbers; Inflation and index numbers.

Guidelines for Project Work in Economics (Class 12th)

The <u>objectives</u> of the project work are to enable learners to: probe deeper into theoretical concepts learnt in XII

- Analyse and evaluate real world economic scenarios using theoretical constructs and arguments
- Demonstrate the learning of economic theory
- Follow up aspects of economics in which learners have interest Develop the communication skills to argue Logically The <u>expectations</u> of the project work are that:
- Learners will complete **ONE** project and will work on **one** topic of Moral Values and try to imbibe those values along with the Project Work in each academic session.
- Project should be of 1000 words (excluding diagrams & graphs), preferably hand-written
- It will be an independent, self-directed piece of study

Role of the teacher:

The teacher plays a critical role in developing thinking skills of the learners. A teacher should:

- help each learner select the topic based on recently published extracts from the news media, government policies, RBI bulletin, NITI Aayog reports, IMF/World Bank reports etc., after detailed discussions and deliberations of the topic
- play the role of a facilitator and supervisor to monitor the project work of the learner through periodic discussions
- guide the research work in terms of sources for the relevant data
- educate learner about plagiarism and the importance of quoting the source of the information to ensure authenticity of research work
- prepare the learner for the presentation of the project work
- arrange a presentation of the project file

Scope of the project:

Learners may work upon the following lines as a suggested flow chart:

Choose a title/topic of the research problem

Set objectives of the research problem

Design of a questionnaire /Selection of Sources

Framing a sample & collection of data / material

Classification of data / material

Presentation of data/ material (with graphs and tables)

Analysis of data/ material with (percentage /statistical techniques; mean, median , SD, CV.)

Interpretation of data/ material (draw the relevant conclusion from the collected

data/material)

Suggetions to solve the problem References / Bibliogrhaphy

Expected Checklist:

- Introduction of topic/title
- Identifying the causes, consequences and/or remedies
- Various stakeholders and effect on each of them
- Advantages and disadvantages of situations or issues identified
- Short-term and long-term implications of economic strategies suggested in the course of research
- Validity, reliability, appropriateness and relevance of data used for research work and for presentation in the project file
- Presentation and writing that is succinct and coherent in project file
- Citation of the materials referred to, in the file in footnotes, resources section, bibliography etc.

Mode of presentation/submission of the Project:

At the end of the stipulated term, each learner will present the research work in the Project File to the External and Internal examiner. **The questions should be asked from the Research Work/ Project File of the learner. The Internal Examiner should ensure that the study submitted by the learner is his/her own original work.** In case of any doubt, authenticity should be checked and verified.

Marking Scheme :

Marks are suggested to be given as -

S. No.	Heading	Marks Allotted
1.	(Relevance of the topic)	1
2.	Knowledge Content/Research Work/ Viva-Voce/ Project Work	7

3.	Presentation Technique	3
4.	Practical Work on Moral values	7
	Торіс	
	Book Bank/ Bibliography	2
	Total	20 Marks

Project in Economics

- 1) Micro and Small Scale Industries
- 2) Goods and Services Tax and its impact on GDP
- 3) Human Developmental Index
- 4) Monetary Policy committee and its functioning
- 5) A critical analysis of the present year Government Budget
- 6) Livestock- Backbone of Rural India
- 7) Determination of Minimum Support prices in India
- 8) Digital India- A step towards the future
- 9) Vertical Farming- An alternative way of farming
- 10) Food supply channels in India
- 11) Disinvestment Policy of the Present Government
- 12) Role of RBI in controlling Money Supply in India
- 13) Currency War- Reasons and Repercussions
- 14) Alternative Fuel- The need of the hour
- **15)** Bumper Production- A boon or a bane for the farmer
- 16) Health Expenditure in India- Comparison of two or more states can be done
- 17) Trends in credit availability in India
- 18) Relation between stock price index and economic health of the country

Moral Value Topics;

- 1) Self Help Groups and their working
- 2) Sarv Shiksha Abhiyan- Cost benefit Analysis
- 3) Waste Management- A need of the Hour
- 4) Make in India- The way ahead
- 5) Inclusive growth strategy
- 6) Rain water harvesting- A solution to water problem in India
- 7) Organic Farming- Back to the nature
- 8) Skill Development in India.

CLASS-XII MATHEMATICS

Time: 3 Hr

Theory: 80 Marks Internal Assessment: 20 Marks Total: 100 Marks

- 1. All the questions are compulsory.
- 2. The question paper consists of 36 questions divided into 4 sections A,B,C,and D.
- 3. Section A comprises of 20 questions of 1 mark each. Section B comprises of 6 questions of 2 marks each. Section C comprises of 6 questions of 4 marks each. Section D comprises of 4 questions of 6 marks each.
- 4. There is no overall choice. However, an internal choice has been provided in one question of 2 marks, two questions of 4 marks each and three questions of 6 marks each. You have to attempt only one of the alternatives in all such questions.
- 5. Use of calculators is not permitted.

	UNIT						
SR. NO.		CHAPTERS	Q. Carrying 1-Mark	Q. Carrying 2-Mark	Q. Carrying 4-Mark	Q. Carrying 6-Mark	Total Marks
1	Relations &	Relations & Functions	1	1	-	-	3
2	Functions	Inverse Trigonometric Functions	1	-	1	-	5
3,4	Algebra	Matrices and Determinants	2	1	-	1	10
5		Continuity and Differentiability	3	-	1	-	7
6		Applications of Derivatives	1	1	-	1	9
7	Calculus	Integrals	3	1	1	-	9
8		Applications of the Integrals	-	-	1	-	4
9		Differential Equations	2	-	1	-	6
10	Vectors and	Vectors	2	2	-	-	6
11	three Dimensional Geometry	Three Dimensional Geometry	2	-	-	1	8
12	Linear Programming	Linear Programming	1	-	1	-	5
13	Probability	Probability	2	-	-	1	8
		TOTAL QUESTIONS	20	6	6	4	
		TOTAL MARKS	20	12	24	24	80

SYLLABUS UNIT I: RELATIONS & FUNCTIONS

1 Relations and Functions:

Types of relations: Reflexive, symmetric, transitive and equivalence relations. One to one and onto functions, composite functions, inverse of a function.

2 Inverse Trigonometric Functions:

Definition, Range, Domain, Principal value branches. Graphs of inverse trigonometric functions. Elementary properties of inverse trigonometric

functions.

UNIT II: ALGEBRA

3 Matrices:

Concept, notation, order, equality, types of matrices, zero and identity matrix, transpose of a matrix, symmetric and skew symmetric matrices. Operation of matrices. Addition and multiplication and multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. Non-commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order 2). Concept of elementary row and column operations. Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries).

4 Determinants:

Determinant of a square matrix (up to 3×3 matrices), properties of determinants, minors, cofactors and applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of system of linear equation by examples, solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix.

UNIT III: CALCULUS

5 Continuity and Differentiability:

Continuity and Differentiability, derivative of composite functions, chain rule, derivative of inverse trigonometric functions, derivative of implicit function. Concepts of exponential and logarithmic functions.

Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second order derivatives. Rolle's and Lagrange's Mean Value Theorems (without proof) and their geometric interpretation.

6 Applications of Derivatives

Applications of derivatives: rate of change of bodies, increasing/ decreasing functions, tangents and normal, use of derivatives in approximation, maxima and minima (first derivative test motivated geometrically and second derivative test given as a provable tool). Simple problems (that illustrate basic principles and understanding of the subject as well as real life situations).

7 Integrals:

Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, Evaluation of simple integrals of the following types and problems based on them.

$$\int \frac{dx}{x^2 \pm a^2} , \int \frac{dx}{\sqrt{x^2 \pm a^2}} , \int \frac{dx}{\sqrt{a^2 - x^2}} , \int \frac{dx}{\sqrt{ax^2 + bx + c}} , \int \frac{dx}{ax^2 + bx + c}$$
$$\int \frac{px + q}{ax^2 + bx + c} dx , \int \frac{px + q}{\sqrt{ax^2 + bx + c}} dx , \sqrt{a^2 \pm x^2} dx \text{ and } \int \sqrt{x^2 - a^2} dx$$

 $\int \sqrt{ax^2 + bx + c} \, dx$ and $\int (px + q) \sqrt{ax^2 + bx + c} \, dx$

Definite integrals as a limit of a sum. Fundamental Theorem of Calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals.

8 Applications of the Integrals:

Applications in finding the area under simple curves, especially lines, circles/parabolas/ellipses (in standard form only), area between any of the two above said curves (the region should be clearly identifiable).

9 Differential Equations:

Definition, order and degree, general and particular solutions of a differential equation. Formation of differential equation whose general solution is given. Solution of differential equations by method of separation of variables, solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type:

 $\frac{dy}{dx} + py = q \text{ where } p \text{ and } q \text{ are functions of } x \text{ or constant}$ $\frac{dx}{dy} + px = q \text{ where } p \text{ and } q \text{ are functions of } y \text{ or constant}$

UNIT IV: VECTORS AND THREE DIMENSIONAL GEOMETRY

10 Vectors:

Vectors and scalars, magnitude and direction of a vector. Direction cosines and direction ratios of vectors. Types of vectors (equal, unit, zero, parallel and collinear vectors), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition, Geometrical Interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors, scalar triple product of vectors.

11 Three-dimensional Geometry:

Direction cosines and direction ratios of a line joining two points. Cartesian equations and vector equation of a line, coplanar and skew lines, shortest distance between two lines. Cartesian and vector equation of a plane. Angle between (i) two lines, (ii) two planes, (iii) a line and a plane. Distance of a point from a plane.

UNIT V: LINEAR PROGRAMMING

12 Linear Programming:

Introduction, related terminology such as constraints, objectives function, optimization, different types of linear programming (L.P.) problems, mathematical formulation of L.P problems, graphical method of solution for problems in two variables, feasible and infeasible regions (bounded or unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints)

UNIT VI: PROBABILITY

13 Probability:

Conditional probability, multiplication theorem on probability, independent events, total probability, Baye's theorem, Random variable and its probability distribution, mean and variance of random variable.

INTERNAL ASSESSMENT	20 Marks
Mathematics Activities	10 Marks
Periodic Tests (Best 2 out of 3 tests conducted)	8 Marks
Book Bank	2 Marks

Note : For activities NCERT Lab Manual may be referred.

Conduct of Periodic Tests

- 1. Periodic Test is a Pen and Paper assessment which is to be conducted by the subject teacher.
- 2. In the entire Academic Year, three Periodic Tests in each subject may be conducted.
- 3. Once schools complete the conduct of all three periodic tests, they will convert the weightage of each of the three tests into ten marks each for identifying best two tests. The best two will be taken into consideration and the average of the two shall be taken as the final marks for PT.
- 4. The school will ensure simple documentation to keep a record of performance.

Assessment of Activity Work:

Time : 2hrs

10 Marks

Throughout the year any 10 activities shall be performed by the student from the activities given in the NCERT Laboratory Manual for the respective class (XI or XII) which is available on the link : http://www.ncert.nic.in/exemplar/labmanuals.html A record of the same may be kept by the student. An year end test on the activity may be conducted at the School Level. The weightage are as under:

•	The activities and one of the projects performed by the student through out	the year and
	record keeping :	5 marks

- Assessment of the activity performed during the year end test: **3 marks**
- Viva-voce :

Activities

2 marks

- 1. To verify that the relation R in the set L of all lines in a plane, defined by $R = \{(l, m): l \perp m\}$ is symmetric but neither reflexive nor transitive.
- 2. To verify that the relation R in the set L of all lines in a plane, defined by $R = \{(l, m): l \parallel m\}$ is an equivalence relation.
- 3. To demonstrate a function which is not one-one but is onto.
- 4. To demonstrate a function which is one-one but not onto.
- 5. To draw the graph of $\sin^{-1} x$, using the graph of sin x and demonstrate the concept of mirror reflection (about the line y = x).
- 6. To explore the principal value of the function $\sin^{-1} x$ using a unit circle.
- To sketch the graphs of a^x and log_ax, a > 0, a ≠ 1 and to examine that they are mirror images of each other.
- 8. To establish a relationship between common logarithm (to the base 10) and natural logarithm (to the base *e*) of the number x.
- 9. To find analytically the limit of a function f(x) at x = c and also to check the continuity of the function at that point.
- 10. To verify that for a function f to be continuous at given point x_0 , $\Delta y = f(x_0 + \Delta x) f(x_0)$ is arbitrarily small provided. Δx is sufficiently small.
- 11. To verify Rolle's Theorem.
- 12. To verify Lagrange's Mean Value Theorem.
- 13. To understand the concepts of decreasing and increasing functions.
- 14. To understand the concepts of local maxima, local minima and point of inflection.
- 15. To understand the concepts of absolute maximum and minimum values of a function in a given closed interval through its graph.
- 16. To construct an open box of maximum volume from a given rectangular sheet by cutting equal squares from each corner.
- 17. To find the time when the area of a rectangle of given dimensions become maximum, if the length is decreasing and the breadth is increasing at given rates.
- 18. To verify that amongst all the rectangles of the same perimeter, the square has the maximum area.
- 19. To evaluate the definite integral $\int_{a}^{b} \sqrt{1-x^2} dx$ as the limit of the sum and verify it by actual integration.
- 20. To verify geometrically that $\vec{c} \times (\vec{a} + \vec{b}) = \vec{c} \times \vec{a} + \vec{c} \times \vec{b}$
- 21. To verify that angle in a semi-circle is a right angle, using vector method.
- 22. To locate the points to given coordinates in space, measure the distance between two points in space and then to verify the distance using distance formula.
- 23. To demonstrate the equation of a plane in normal form.

- 24. To verify that the angle between two planes is the same as the angle between their normals.
- 25. To find the distance of given point (in space) from a plane (passing through three noncollinear points) by actual measurement and also analytically.
- 26. To measure the shortest distance between two skew lines and verify it analytically.
- 27. To explain the computation of conditional probability of a given event A, when event B has already occurred, through an example of throwing a pair of dice.

Projects

Project work in mathematics may be performed individually by a student or jointly by a group of students. These projects may be in the form of construction such as curve sketching or drawing of graphs etc. It may offer a discussion of a topic from history of mathematics involving the historical development of particular subject in mathematics/topics on concepts. Students may be allowed to select the topics of their own choice for projects in mathematics. The teacher may act as a facilitator by creating interest in various topics. Once the topic has been selected, the student should read as much about the topic as is available and finally prepare the project.

- 1. To minimise the cost of the food, meeting the dietary requirements of the staple food of the adolescent students of your school.
- 2. Estimation of the population of a particular region/country under the assumptions that there is no migration in or out of the existing population in a particular year.
- Finding the coordinates of different points identified in your classroom using the concepts of three dimensional geometry and also find the distances between the identified points.
- 4. Formation of differential equation to explain the process of cooling of boiled water to a given room temperature.
- 5. Project on history of Mathematicians: It may include history of Indian mathematicians such as Aryabhata, Brahmgupta, Varahamihir, Sridhara, Bhaskaracharya, Ramanujan etc., and history of foreign mathematicians such as Cantor, Pythagoras, Thales, Euclid, Appollonius, Descartes, Fermat, Leibnitz, Euler, Fibonac, Gauss, Newton, etc.
- 6. On linear Programming problems related to day-to-day life like collecting data from families of their expenditures and requirements from the factories to maximum output.
- 7. Collect data from dieticians, transporters, agents and formulate linear programming problems.
- 8. Make a chart of the formulae of applications of calculus.
- Applications of conic sections, vectors, three dimensional geometry, calculus, etc., in Mathematics and Physics.
- 10. Mathematics and Chemistry: Study structure of organic compounds.
- 11. Mathematics and Biology: Study of science of heredity etc.
- 12. Mathematics and Music
- 13. Mathematics and Environment
- 14. Mathematics and Arts: Construction of shapes using curves
- 15. Mathematics and Information and Communication Technology: Writing of Mathematical

programmes, flow charts, algorithm, circuit diagrams etc.

- 16. Collection of statistical data and analysing it for standard deviation and mean deviation.
- 17. Observe the various patterns and properties in Pascal's triangle and make a project.
- 18. Prepare a project based on the Fibonacci sequence, their properties and similar pattern found in nature.
- 19. Form a differential equation for the growth of bacteria in different environments.
- 20. Study the nature of mathematics and make a project showing where three aspects of nature of mathematics formalism, logic, intuition is applied in the development of mathematics.

CLASS-XII BUSINESS STUDIES – II (COMMERCE and HUMANITIES GROUP)

Time: 3 Hrs

Theory: 80 Marks Project work: 20 marks Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

- 1. The question paper will cover whole of the syllabus.
- 2. 21 Questions will be set in the question paper.
- 3. All units of the syllabus should be given adequate representation in the question paper.
- 4. There will be 4 sections in the paper and all sections will be compulsory.

Section-A

5. Question No. 1 consists of 20 sub parts (1a to 1t) carrying 1 mark each. Answer of each Part should be given in 1-15 words. Objective type questions may include questions with one word to one sentence answer/fill in the blank/true or false/multiple choice type questions.

Section-B

6. Question No. 2 to 10 will carry 2 marks each. Answer of each question should be given in 5-10 lines.

Section-C

7. Do any 6 questions out of 8 questions. Question No. 11 to 18 will carry 4 marks each. Answer of each question should be given in 15-20 lines.

Section-D

8. Question No. 19 to 21 will carry 6 marks each with internal choice. Answer of each question should be given in 3-5 pages. Internal choice question should not be set from the same unit.

UNIT	NAME OF THE	SECTION	SECTION	SECTION	SECTION
UNII	NAME OF THE	SECTION -	SECTION -	SECTION -	SECTION -
NO.	UNIT	Α	В	С	D
		(1 mark	(2 mark	(4 mark	(6 mark
		question)	question)	question)	question)
1	NATURE AND				
	SIGNIFICANCE	1	1		1Question
	OF			1	from units
	MANAGEMENT				1,2,3, and 4
2	PRINCIPLES OF	2	1		with internal
	MANAGEMENT				choice not
					from same
3	BUSINESS	1	1		unit.
	ENVIRONMENT				
4	PLANNING	2		1	
5	ORGANISATION	2	1		1Question
				1	from units
6	STAFFING	2			5,6,7, 8 and

Detail of questions set from each unit

7	DIRECTING	2	1		9 with
8	CONTROLLING	1		1	internal
9	COORDINATION	1	1		choice not
					from same
					unit.
10	BUSINESS	1		1	1Q. from
	FINANCE				units
11	FINANCIAL	2	1	1	10,11,12and
	MARKETS				13 with
12	MARKETING	2	1	1	internal
13	CONSUMER	1	1	1	choice not
	PROTECTION				from same
					unit.
		20	09	08	03
				(DO ANY 6)	(with
					internal
					choice)

SYLLABUS (THEORY)

PART – A PRINCIPLES AND FUNCTIONS OF MANAGEMENT

Unit 1: Nature and Significance of Management

- Management concept, objectives, and importance
- Management as Science, Art and Profession
- Levels of Management

• Management functions-planning, organizing, staffing, directing and controlling

Unit 2: Principles of Management

- Principles of Management- concept and significance
- Fayol's principles of management
- Taylor's Scientific management- principles and techniques

Unit 3: Business Environment

• Business Environment- concept and importance

• Dimensions of Business Environment- Economic, Social, Technological, Political and Legal

• Demonetization - concept and features

• Impact of Government policy changes on business with special reference to liberalization, privatization and globalization in India

Unit 4: Planning

- Concept, importance and limitation
- Planning process

• Single use and standing plans. Objectives, Strategy, Policy, Procedure, method, Rules, budget and Programme

Unit 5: Organising

- Concept and importance
- Organising Process
- Structure of organisation- functional and divisional concept. Formal and informal organisation- concept
- Delegation: concept, elements and importance
- Centralisation concept and features
- Decentralization: concept, features and importance

Unit 6: Staffing

- Concept and importance of staffing
- Staffing as a part of Human Resource Management concept
- Staffing process
- Recruitment process
- Selection process
- Training and Development Concept and importance, Methods of training on the job and off the job vestibule training, apprenticeship training and internship training

Unit 7: Directing

Concept and importance

Elements of Directing

- Supervision- Concept and importance
- Motivation concept, Maslow's hierarchy of needs, Financial and nonfinancial incentives
- Leadership concept, styles authoritative, democratic and laissez faire
- Communication concept, formal and informal communication; barriers to effective communication, how to overcome the barriers.

Unit 8: Controlling

- Controlling Concept and importance
- Relationship between planning and controlling

• Steps in process of control

Unit 9- Coordination

Coordination: Meaning, Nature and importance.

PART – B BUSINESS FINANCE & MARKETING

Unit 10: Business Finance

•Financial decisions: investment, financing and dividend- Meaning and factors affecting financial decisions.

•Financial Planning - concept and importance

•Capital Structure - concept and factors affecting capital structure

•Fixed and Working Capital - Concept and factors affecting their requirements

Unit 11: Financial Markets

• Financial Markets: Concept, Functions and types

• Money market and its instruments

• Capital market and its types (primary and secondary), methods of floatation in the primary market

- Stock Exchange Functions and trading procedure
- Securities and Exchange Board of India (SEBI) Objectives and functions

Unit 12: Marketing

- Marketing Concept, functions and philosophies
- Marketing Mix Concept and elements
- Product branding, labelling and packaging Concept
- Price Concept, Factors determining price
- Physical Distribution concept, components and channels of distribution

• Promotion – Concept and elements; Advertising, Personal Selling, Sales Promotion and Public Relations

Unit 13: Consumer Protection

- Concept and importance of consumer protection
- Consumer Protection Act 1986: Meaning of consumer
- Rights and responsibilities of consumers
- Who can file a complaint?
- Redressal machinery
- Remedies available

• Consumer awareness - Role of consumer organizations and Non-Governmental Organizations (NGOs)

PROJECT WORK

MARKS: 20

The marks will be allocated on the following heads.

1	Initiative, cooperativeness and participation	2 Marks
2	Creativity in presentation	2 Mark
3	Content, observation and research work	4 Marks
4	Analysis of situations	6 Marks
5	Viva	6 Marks
	Total	20 Marks

Students are supposed to select one unit out of four and are required to make only ONE project from the selected unit (consist of one project of 20 marks)

- PROJECT 1: Elements of business environment (students can select any one of the topic)(a) Changes witnessed over the last few years on mode of packaging, labelling and its impact.
 - (b) Changing role of women in the past 25 years.
 - (c) Types of packaging and its impact.
 - (d) Sources of business finance based on a real life company.
 - (e) The changes in the pattern of import and export of different products.
 - (f) Climate change on business environment.

PROJECT 2: Principles of Management. (Henry Fayol and Taylor)

Students are required to observe the application of the general principles of management given by Henry Fayol in a departmental store or an industrial unit, fast food outlet or any small business unit.

OR

They may observe the application of scientific management techniques by FW Taylor in a departmental store or an industrial unit, fast food outlet or any small business unit.

Project 3: Stock Exchange.

(a) Brief history of Stock Exchange in India.

- (b) Listing procedure of securities in stock exchange.
- (c) Dematerialisation of securities in stock exchange.
- (d) Causes of fluctuations of prices in stock exchange.

Project 4: Marketing Management

Students can take the example of any consumer product like moisturizer, noodles, wipes, air conditioners, baby diapers, fruit candy, hair oil, bike, inverter, blanket, bread, ladies bag, kurti, footwear, coffee, chocolate, mobile, microwave oven, newspaper, washing powder, etc and give information about:

- (a) Why they have selected this product?
- (b) Name of the product.
- (c) Feature of product
- (d) Benefits and demerits of the product
- (e) Its 5 competitive brands in the market
- (f) Its unique selling proposition.
- (g) The product's brand strategy
- (h) Logo and tag line of the product.
- (i) Developing a promotion plan for the product.
- (j) Packing of the product.
- (k) Explanation of its labelling.
- (l) Social message for the label.

(m) What means of transport will be used and why?

Presentation and submission of project report.

At the end of the stipulated term, each student will prepare and submit his/her project report.

Following essentials are required to be fulfilled for its preparation and submission.

- 1. The whole project will be in a file format
- 2. The project will be handwritten.
- 3. The project will be presented in a neat folder.
- 4. The students will prepare project on ruled sheets or will use an interleaf practical notebook.
- 5. The project report will be developed in the following sequence-
 - Cover page should project the title, student information, school and year.
 - List of contents.
 - Acknowledgements and preface (acknowledging the institution, the newspapers read, T.V. channels viewed, places visited and persons who have helped).
 - Introduction.
 - Topic with suitable heading.
 - Planning and activities done during the project, if any.

- Observations and findings while conducting the project.
 Conclusions (summarised suggestions or findings, future scope of study).
 Appendix (if needed).

CLASS-XII POLITICAL SCIENCE SESSION 2020-21

TIME: 3Hrs

Theory: 80 Marks Project : 20 Marks Total: 100 Marks

STRUCTURE OF QUESTION PAPER

All Questions are Compulsory.

The Question Paper will comprise of 4 sections A, B, C, and D

of four questions with 37 sub parts to be attempted.

All units of the syllabus should be given adequate representation in the

Question paper.

SECTION-A

Objective Type Questions: Question No. 1 will have twenty sub parts (I TO XX) and each sub Part will carry 1 mark. This Section Will include questions with one word answer/fill in the blank/true or false /multiple choice questions. **20×1=20**

SECTION-B

Very Short Answer Type Questions: Question No. 2 comprises of 8 sub parts (II TO IX) carrying 2 marks each. Answer to each question should be in About 20-30 words. All questions are compulsory.
8×2=16

SECTION-C

Short Answer Type Questions: Question No. 3 comprises of 5 sub parts (X TO IVX) Out of which students have to attempt 5 question, 3 out of 5 have internal choice carrying 4 marks each. Answer to each question should be in about 50-60 words. **5×4=20**

SECTION-D

Long Answer Type Questions: Question No. 4 comprises of 4 sub parts (I TO IV) carrying 6 marks each. Answer to each question should be in about 150-200 words. All questions are compulsory. There will be 100% internal choice in these question.

Note: Keeping in view the syllabus, the 22 chapters have been divided into 8 parts. While preparing the question paper it should be compulsory to follow given ahead table strictly for adequate representation to each unit in paper.

Question Paper Design

Subject: - Political Science

Code: - 18 Class: XII (Session 2020-21)

Time: - 3 Hours

Maximum Marks: - 80

Sr. No.	Typology of questions	Learning outcomes and Testing Skills	Multiple choice (01 marks)	Very short answer type (02 marks)	Short answer type (04 marks)	Long answer type (06 marks)	Total marks	% weightage
1	Remembering (Knowledge based simple recall questions, to know specific facts, terms, concepts, principals, define, recite, information)		16	02	01		24	30%
2	Understanding (comprehension to be familiar with meaning understand conceptually, interpret, compare, contrast, explain or interpret information)		04	04	03	03	42	52.5%
3	Application (Use abstract information, in concrete situation, to apply knowledge to knew situations use given content situation example)	analytical skills, critical skills		02	01	01	14	17.5%
4			20*1=20	08*2=16	05*4=20	04*6=24	80+20 (Project) =100	100%
5	Total (01 Project marks10+ viva voce 10 marks =20 marks		Estimate d time =40 Minutes	Estimate d time =30 Minutes	Estimate d time =40 Minutes	Estimate d time =60 Minutes	5mintuer eading of question paper + 5mintue s rechecki ng of answer sheet	Total Time =180 minutes

Table Showing unit wise distribution of question to be set in question paper

Unit	Number of questions to be set from each unit (01 marks each)	Number of questions to be set from each unit (02 marks each)	Number of questions to be set from each unit (04 marks each)	Number of questions to be set from each unit (06 marks each with 100% internal choice)
Ι	2 (Recall)	1 (Application)	Question number 10 th from Unit I and Internal choice question	Question number 15 th from Unit I and Internal choice question
II	2 (Recall)	1 (Recall)	from Unit II (Understanding)	from Unit II (Understanding)
Ш	2 (Recall)	1 (Understanding)	1 (Understanding)	Question number 16 th from Unit III and Internal
IV	2 (Understanding)	1 (Understanding)	1 (Recall)	from Unit IV (Application)
V	1 (Recall) + 2 (Understanding)	1 (Understanding)	Question number 13 th from Unit V and Internal choice question	Question number 17 th from Unit V and Internal choice question
VI	3 (Recall)	1 (Recall)	from Unit VI (Application)	from Unit VI (Understanding)
VII	3 (Recall)	1 (Understanding)	Question number 14 th from Unit VII and Internal choice question	Question number 18 th from Unit VII and Internal choice question
VIII	3 (Recall)	1 (Application)	from Unit VIII (Understanding)	from Unit VIII (Understanding)
	Total number of question 20 (01 marks each) 20*1=20 marks	Total number of question 08 (02 marks each) 08*2=16 marks	Total number of question 08 (04 marks each) 05*4=20 marks	Total number of question 04 (06 marks each) 04*6=24 marks

SYLLABUS

PART-A POLITICAL THEORY Part-I

Unit I: Political System

Meaning, Characteristics ; Functions of Political system David Easton`s input output model Difference between state and political system

Part II

Unit II Some major contemporary Political Theories

Liberalism

Marxism

Political ideas of Mahatma Gandhi

Part-III

Unit III: Bureaucracy (Civil Services)

Meaning and importance

Recruitment

Role and functions

Distinction between Political Executive and

Permanent Executive and their respective roles

: Public opinion

Role and importance of Public Opinion in a Democratic Polity.

Agencies for the formulation and expression of Public Opinion **Part-IV**

Unit III : Party System

Political parties - their functions and importance

Basis of formation of Political Parties

Types of Party System

The Role of Opposition

: Interest and Pressure Groups

Interest Groups and Pressure Groups – their nature types and functions

Ways of functioning of pressure groups

INDIAN POLITICAL SYSTEM

Part-V

Unit V: Indian Democracy

Parliamentary Model.

Problems and challenges to Indian Democracy & future of Indian democracy

Democracy at Grass root

Concept of Panchayati Raj

Structure and Working of Panchayati Raj(73th Amendment)

Panchayati Raj – Some problems

Local Bodies in Urban Areas(74th Amendment)

Part-VI

Unit VI: Party System in India

Nature of Party System in India

Study of major 4 national political parties (INC, BJP, CPI, CPI (M) their programs and policies.Regional political parties in Punjab (SAD, AAP)Problems facing the Indian Party System

Electoral System

Adult Franchise Direct and Indirect Elections

And people's participation Voting behavior – meaning and determinants Election Commission and Election Procedure

Part-VII

Unit VII: National Integration

Problems of National Integration Steps taken to promote National Integration

: Foreign Policy of India

Determinants of Foreign Policy Basic principles of Foreign Policy India and the United Nations, India and SAARC

Part-VIII

Unit VIII: India and the World

India's relations with her Neighbors : Nepal, Sri Lanka, China, Bangla Desh and Pakistan India's relation with U.S.A. and Russia

India's approach to major world issues: Human Rights, Disarmament and Globalization.

CLASS-XII Sociology (2020-21)

Time : 3 Hrs

Theory : 80Marks Project work/IA :20 Marks Total:100 Marks

STRUCTURE OF QUESTION PAPER

- 1. All questions are compulsory.
- 2. The question paper is divided into four sections **A**, **B**, **C** and **D**.
- There are 38 questions in all. Some questions have internal choice. Marks are indicated against each question.

Section A

Objective Type Questions: This section comprises question No. 1-20. These are objective type questions carry 1 mark each. This type may include questions with one word to one sentence answers/Fill in the blanks/True or false/Multiple choice type questions. $20 \times 1 = 20$

Section **B**

Very Short Answer Type Questions: This section comprises question No.21-29 .These are very short answer type questions carrying 2 marks each. Answer to each question should not exceed 30 words. 9x2=18

Section C

Short Answer Type Questions: This section includes question No. 30-35. They are short answer type questions carrying 4 marks each. Answer to each question should not exceed 80 words. 6x4=24

Section D

Long answer Questions: This section question No. 36-38. This type of question (with internal choice) long answer type questions carrying 6 marks each. Answer to each question should not exceed 200 words each. Question no 38 is to be answered with the help of the passage given.

3x6=18

Type of Question	Marks Per Question	Total no. of Questions	Total Marks
Objective Type	1	20	20
(Learning checks)			
Very Short	2	9	18
answer(VSA)			
Short Answer (SA)	4	6	24
Long Answer (LA)	6	3	18
Total			80

QUESTION WISE BREAK UP

WEIGHTAGE TO CONTENT

Section A	20 Marks
Section B	20 Marks
Section C	20 Marks
Section D	20 Marks
Project Work	20 Marks
Total	100 Marks

WEIGHTAGE OF DIFFICULTY LEVEL

Estimated Difficulty Level	Percentage
(i) Easy (E)	30%
(ii) Average (AV)	50%
(iii)Difficult (D)	20%

COURSE STRUCTURE:

Sr.	Unit	Name of the Unit	Periods	Marks
No.				
1	Unit I	Tribal Society		20
2	Unit II	Basic Concepts in Sociology		20
3	Unit III	Culture , Socialisation and Social Institutions		20
4	Unit IV	Social Structure, Social Stratification, Social Change and Founding Fathers of Sociology		20

SYLLABUS

PART-A

Unit : I Tribal, Rural and Urban Societies in India

- Tribal Society : Meaning ,Features; Classification of Tribes; Marriage System; Issues- Deforestation and Displacement; Changes in Tribal Society.
- **2. Rural Society :** Meaning, Features; Issues- Indebtedness, Impact of Green Revolution; Changes in Rural Society.
- **3. Urban Society:** Meaning Features; Issues Housing and Slums

Unit : II Inequalities in Indian Society

- **4. Caste Inequalities:** Concept, Features; Caste and Social Stratification, Theories of Origin of Caste, Caste Inequality and Indian Society
- 5. Class Inequalities: Concept of class, Features of Class; Relations between caste, class, status Group and class Hierarchy, Views of Sociologists on class structure, Classes in Rural and Urban India.
- 6. **Gender Inequalities:** Concept, Gender Inequality, Theories of Feminism, Gender; Gender Discrimination: Meaning and Nature; Problems of Women, Role of Gender relation in Societal Development

Unit : III Structural and Cultural Change in India

- 7. Westernisation and Sankritisation: Westernisation: Meaning, Carrier of process, Features, Impact: Sanskritisation: Meaning, Sanskritisation preferred as against Brahminisation, Dominant Caste, Impact
- 8. Modernisation and Globalisation: Modernisation: Meaning, Characteristic, Process of Modernisation, Causes, Impact: Globalisation: Meaning, Characteristics, Process of Globalization, Causes, impact
- **9. Social Movement:** Meaning Types, Stages Caste Based Movements, Class Based Movements, Women's movements, Environmental movements

Unit : IV Social Problems in Indian Society

- **10.** Social Problems: Alcoholism and Drug Addiction
- Violence Against Women: Female Foeticide and Domestic Violence: Female Foeticide: Meaning, India Scenario, Causes, Consequences, Strategies to Combat Female Foeticide; Domestic Violence- Meaning, Forms, Factors, Causes, Effects, Remedies
- 12. Social Issues: The Aged and Disability: The Aged: Theries, Problems, Remedial Measures: Disability- Definition, Magnitude of Disability, Types, Causes, Social Model, Problems, Measures

PROJECT WORK/ INTERNAL ASSESSMENT

20 Marks

MODE OF PRESENTATION/SUBMISSION OF THE PROJECT:

At the end of the stipulated term, each learner will present the research work in the Project File Internal examiner. **The questions should be asked from the Research Work/ Project File of the learner. The Internal Examiner should ensure that the study submitted by the learner is his/her own original work.** In case of any doubt, authenticity should be checked and verified.

Practical Examination

Allocation of Marks (20)

The marks will be allocated under the following heads:

А	Project (as prescribed in book)	10 Marks
	Research Design	
	i. Overall format	1 Marks
	ii. Research question/Hypothesis	1 Marks
	iii. Choice of the technique	2 Marks
	iv. Detailed procedure for implementation of	2 Marks
	technique	2 Marks
	v. Limitations of the above technique	2 Marks
	vi. Viva	
В	Social work related Activities/practical work	8 Marks
С	Book bank	2 Marks
	20 Marks	

CLASS-XII Public Administration (2020-21)

Time: 3 Hrs

Theory: 80 Marks Project work/INA/B. bank: 20 Marks Total: 100 Marks

STRUCTURE OF QUESTION PAPER

- 1. All questions are compulsory.
- 2. The question paper is divided into four sections. A, B, C and D
- 3. There are 34 questions in all. Some questions have internal choice. Marks are indicated against each question.

Section A

Objective Type Questions: This section comprises 16 questions (from 1 to 16). These are objective type questions carry 1 mark each. This type may include questions with one word to one sentence answers/fill in the blanks/true or false/multiple choice type questions.

Section B

Very Short Answer Questions: This section will have 8 questions (from 17 to 24). Each question will carry 2 marks. All questions are compulsory. Answer of each question should be in 20-30 words.

Section C

Short Answer Questions: This section will have 6 questions (from 25 to 30). Each question will carry 4 marks and all the questions shall have internal choice too. Each question should be answered in 50-60 words. At least one question along with internal choice must be selected from each group of the syllabus.

Section D

Long Answer Questions: This section will have 4 questions (from 31 to 34), each one with internal choice. Each question will carry 6 marks. Answer to each question should be in 150-200 words.

4×6=24

Note:- Weightage to each unit must be given in each type of questions as appropriate. Question wise breakup:

Type of Question	Marks Per	Number of	Total Marks	Percentage
	Question	Questions		
Objective Type/ Multiple	1	16	16	20
choice questions	1	10	10	20
Very Short Answer	2	8	16	20
(VSA)	-	Ŭ	10	
Short Answer (SA)	4	6	24	30
Long Answer (LA)	6	4	24	30
Total		34	80	100

16×1=16

8×2=16

6×4=24

Weightage to Difficulty Level:

Estimated Difficulty Level	Percentage		
(i) Easy (E)	30%		
(ii) Average (Av)	50%		
(iii)Difficult (D)	20%		

Design of Question Paper

Typology of questions	MCQ/ Objective type (1 Mark)	Very Short Answer (VSA) (2 Marks)	Short Answer (SA) (4 Marks)	Long Answer (LA) (6 Marks)	Total Marks	Percentage
Remembering- (Knowledge based Simple recall questions, to know specific facts, terms, concepts, principles or theories; Identify, defined or recite, information)	16	2	1	-	24	30
Understanding- (Comprehension-to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase, or interpret information	-	5	3	3	40	50
Application- (Use abstract information in concrete situation, to apply knowledge to new situation; Use given content to interpret a situation, provide an example, or solve a problem)	-	1	2	1	16	20
Project/INA/B. bank – 20 Marks	1×16=16	2×8=16	4×6=24	6×4=24	80	100

SYLLABUS

GROUP-A

Unit–I Personnel Administration

- a) Recruitment and Training: UPSC: Its Organisation and Role.
- b) Promotion and Position classification.
- c) Conduct and Discipline.
- d) Morale.
- e) Joint Consultative Machinery: Employer-Employee Relations.

Unit–II Financial Administration

- a) Budget-Meaning, Principles, and Importance. The budget as an instrument of Public Policy. The Budgetary process.
- b) Ministry of Finance- Its Organisation and Working Legislative Control Finance.
- c) Public Accounts Committee at the central level.
- d) Estimates Committee at the central level.
- e) Performance Budgeting.

GROUP-B

Unit–III Audit and Its Role

- a) Comptroller and Auditor General of India.
- b) Accounting: Its Importance and Organisation.

Unit–IV Selected Approaches

- a) Scientific Management.
- b) Human Relations Approach.

GROUP-C

Unit-V Functional Aspects of Administration

- a) Communication.
- b) Supervision.
- c) Coordination.
- d) Centralisation.
- e) Decentralisation.
- f) Field Headquarter Relationship.
Unit–VI Policy and Planning

- a) Leadership.
- b) Policy Formation.
- c) Planning and Decision Making.

GROUP-D

Unit-VII Administration Improvement

- a) O & M (Organisation and Methods).
- b) Administrative Reforms.

Unit-VIII Law and Legislation

- a) Administrative Law.
- b) Rule of Law.
- c) Delegated Legislation.
- d) Administrative Tribunals- Role, Structure and Working.

CLASS-XII Philosophy (2020-21)

Time : 3 Hrs

Theory:80 Marks Project work/IA:20 Marks Total:100 Marks

STRUCTURE OF QUESTION PAPER

- 1. All questions are compulsory.
- 2. The question paper is divided into four sections **A**, **B**, **C** and **D**.
- There are 38 questions in all. Some questions have internal choice.
 Marks are indicated against each question.

Section A

Objective Type Questions: This section comprises question No. 1-20. These are objective type questions carry 1 mark each. This type may include questions with one word to one sentence answers/Fill in the blanks/True or false/Multiple choice type questions. 20×1=20

Section B

Very Short Answer Type Questions: This section comprises question No.21-29 .These are very short answer type questions carrying 2 marks each. Answer to each question should not exceed 30 words. 9x2=18

Section C

Short Answer Type Questions: This section includes question No. 30-35. They are short answer type questions carrying 4 marks each. Answerto each question should not exceed 80 words.6x4=24

Section D

Long answer Questions: This section question No. 36-38. This type of question(with internal choice) long answer type questions carrying 6 marks each. Answer to each question should not exceed 200 words each. Question no 38 is to be answered with the help of the passage given.

3x6=18

Type of Question	Marks Per	Total no. of	Total Marks
	Question	Questions	
Objective Type	1	20	20
(Learning checks)			
Very Short	2	9	18
answer(VSA)			
Short Answer (SA)	4	6	24
Long Answer (LA)	6	3	18
Total			80

QUESTION WISE BREAK UP

WEIGHTAGE TO CONTENT

Section A	20 Marks
Section B	20 Marks
Section C	20 Marks
Section D	20 Marks
Project Work	20 Marks
Total	100 Marks

WEIGHTAGE OF DIFFICULTY LEVEL

Estimated Difficulty Level	Percentage
(i) Easy (E)	30%
(ii) Average (AV)	50%
(iii)Difficult (D)	20%

SYLLABUS

(PART-A)

- UNIT I Scientific Method: its nature; difference between this method and common sense thinking. Hypothesis: Its meaning, its place in scientific method; formulation of a relevant hypothesis.
 UNIT II Explanation: its meaning, popular and scientific explanation, kinds
- and limits of scientific explanation. Propositions: Meaning / traditional, analysis of propositions, Various divisions of propositions. Inference: Its Nature and Kinds-Immediate Inference, opposition, observation and conversion
- **UNIT III** Knowledge: Sources of Knowledge, Nature and theories of truth Schools of Philosophy: Idealism and Materialism.
- UNIT IV Indian Philosophy: Its nature and salient features.The Philosophy of Bhagwad-Gita-Karma Yoga.Sikhism: Its salient features; concepts ofsewa.

MODE OF PRESENTATION/SUBMISSION OF THE PROJECT:

At the end of the stipulated term, each learner will present the research work in the Project File Internal examiner. The questions should be asked from the Research Work/ Project File of the learner. The Internal Examiner should ensure that the study submitted by the learner is his/her own original work. In case of any doubt, authenticity should be checked and verified.

Practical Examination

Allocation of Marks (20)

The marks will be allocated under the following heads:

Α	Project (as per syllabus) 10 Marks				
	Research Design				
	i. Overall format	1 Marks			
	ii. Research question/Hypothesis	1 Marks			
	iii. Choice of the technique	2 Marks			
	iv. Detailed procedure for implementation of 2 Marks				
	technique	2 Marks			
	v. Limitations of the above technique 2 Marks				
	vi. Viva				
В	BSubject enrichment Activities/practical work8 Marks				
С	C book bank 2 Marks				
	Total	20 Marks			

CLASS-XII RELIGION

Time: 3 Hrs

Theory: 80 Marks Project File/INA/Book Bank : 20 Marks Total: 100 Marks

STRUCTURE OF QUESTION PAPER

- 1. The question paper will comprise of 32 questions in total.
- 2. All questions will be compulsory to attempt.
- 3. The question paper will consist of four parts with each part representing all sections and all religions.
- Part-Iwill consist of ten (10) objective type questions (Q. no. 1 to 10)
carrying one mark
include questions with one word to one sentence answer or fill in
the blank or true/false or multiple choice type questions.

10×1=10

- Part-II will consists of eight (8) short answer type -I questions (Q. no. 11 to 18) carrying 2 marks each. Answer of each question should be given within 30-35 words.
 8×2=16
- Part-III will consist of nine (9) short answer type-II questions (Q. no. 19 to 27) carrying 4 marks each. Answer of each question should be given within 70-80 words. Out of nine, three Questions will have internal choice.
- Part-IV will consist of three (3) long answer type questions with internal choice (Q. no. 28 to 30) carrying 6 marks each. Answer of each question should be given in approximately 2 to 2½ pages of the answer sheet.
 3×6=18

Type of question	Marks per	No. of questions	Section wise Distribution of questions		Total Marks	
	question		Section A	Section B	Section C	
Objective type	1 Mark	10	3	3	4	10
Short answer type-I	2 Marks	08	3	3	2	16
Short answer type-II	4 Marks	09	3	3	3	36
Long answer type	6 Marks	03	1	1	1	18
Total		30	10	10	10	80

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

SYLLABUS SECTION A: (HISTORICAL)

- (1) Religious life of the Indus valley people and early Aryans.
- (2) Budhist movement (up to Ashoka Period).
- (3) Rise And development of Sikhism (A.D. 1469 1708).

SECTION B : (LITERARY)

- (1) Introduction to Vedic Literature (name and main features of the four Vedas).
- (2) General Introduction to Puranas, Upanishads, Shastras.
- (3) The Adi-Granth its editing scheme.

SECTION C : (REFLECTIVE)

- (1) Ashta marga of Buddhism.
- (2) Ethical teachings of Jainism.
- (3) The Sikh way of life.

BOOK PRESCRIBED

An Introduction to Indian Religion by Harbans Singh & L.M. Joshi (Punjabi University, Patiala).

BOOK SUGGESTED (for general reading)

Punjabi University, Patiala Budhism Jainism Sikhism

Surinder Singh Johar – A hand book of Sikhism.

CLASS-XII MUSIC (VOCAL)

Time: 3Hrs Time: 20 mints (per student)

Theory: 45 Marks Practical: 50 Marks IA: 05 Marks Total: 100 Marks

SYLLABUS (THEORY) STRUCTURE OF QUESTION PAPER (THEORY)

- 1. The question paper will comprise of 25 questions in total.
- 2. The question paper will consist of three parts with each part representing both sections.
- **Part-I** will consist of 11 objective type questions (Q. no. 1 to 11) carrying one mark each. Answer of these questions are in one word or in one sentence.

11×1=11 Marks

Part-II will consist of 10 short answer type questions (Q. no. 12 to 21) carrying three (3) marks each. Attempt any eight questions out of ten questions. Answer of each question should be given in 10-15 lines.

8×3=24 Marks

Part-III will consist of 4 long answer type questions (Q. no. 22 to 25) every questions carrying 5 marks each. Attempt any two questions out of four questions. Answer of each question should be given with in 150-200 lines.
2×5=10 Marks

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of Questions	Marks of per Question	No. of Questions	Section-wis of Question	e Distribution s
			Section-A	Section-B
Objective Type	1 mark	11	7	4
Short Answer Type	3marks	10	6	4
Essay Type	5marks	04	2	2
Total Questions		25	15	10

SECTION-A

- 1. Brief history of modern period of Hindustani music.
- 2. Detailed knowledge of Tabla and Harmonium.
- 3. Time theory of Ragas.
- 4. Define and explain the, following terms:

Varna, Kan, Khatka, Murki,Gamak, Gayak, Gayaki, shudh Rag, Chhayalg Rag, Sankiran Rag, Lakshan geet.

- 5. Gayak ke gun aur dosh.
- 6. Definition of that. Its Characterstics, Ten that of Bhat Khande. Comparision between Raag and Thal Rules.
- 7. Essay:-(1) Importance of Tal in Music

(2) Place of Fine Arts in Music.

- 1. Cantribution towards music by the following scholars:-
 - (1) Bade Gulam Ali Khan.
 - (2) Bhim Sain Joshi.

- (3) Prof: Baldev sharan Narang
- (4) Faiyaz Khan
- 2. Shastri gayan shailies:-
 - Dharupad, Dhamar, Tarana, Dhumri, Khayal, Tappa.
- 3. Cantribultion of famous folk singers of Punjab in Folks music.
 - i. Assa Singh Mastana
 - ii. Surinder Kaur
 - iii. Narinder Biba
 - iv. Kuldeep Manak
 - v. Lal Chand Yamala Jat
 - vi. Didar Sandhu
 - vii. Parkash Kaur

SECTION-B

- 1. 10 Alankaras
- To write the notations of Drut Khyals in prescribed.
 Raags: Bhairav Bhimplasi, Malkauns, Khamaj.
- 3. Notation of Rupak tal, EK taal, jhaptal, Sul Taal, Tilwara tal, Dhamar tal.
- 4. Recognition of Raags from given Swar Sangaties.
- 5. Description of prescribed Raags.

STRUCTURE OF QUESTION PAPER (PRACTICAL)

There should not be more than 9 students in a batch of practical examination. Harmonium is allowed as accompaniment in music (Vocal). The examiner will set the question paper on the spot. While setting the question paper in practical, the examiner must consider the syllabus in theory and will follow the following instructions.

- Demonstration/performance of any one Raag out of the prescribed syllabus. The students can exercise the choice of Raags. It will be for 4 minutes and shall carry 10 marks.
- 2. Demonstration/performance of one Raag from prescribed syllabus. The choice will be of examiner. It will be for 4 minutes and will carry 10 marks.
- 3. Demonstration/performance of prescribed Taals in Ikgun and Dugun Layakaries by hand. It will be for 4 minutes and will carry 10 marks.
- 4. Recognition of one Taal and one Raag out of the prescribed syllabus. It will be for 4 minutes and will carry 10 marks.
- 5. Demonstration/performance regarding Tarana/Tappa/ Lok geet/Patriotic song. It will also be for 4 minutes and will carry 10 marks.

SYLLABUS (PRACTICAL)

- One Drut Khayal with Alaap- Taan the following Raags: Bhairav, Bhimplasi, Malkauns, Khamaj.
- 2. One slow Khyal with short Alaaps and Taans in any of the prescribed Raags.

- 3. One Tarana only Sathai and Antra in any of the prescribed Raags.
- 4. Ability to demonstrate Rupak tal, jhaptal, Sul tal, Tilwara tal, dhamar tal with reciting bols by hands in Ikgun and Dugun layakari.
- 5. One Camposition of Patriotic song.
- 6. Ability to recognise the prescribed Raag from the passages of swaras.
- 7. Knowledge of the structure of Harmonum and Tabla.
- 8. 10 Alankaras.

Note:- The book Published and Prescribed by the Punjab School Education Board:-

Sangeet Gayan-12

CLASS-XII GURMAT SANGEET

Time: 3Hrs Time: 20 mints (per student)

Theory: 45 Marks Practical: 50 Marks IA: 05 Marks Total: 100 Marks

SYLLABUS (THEORY) STRUCTURE OF QUESTION PAPER (THEORY)

- 1. The question paper will comprise of 25 questions in total.
- 2. The question paper will consist of three parts with each part representing both sections.
- **Part-I** will consist of 11 objective type questions (Q. no. 1 to 11) carrying one mark each. Answer of these questions are in one word or in one sentence.

11×1=11 Marks

Part-II will consist of 10 short answer type questions (Q. no. 12 to 21) carrying three (3) marks each. Attempt any eight questions out of ten questions. Answer of each question should be given in 10-15 lines.

8×3=24 Marks

Part-III will consist of 4 long answer type questions (Q. no. 22 to 25) every questions carrying 5 marks each. Attempt any two questions out of four questions. Answer of each question should be given with in 150-200 lines.
2×5=10 Marks

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of Questions	Marks of per Question	No. of Questions	Section-wise Distribution of Questions	
			Section-A	Section-B
Objective Type	1 mark	11	7	4
Short Answer Type	3marks	10	6	4
Essay Type	5marks	04	2	2
Total Questions		25	15	10

SYLLABUS (THEORY) SECTION-A

Unit-1

- 1. Brief history of Gurmat Music.
- 2. Contribution towards Gurmat Sangeet by Guru Arjun Dev Ji.
- 3. Introduction of Choukie :
 - a. Asa Di Var
 - b. Sodar
- 4. Brief introduction of famous Kirtaniyas of Guru period.
 - a. Bhai Mardana
 - b. Bhai Shahzad
 - c. Bhai Sata.
 - d. Bhai Balwand.
- 5. Raag Parkar and Mishrit (mixed) Raags of Guru Granth Sahib.
- 6. Life sketch and contribution of towards Gurbani Sangeet.

- a. Bhai Chand
- b. Prof. Tara Singh
- c. Bhai Hira Singh
- Definition of following music terms used in Gurmat Sangeet Raag: Mahalla, Shabad Ank, Rahao, Dhuni (Dhun), Partal, Ghar.

SECTION-B

- 1. Description of the prescribed Raags: Todi and Dhanasari, Sarang, Baharaiv.
- Description with Ikgun, Dugun and Chougun of Ek Taal, Jhap Taal, Rupak Taal and Teen Taal.
- Recognition of prescribed Raags: Asavari, Dhanasari, Bhairav, Sarang Raags from given Swar- Sangaties.
- 4. Notation of Shabad- Gayan only Sathai Antra.

STRUCTURE OF QUESTION PAPER (PRACTICAL)

There should not be more than 9 students in a batch of practical examination. Harmonium is allowed as accompaniment in music (Vocal). The examiner will set the question paper on the spot. While setting the question paper in practical, the examiner must consider the syllabus in theory and will follow the following instructions.

- Demonstration/performance of any one Raag out of the prescribed syllabus. The students can exercise the choice of Raags. It will be for 4 minutes and shall carry 10 marks.
- 2. Demonstration/performance of one Raag from prescribed syllabus. The choice will be of examiner. It will be for 4 minutes and will carry 10 marks.
- 3. Demonstration/performance of prescribed Taals in Ikgun and Dugun Layakaries by hand. It will be for 4 minutes and will carry 10 marks.
- 4. Recognition of one Taal and one Raag out of the prescribed syllabus. It will be for 4 minutes and will carry 10 marks.
- 5. Demonstration/performance regarding Tarana/Tappa/ Lok geet/Patriotic song. It will also be for 4 minutes and will carry 10 marks.

SYLLABUS (PRACTICAL)

- 1. Shabad Gayan in Bhairav, Sarang, Asavari and Dhansari according to the traditional style of Gurbani Gayan.
- 2. Capability to demonstrate: Ek Taal, Jhap Taal, Rupak Taal and Teen Taal.
- 3. Five Alankaras: (Sargam and Akaar) in Bhairav and Todi Raags.
- 4. Recognition of prescribed Raags by given Swar-Sangities.
- 5. Gayan of one Gurbani Salok in vilambat laya according to Vandana style.

CLASS-XII MUSIC (INSTRUMENTAL)

Time: 3Hrs Time: 20 mints (per student)

Theory: 45 Marks Practical: 50 Marks IA: 05 Marks Total: 100 Marks

SYLLABUS (THEORY)

- STRUCTURE OF QUESTION PAPER (THEORY)
- 1. The question paper will comprise of 25 questions in total.
- 2. The question paper will consist of three parts with each part representing both sections.
- **Part-I** will consist of 11 objective type questions (Q. no. 1 to 11) carrying one mark each. Answer of these questions are in one word or in one sentence.

11×1=11 Marks

Part-II will consist of 10 short answer type questions (Q. no. 12 to 21) carrying three (3) marks each. Attempt any eight questions out of ten questions. Answer of each question should be given in 10-15 lines.

8×3=24 Marks

Part-III will consist of 4 long answer type questions (Q. no. 22 to 25) every questions carrying 5 marks each. Attempt any two questions out of four questions. Answer of each question should be given with in 150-200 lines.
2×5=10 Marks

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of Questions	Marks of per Question	No. of Questions	Section-wise Distribution of Questions	
			Section-A	Section-B
Objective Type	1 mark	11	7	4
Short Answer Type	3marks	10	6	4
Essay Type	5marks	04	2	2
Total Questions		25	15	10

SYLLABUS (THEORY) PART-A

- 1. History of Modren Period of Hindustani Music.
- 2. Detailed knowledge of the following instruments:-Sitar, Tabla.
- 3. Time Theory of Ragas.
- Definition of the following music terms: Varna, kan, meend, mizrab, jhalla, chikari, gamak, soot, krintan, zamjama, Shudh, chyalag, sankeeran raags.
- 5. Vadak ke Gun our Dosh.
- 6. Definition and Principles of Thaats. Ten Thaats of Pandit Bhatkhande. Comparision between raags and thats rules.
- 7. (a) Importance of taal in music
 - (b) Music and other Fine-Arts
- 8. Contribution towards music by the following schotars:-(a) Ustad Allaudin Khan

- (b) Sh. Nikhil Banerjee
- (c) Pandit Harwinder Kumar Sharma
- (d) Ustad Vilayat Khan
- 9. Development of vadan styles in Indian Music.
- Instruments used in solo performance in Indian Music.
 Sitar, Sarood, Sarangi, Dilruba, Shanai, Flute, Jattarang, Harmonimum, Tabla, Dhol

PART-B

- 1. 10 Alankaars.
- 2. To write the notation of Razakhani Gats in Bhairav, Malkauns, Bhimplasi and Khamaj Raags.
- 3. One slow Gat in prescribed Raags.
- 4. One composition in Ek Taal or Jhap Taal in prescribed Raags.
- 5. One Dhun in any Raag.
- 6. Description of Rupak Tal, Ek Taal, Tilwada Taal, Dhamaar Taal, Sultal and Jhap Taal with Ekgun and Dugan layakaries.
- 7. Knowledge of the structure of your Instrument.

STRUCTURE OF QUESTION PAPER (PRACTICAL)

There should not be more than 9 students in a batch of practical examination. Harmonium is allowed as accompaniment in music (Vocal). The examiner will set the question paper on the spot. While setting the question paper in practical, the examiner must consider the syllabus in theory and will follow the following instructions.

- Demonstration/performance of any one Raag out of the prescribed syllabus. The students can exercise the choice of Raags. It will be for 4 minutes and shall carry 10 marks.
- 2. Demonstration/performance of one Raag from prescribed syllabus. The choice will be of examiner. It will be for 4 minutes and will carry 10 marks.
- 3. Demonstration/performance of prescribed Taals in Ikgun and Dugun Layakaries by hand. It will be for 4 minutes and will carry 10 marks.
- Recognition of one Taal and one Raag out of the prescribed syllabus. It will be for 4 minutes and will carry 10 marks.
- 5. Demonstration/performance regarding Tarana/Tappa/ Lok geet/Patriotic song. It will also be for 4 minutes and will carry 10 marks.

SYLLABUS (PRACTICAL)

- 1. One Drut Gat with short Alaap, Toras and Jhalla in each of the following Raags.
 - i. Bhairav
 - ii. Malkauns
 - iii. Bhimplasi
 - iv. khamaaj
- 2. One slow Gat with short Alaap and Toras in any of the prescribed Raags in the syllabus.
- 3. Ability to demonstrate Ek taal, Tilwara Taal, Dhamaar taal, Sultal and jhap taal by hand with reciting bols in Ikgun and Dugun layakari.
- 4. Ability to play one gat in Ek Taal or Jhap Taal.
- 5. Ten Alankars.
- 6. One Dhun in any Raag.

Note:- The book Published and Prescribed by the Punjab School Education Board:-

Sangeet Vadan-12 (Instrumental)

CLASS-XII MUSIC (TABLA)

Time: 3Hrs Time: 20 mints (per student)

Theory: 45 Marks Practical: 50 Marks IA: 05 Marks Total: 100 Marks

SYLLABUS (THEORY)

STRUCTURE OF QUESTION PAPER (THEORY)

- 1. The question paper will comprise of 25 questions in total.
- 2. The question paper will consist of three parts with each part representing both sections.
- **Part-I** will consist of 11 objective type questions (Q. no. 1 to 11) carrying one mark each. Answer of these questions are in one word or in one sentence.

11×1=11 Marks

Part-II will consist of 10 short answer type questions (Q. no. 12 to 21) carrying three (3) marks each. Attempt any eight questions out of ten questions. Answer of each question should be given in 10-15 lines.

8×3=24 Marks

Part-III will consist of 4 long answer type questions (Q. no. 22 to 25) every questions carrying 5 marks each. Attempt any two questions out of four questions. Answer of each question should be given with in 150-200 lines.
2×5=10 Marks

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of Questions	Marks of per Question	No. of Questions	Section-wis of Question	e Distribution s
			Section-A	Section-B
Objective Type	1 mark	11	7	4
Short Answer Type	3marks	10	6	4
Essay Type	5marks	04	2	2
Total Questions		25	15	10

SYLLABUS (THEORY)

PART-A

- 1. Defination of the following :- Uthan, Peshkar, Paran, Tehai, Duppali, Tippali, Rela, Nagma.
- 2. Principles of formation of Taal.
- 3. Essay on importance of Laya and Taal in music and importance of Tabla in music. .
- 4. Comparative study of Tabla and Pakhawaj Vadan.
- 5. Taal and its ten Parans.
- 6. Brief introduction of Gharanas of Tabla.
- 7. Priciples of Tabla solo Vadan.
- 8. Biographical sketches of the following Tabla maestro :
 - a. Pt. Kanthe Maharaz

- b. Pt. Shamta Prasad
- c. Ustad Zakir Hussian
- d. Ustad Laxaman Singh Seen.

PART-B

- Introduction and notation of the following Taals with Ikgun, Dugun, Tigun and Chougun Layakaries :(i) Rupak Taal (ii) Jhap Taal (iii) Ek Taal (iv) Deepchandi (v) Teen Taal (vi) Punjabi Theka (Chhota Teen Taal)
- 2. Description and comparison of the following Taals :
 - a. Teen Taal- Punjabi Theka
 - b. Deepchandi- Dhamar Taal
 - c. Rupak Taal- Tivra Taal
- 3. Notation of the following material in Teen Taal, Jhap Taal, Rupak Taal: Peskhar, Kayada, Tehai, Paran, Rela and Tukra.
- 4. Recognition of Teen Taal, Deepchandi, Punjabi Theka, Dhamar, Rupak, Tivra Taals through some Bols.
- 5. Notation of Nagama in prescribed Taals.

STRUCTURE OF QUESTION PAPER (PRACTICAL)

There should not be more than 9 students in a batch of practical examination. Harmonium is allowed as accompaniment in music (Vocal). The examiner will set the question paper on the spot. While setting the question paper in practical, the examiner must consider the syllabus in theory and will follow the following instructions.

- Demonstration/performance of any one Raag out of the prescribed syllabus. The students can exercise the choice of Raags. It will be for 4 minutes and shall carry 10 marks.
- 2. Demonstration/performance of one Raag from prescribed syllabus. The choice will be of examiner. It will be for 4 minutes and will carry 10 marks.
- 3. Demonstration/performance of prescribed Taals in Ikgun and Dugun Layakaries by hand. It will be for 4 minutes and will carry 10 marks.
- 4. Recognition of one Taal and one Raag out of the prescribed syllabus. It will be for 4 minutes and will carry 10 marks.

5. Demonstration/performance Play Nagma on Harmonium in any taal in precibed syllabus. It will be 4 minutes and will carry 10 marks.

SYLLABUS (PRACTICAL)

- System solo performance of the following Taals: Ek Taal and Teen Taal, Teewra Taal, Rupak Taal.
- 2. Few Laggis in Rupak Taal.
- 3. To play Thekas in Ikgun and Dugun Layakaries in Deepchandi, Teen Taal and Chhota Teen Taal, Rupak, Jhap Taal and Ek Taal.
- 4. Recognition of Taals.
- 5. Tuning of Tabla.
- 6. Ability to play Nagama on Harmonium in any Taal of your syllabus.
- 7. Ability to Padhant showing Tali and Khali of Taals in Ikgun and Dugun Layakaries.

CLASS-XII DANCE

Time: 3Hrs Time: 20 mints (per student)

Theory: 45 Marks Practical: 50 Marks IA: 05 Marks Total: 100 Marks

SYLLABUS (THEORY) STRUCTURE OF QUESTION PAPER (THEORY)

- 1. The question paper will comprise of 25 questions in total.
- 2. The question paper will consist of three parts with each part representing both sections.
- **Part-I** will consist of 11 objective type questions (Q. no. 1 to 11) carrying one mark each. Answer of these questions are in one word or in one sentence.

11×1=11 Marks

Part-II will consist of 10 short answer type questions (Q. no. 12 to 21) carrying three (3) marks each. Attempt any eight questions out of ten questions. Answer of each question should be given in 10-15 lines.

8×3=24 Marks

Part-III will consist of 4 long answer type questions (Q. no. 22 to 25) every questions carrying 5 marks each. Attempt any two questions out of four questions. Answer of each question should be given with in 150-200 lines.
2×5=10 Marks

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of Questions	Marks of per Question	No. of Questions	Section-wis of Question	e Distribution s
			Section-A	Section-B
Objective Type	1 mark	11	7	4
Short Answer Type	3marks	10	6	4
Essay Type	5marks	04	2	2
Total Questions		25	15	10

SYLLABUS (DANCE)

PART-A

- 1. Knowledge of the Kathak dance.
- 2. Definition of the following terms: Laya, Taal, Theka, Paran, Chakkardaraparan, Kavit, Gat-nikas.
- 3. Knowledge of Hasta Mudras (Sanyukta) based on Abhinaya Darpana.
- 4. Knowledge of the following Dances :
 - i. Bharata Natayam
 - ii. Lasya
- 5. Life sketch of Udey Shanker.
- 6. Knowledge of Rasa and Bhava and their application in Dance.
- 7. Knowledge of folk dance of Punjab.

PART-B

- 8. Definition and comparative study of Teen Taal and Jhap Taal.
- 9. Ability to write the following material in prescribed Taals given below:
 - i. Teen Taal: One Thaat, one Amad, Two Tukras, one Salami, one Paran, two Toras, one Kavit.
 - ii. Jhap Taal: One Thaat, one Tehai, one Amad, one salami, one Tora.
- 10. Ability to recognize the Layakari (Ikgun, Dugun, Tigun and Chougun) through some Bole from Teen Taal and Jhap Taal.

STRACTURE OF QUESTION PAPER (PRACTICAL)

There should not be more than 9 students in a batch of practical examination. The examiner will set the question paper on the spot. While setting the question paper in practical examination, the examiner must consider the syllabus in theory and will follow the following instructions.

- 1. A systematic dance performance in any Taal out of the prescribed syllabus as per the choice of student. It will be for 6 minutes and shall carry 10 marks.
- 2. A systematic dance performance in any Taal out of the prescribed syllabusas per the choice of the examiner. It will be for 4 minutes and will carry 10 marks.
- 3. Demonstration/performance of any Taal in Ikgun, Dugun layakaries. It will be for 4 minutes and shall carry 10 marks.
- 4. Student will be given some Bols out of the prescribed Taals.m He/She will have to recognize two out of these. It will be for 2 minutes and will carry 10 marks.
- 5. Padhant of prescribed Taal and layarkries on hand. It will be for 4 minutes and carry 10 marks.

SYLLABUS (PRACTICAL)

Systematic performance of the following Taals:

- I. (a).Teen Taal:
 - (i) Four varaties of advance Tatkar, in Ikgun and Dugun layakaries.
 - (ii) One Thaat
 - (iii) One Amad
 - (iv) two simple Tukras
 - (v) One Salami
 - (vi) One Paran
 - (vii) One Kavit.
 - (b) Jhap Taal:-
 - (i) One Thaat
 - (ii) one Tehai
 - (iii) one Amad
 - (iv) one Salami
 - (v) one Tora.

- II. Padhant of Thekas of Teen Taal and Jhap Taal in Ikgun, Dugun and Chougun layakaries by hand.
- III. Padhant of all material in Teen Taal by hand.

STRUCTURE OF QUESTION PAPER

The question paper has 5 sections comprising of total 25 questions. All questions are compulsory.

SECTION-I

MCQ/Objective Type Questions: This section comprises questions with one word to one sentence answer/ fill in the blanks/ true or false etc. all multiple choice type questions. The section has 08 sub parts (questions) 1 to 08, carrying one mark each. This section shall cover unit II to IV of the syllabus.

Very Short Answer Questions: This section comprises of 7 sub parts or questions 9 to 15, carrying 2 marks each. Answer to each question may be of two to three sentences. This section will cover Unit I to V of the syllabus.

SECTION-II

Short Answer Questions: This section comprises 5 sub parts, questions 16 to 20, each carrying 4 marks. At least one question from Unit I to V shall be set in this section and a pair of questions from unit II to IV, which includes internal choice. $4 \times 5 = 20$

SECTION-III

SECTION-IV

Long Answer Questions: This section comprises of 3 sub parts (questions) with 100% internal choice, 21 to 23, carry 6 marks each. Answer to each question should be in about 100 to 150 words. All the five Units of Syllabus shall be covered in this section, choosing one pair from first two units and two pairs from last three units.

6×3=18

SECTION-V

Map Question: This section comprises two questions of map carrying 5marks each. Students/Examinees are to attempt any 5 out of 8 items in each question. One part of map work pertains to identification and other pertains to labelling in political outline map of India as per syllabus i.e. questions no. 24 will be set out of Unit II and V while questions number 25 shall be set out of Unit III & IV.

Theory: 70 Marks

CLASS-XII Geography (2020-21)

Time: 3 Hours

 $2 \times 7 = 14$

 $1 \times 8 = 08$

5×2 =10

Question wise Break up

Type of Question	Marks Per Question	Total no. of Questions	Total Marks	percentage
Objective Type (Learning checks)	1	08	08	11.5
Short Answer(VSA)	2	07	14	20
ShortAnswers (SA)	4	05	20	28.5
Long Answer (LA)	6	03	18	25.5
Map Skills Based	5	02	10	14.5
Total		25	70	100

Weightage to Content

Section A	08 Marks
Section B	14Marks
Section C	20 Marks
Section D	18 Marks
Section E (Map Work)	10 Marks
Practical	20 Marks
Project Work/Book bank	08/02 Marks
Total	100 Marks

Weightage of Difficulty Level

Estimated Difficulty Level	Percentage
(i) Easy (E)	30%
(ii) Average (AV)	50%
(iii)Difficult (D)	20%

Unit Wise Weightage

	MCQ/ Objective type 1(8)	Very short Answer Type 2(7)	Short Answer type 4 (5)	Long Answer type 6 (3)	Map 5 (2)	
Unit —I		2(1)	4 (1)	$\int 6(1)$	Unit - II & V	=09
Unit II	1 (2)	2 (1)	4 (2)		5(1)	=13.5
Unit III	1 (3)	2 (2)	4(1)	()		=17.5
Unit IV	1(3)	2 (2)	4(1)	6 (2)	Unit - III & IV 5(1)	17.5
Unit V		2(1)	4(1)	()		12.5
						=25
						=5
Practical Internal Assessment /Book Bank	08	14	20	18	10	100

Weightage of Marks Unit wise

Typology of	MCQ/Ob	Very	Short	Long	Map	Total	% wise
questions	jective	short	Answer-	Answer	work (5)	Marks	Weighta
	type(1	Answer(I (SA-	(LA)(6			ge
	Mark)	VSA)(2	1)(4	Marks)			
		Marks)	Marks)				
Remembering-	8	2		1	-	18	25.5%
(Knowledge based							
Simple recall							
questions, to know							
specific facts,							
terms, concepts,							
principles or							
theories; Identify,							
defined or recite,							
information)							
Understanding-		3	3	2		30	43%
(Comprehension-to							
be familiar with							
meaning and to							
understand							
conceptually,							
interpret, compare,							
contrast, explain,							
paraphrase, or							
interpret							
information							
Application (Use		2	2			12	17%
abstract information							
in concrete							
situation, to apply							
knowledge to new							
situation; Use given							
content to interpret							
a situation, provide							
an example, or							
solve a problem)							
Thinking skills (2	10	14.5%
Analysis &							

Synthesis- classify,							
compare, contrast,							
or differentiate							
between different							
pieces of							
information,							
Organize and/or							
integrate unique							
pieces of							
information from a							
variety of sources)							
Total-70	8	7X2=14	5X4=20	3X6=18	2X5=10	Total 70	100%

SYLLABUS GEOGRAPHY-12 XII

UNIT –I

- Nature and scope of Geography and its Branches:
- Geographical thought; Brief definitions of Determinism, and Possiblism, radical and postmodern Geography. The contribution of A.V Humboldt, Carl Ritter, Paul Vidal De La Blache, and E.C Sample, and Branches of Geography.

UNIT-II

Human Resources:

- Population: distribution density and growth, Age-sex ratio, Urbanisation. Literacy
- Determinants of population change.Geography of Indian Diaspora, Migration causes and consequences, Demographic transition theory.
- Human development concept; selected indicators, International comparison, Punjab's rank in national HDI
- Human settlements: Rural and Urban, Urbanisation in India and its impact. Distribution of Metropolitan cities, Mega cities. Growth centres and Growth poles.

UNIT –III

Economic Geography

Primary activities:

- Concepts and changing trends; gathering; pastoral, mining, subsistence agriculture, modern trends in agriculture with special reference to Punjab, and organic farming.
- Geographic distribution of major crops in India (Wheat, Rice, Tea, Coffee, cotton Jute, Sugarcane)

Secondary activities:

- Concepts, manufacturing types (Household, Small scale, large scale, agro based and mineral based industries with special reference to Punjab. Distribution of metallic (Iron ore, Copper, Bauxite, Manganese,) Non-Metallic, Conventional (coal Petroleum, natural gas) Non-conventional (Solar, Wind, Tidal) and resources conservation.
- Industries: Types, distribution of selected industries; Iron and steel, cotton textile, sugar, pharmaceutical petrochemical and knowledge-based industries. Industrial corridors, dedicated freight corridors. FDI and impact on Indian industries.
- Tertiary activities; Quaternary, and *quinary*activities.
- People engaged in tertiary industries. A case study from Punjab.

UNIT-IV

Transport, Communication and Trade.

- Land transport: roads, (North South, East -West corridors, Golden quadrilateral and Diamond Quadrilateral) New Numbering scheme of National Highways.
- Railways: Trans -Continental railways. Luxury trains in India.
- Water transport. Inland, Major Ocean routes of the world.
- Air transport, oil and gas pipe lines (TAPI, HBJ, Indo Iranian Naharkatia-Nunmati-Barauni Pipeline, Kandla-Bhatinda Pipeline, Gas pipelines- Jamnagar Srinagar L.P.G Pipeline, Dhabol-Kakinada pipeline.
- International and national trade, sea ports and their Hinterlands and Major airports)
- International trade bases and changing patterns. International organisations with reference to India. Role of WTO in International trade.

UNIT - V

- Geographical Perspectives on selected issues and problems. Environmental pollution; Land, water, air
- Geography of Superlatives in India and Punjab.

UNIT-VI

Practical work: 20 marks

A

- I. Types of data: Primary, Secondary and other resources
- II. Representation of data construction of diagrams: Bars, circle, and flowcharts
- III. Thematic maps construction of dot, choropleth and isopleth with base map of Punjab.
- IV. Data analysis and generation of diagrams graphs with the help of computers.
- V. **Satellite communication**, Geographical information system Definitions and *Global Positioning System:* Show working of *GPS*.

B. INA/Project report/BB: 10 marks.

Project report in the following topics as per the convenience and resources available.

- 1. Growth of population. Changing patterns in agriculture,
- 2. Migration patterns from Punjab to foreign countries
- 3. Land, Water, air pollution: Meaning, causes, sources and measures to control them.
- 4. Changing patterns of settlements.
- 5. Changing patterns of transportation.
- 6. Superlatives of any concerned city or village.

Students may use questionnaire, interviews and observation method for data collection.

CLASS-XII DEFENCE STUDIES

Time : 3 Hrs

Theory : 80 Marks Project Work: 20 Marks Total: 100 Marks FR (THEORY)

STRUCTURE OF QUESTIONS PAPER (THEORY)

- 1. There will be 30 Questions in all.
- 2. There will be 15 questions of one Mark each & these questions will be objective type. 15×1= 15 Marks
- 3. There will be 5 questions of 3 Marks each. $5\times3=15$ Marks
- 4. There will be 6 questions of 5 Marks each with internal choice.

6×5=30 Marks

5. There wil be 4 questions. Attempt any two questions of 10 marks each. $2 \times 10=20$ Marks

SYLLABUS Group- A

- 1. Elements of Strategy: Various definitions, distinctions between grand strategy, strategy and tactics type of strategy.
- 2. Armed forces of India's neighbours with special reference to Pakistan, China, Nepal, Bangladesh, and Sri Lanka.
- 3. Higher Defence Organization in India

(a) Defence Minister's committee.

(b) Chief of Staff s Committee.

- 4. Elements of Evolution of tactics: means of collection and interpreting information troop movements, operational and verbal orders, attack, defence and withdrawal.
- 5. Higher Defence organizations in India.
 - (a) Defence Committee of the Cabinet.
 - (b) National Defence Council.
 - (c) Powers of the President in relation to armed forces.
- 6. Organization of India's Armed forces.
 - (a) Equivalent ranks in the Armed forces.
 - (b) Role and Characteristic of Army, Navy and Air Force.
 - (c) Army: Integrated Headquarters, static and field formation, Elementary knowledge of the following weapons.
 5.56mm INSAS Rifle, 7.62mm MMG, LMG 9 mm Carbine, Grenade, Morter, Rocket Launcher, Antitank weapons : Tanks and APC
 - (d) Navy: Headquarters, Commands, Type of Ships and Submarines.
 - (e) Air Force, Headquarters, Commands, Types of service, Air Crafts of India.

PAPER-II

VIVA VOCE / PROJECT WORKS

20 Marks

- 1. Interview or Viva Voce: 10
- 2. Project File: 10

CLASS-XII PSYCHOLOGY

Time: 3 Hrs Time: 3 Hrs

Theory: 70 Marks Practical:30Marks Total: 100 Marks

STRUCTURE OF QUESTION PAPER

- 1. The Question paper will comprise of 26 questions in total.
- 2. All questions will be compulsory to attempt.
- 3. The question paper will consist of four parts:
- Part-I will consist of eight (8) objective type questions (Q.No.1 to 8) carrying 1 mark each. Objective type questions may include questions with one word to one sentence answer or fill in the blank or true/false or multiple choice type questions.
 8×1=8
- Part-II will consist of eight (8) short answer type I, questions (Q. No. 9 to 16) carrying 2 marks each. Answer of each question should be given in 50-60 words.
 8×2=16
- Part-III will consist of seven (7) short answer type II, questions (Q. No. 17 to 23) carrying 4 marks each. Answers of each question should be given in 80-90 words. Out of seven, two internal choice questions will be asked.
 7×4=28
- Part-IV will consist of three (3) long answer type questions with internal choice (Q. No. 24 to 26) carrying 6 marks each. Answer of each question should be given in approximately two pages of the answer sheet.

3×6=18

UNITWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of	Marks	No. of	Unitwise Distribution Of Questions					Total			
question	per question	questions	Unit- I	Unit- II	Unit- III	Unit- IV	Unit- V	Unit- VI	Unit -VII	Unit- VIII	Marks
Objective type	1 Mark	8	1	1	1	1	1	1	1	1	8
Short answer type-I	2 Marks	8	1	1	1	1	1	1	1	1	16
Short answer type-II	4 Marks	7	1	1	1	1	1	1	1	-	28
Long answer type	6 Marks	3	-	-	-	-	-	1	1	1	18
Тс	otal	26	3	3	3	3	3	4	4	3	70

SYLLABUS

Unit I Growth and Development: Difference between Growth and Development, Principles of Growth and Development. Stages of Growth and Development, Physical, Mental, Emotional and Social, Characteristics of Adolescence, Effect of Heredity and Environment in Growth and Development.

- Unit II Emotions: Definition, Concept and Characteristics of Emotions, Physical and Physiological changes accompanying emotions.
 Difference between emotions and feelings, Important emotions: Fear, Anger and Aggression, Jealousy, Love, Happiness, Curiosity.
- **Unit III** Motivation: Meaning, Definition and Characteristics of Motivated behaviour, Classes and types of Motives and Needs, Maslow's Theory of Hierarchy of needs. Instincts, Drives, Incentives and goals as Motives. Frustrations and Conflicts of Motives.
- Unit-IV Thinking, Reasoning and Problem Solving: Definition, types and stages of Thinking-images and Thinking Languages and Thinking.
 Reasoning Definition, Characteristics, steps and types of Reasoning
 Problem solving -Creative thinking Concepts : Definition, type of formation of concepts.
- **Unit-V** Delinquency and Mental Health: Delinquent Behavior, Definition, Characteristics, Causes, Remedial and Preventive Measures - Mental Health: Meaning and Definition - Characteristics of a 'Mentally healthy person, Defence Mechanism.
- Unit-VI Intelligence : Definition, Nature and theories : Spearman's two factor theory and Thuestone's Primary Mental Abilities theory - Concept of I.Q. Measurement of Intelligence - Intelligence Tests - Relative Role of Heredity and Environment on the development of Intelligence.
- Unit-VII Personality: Definition, Nature, Characteristics and Traits of Personality Classification of Personality: Sheldon's Jung's and Eysenck's Classifications-Theories of Personality, Freud's Psychoanalytical theory - Jung's Analytical theory, Allport's theory of cardinal traits, Carl Roger's theory of self, Adler's theory of will power.
- **Unit-VIII** Statistics: Frequency distribution, Mean, Median, Mode, Mean Deviation, Standard Deviation, Quartile Deviation. (Only numerical will be set from this unit.)

STRUCTURE OF PRACTICAL PAPER

Time:3 Hrs

Practical Examination

Practical file 8 Marks
 Book Bank 2 Marks
 Viva Voce (Experiments) 05 Marks
 One Pracitcals (05 for conduct and 10 for reporting) 15 Marks
 Total 30 Marks

Experiments:

1. Muller Lyer Illusion

30 Marks

- 2. Maze learning.
- 3. Card Sorting
- 4. Problem Solving
- 5. Intelligence test-Verbal
- 6. Intelligence test-Non-Verbal
- 7. Imagery Types.
- 8. Personality Inventory

Class XII HOME SCIENCE

Time: 3 Hrs

THEORY : 70 Marks PRACTICAL: 25 Marks

IA: 05 Marks (Average Periodic tests' performance; 3 Marks Book Bank ;2 Marks) TOTAL: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

- 1 All questions will be compulsory.
- 2 There will be total 33 questions.
- 3 Question number 1 to 18, Section -A will be objective type questions and of 1 mark each.
- 4 Question number 19 to 23, Section B will be of 2 mark each to be answered in minimum 20 words.
- 5 Question number 24 and 25, Section- C will be of 3 marks each to be answered in minimum 30 words.
- 6 Question number 26 to 29, Section-D will be of 4 marks each, to be answered in minimum 40 words.
- 7 Question number 30 to 33, Section-E will be of 5 marks each, to be answered in minimum 50 to 60 words.
- 8 Internal choices will be given in sections B, C, D, E for two, one , two and two questions respectively.
- 9 Candidate should support the answer with suitable examples wherever required.

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Marks per	No. of	Distributio	Total	
question	Questions	Foods &	Human	Marks
		Nutrition	Development	
1 Mark	18	9	9	18
2 Marks	5	3	2	10
3 Marks	2	1	1	6
4 Marks	4	2	2	16
5 Marks	4	2	2	20
Total		17	16	70

SYLLABUS (THEORY) SECTION – A (Food and Nutrition)

1. Food, Nutrition and Health

i. Definitions: Food, Nutrition, Health, Nutrients, Nutrient density, Malnutrition, Recommended Dietary Allowances, Nutritional Status, Functional Food, Nutraceuticals, Antioxidants, Geriatrics, Probiotics. Functions of food

ii. Classification of Food groups based on the recommendation of ICMR

- iii. Balanced Diet
- iv. Food Guide pyramid

2. Nutrients and nourishment

Carbohydrates, Proteins, Fats, Minerals (calcium, Phosphorus, iron, zinc, iodine, fluorine), Vitamins (A,D,E,K,B and C) and Water

i. Functions and sources

- ii. Health effects of too little and too much of nutrients
- iii. Enhancing nutritional value of foods

3. Meal Planning

i. Meaning, importance and principles of meal Planning

ii. Planning meals for the family- Children (Infants, pre schoolers and school going children), adolescents (boys and girls), adults (men and women), pregnant women, lactating mothers and elderly.

4. Food selection, storage, preparation and preservation at home

- i. Food selection and storage
- ii. Preparation of food: Different methods of cooking
- iii. Food preservation at home importance and methods

5. Food Safety

- i. Food hygiene
- ii. Food Adulteration
- iii. Removal of the pesticide residues from food by different methods.

6. Diet therapy

- i. Principles of diet therapy
- ii. Adaptation of normal diet for therapeutic purpose

SECTION -B (Human Development)

1. Beginning of Motherhood

- i. Signs, discomforts and warning signs of pregnancy
- ii. Antenatal care of expectant mother (diet, rest, exercise, medical checkups and immunization)
- iii. Alternative reproductive methods (in vitro fertilization, gamete intrafallopian transfer, zygote intrafallopian transfer and Surrogacy

2. Prenatal Physiological Processes

- i. Stages of prenatal development (germinal, embryonic and fetal)
- ii. Fetal monitoring techniques (ultrasound, chorionic villus sampling, amniocentesis and foetoscopy)
- iii. Environmental influences on prenatal development (teratogens, diseases, harmful drugs and x-ray)

3. Birth process

- i. Stages of birth process (dilation, expulsion and placental stage)
- ii. Types of child birth (natural, instrument, breech and caesarean)
- iii. Categories of new born babies (pre term, term and post-term)

4. Postnatal care of mother

- i. Meaning and purpose of postnatal care
- ii. Aspects of postnatal care

iii. Effects of parenthood on mother, father and other family members

5. Care of newborn

- i. Characteristics of new born
- ii. Neonatal reflexes
- iii. Feeding, bathing and clothing of newborn
- iv. Immunization
- v. Developmental milestones and delays
- **6. Infant stimulation**
 - i. Mother-child interaction
 - ii. Developmentally appropriate play material
 - iii. Common childhood ailments

STRUCTURE OF QUESTION PAPER (PRACTICAL)

There should not be more than 25 candidates in a group. The Practical question paper will consist of two sections. Distribution of Marks will be as follows:

1. Viva Voce, Notebook & Record	05 Marks
Section-A	
(Food and Nutrition)	
2. Any one practical based on practical no. 2, 3, and 4	5 Marks
3. Any two tests based on practical no. 5	5 Marks
Section-B	
(Child Development and Mother Craft)	
4. Any one practical based on practical no. 4 and 5.	5 Marks
5. Any one practical based on practical no. 6 and 7.	5 Marks

SYLLABUS (PRACTICAL) Section-A (Food and Nutrition)

- 1. Preparation of list of foods available in your home according to food groups.
- 2. Preparation of
 - a) Healthy salads
 - b) Dishes enhancing nutrition value of food (by Combination of cereals,
 - pulses and vegetables, fermentation and sprouting)
 - c) Protein rich snacks and desserts.
- 3. Freezing and sun drying of blanched vegetables.
- 4. Preparation of ORS solution.
- 5. Simple tests for checking adulteration in :
 - a) Cereals : rice, semolina (suji).
 - b) Pulses : Bengal Gram (channa dal)
 - c) Milk
 - d) Tea leaves
 - e) Coriander powder
 - f) Turmeric powder
 - g) Powdered sugar
 - h) Black pepper

Section-B (Child Development and Mother Craft)

- 1. Showing a documentary on neo-natal reflexes and care and management of pre-term babies (http://www.vhai.org/ceo/filmsforchange.php)
- 2. Recording of immunization schedule of infants and children
- 3. Demonstration on feeding, bathing and clothing of newborn
- 4. Preparing developmentally appropriate play material
- 5. Demonstration on sterilization of feeding bottles and disinfecting clothing of infants
- 6. Preparation of weaning foods- liquid and semi-solids
- 7. Preparation of visual aids related to developmental milestones of infancy
- 8. Showing a documentary on family planning methods
- (http://www.vhai.org/ceo/filmsforchange.php) • Aparajita
- Films:
- Anant

Oriented videos: • Neo-Natal

• Aaj Ki Na Samajhi Kal Ki Pareshani

CLASS-XII **MODELLING AND SCULPTURE** ਮਾਡਲਿੰਗ ਅਤੇ ਬੱਤਕਾਰੀ

ਸਮਾਂ:8 ਘੰਟੇ

ਪ੍ਰਯੋਗੀ: 80 ਅੰਕ ਅੰਤਰਿਕ ਮਲਾਂਕਣ.: 20 ਅੰਕ

ਕੱਲ: 100 ਅੰਕ

- ਨੋਟ:-1. ਇਹ ਪੇਪਰ ਪੂਰਨ ਪ੍ਰਯੋਗੀ ਹੈ ਅਤੇ ਪ੍ਰਯੋਗੀ ਪੀਖਿਅਕ ਰਾਹੀਂ ਬੋਰਡ ਵੱਲੋਂ ਨਿਯਤ ਡੇਟਸ਼ੀਟ ਅਨੁਸਾਰ ਲਿਆ ਜਾਵੇਗਾ।
 - 2. ਮਿੱਟੀ ਜਾਂ ਪੀ.ਓ.ਪੀ. ਪੀਖਿਆਰਥੀ ਖਦ ਨਾਲ ਲੈਕੇ ਆਵੇਗਾ।

	ਸਮਾਂ	ਸ਼ੈਸ਼ਨ
ਪਹਿਲਾ ਪੇਪਰ	4 ਘੰਟੇ	ਸਵੇਰ
ਦੂਜਾ ਪੇਪਰ	4 ਘੰਟੇ	ਸ਼ਾਮ

STRUCTURE OF QUESTION PAPER ਪ੍ਰਸ਼ਨ-ਪੱਤਰ ਦੀ ਰੂਪ ਰੇਖਾ

- ਇਹ ਪੇਪਰ ਪ੍ਰਯੋਗੀ ਡੇਟ ਸ਼ੀਟ ਅਨੁਸਾਰ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਵੱਲੋਂ ਲਿਆ ਜਾਵੇਗਾ। ਇਸਦੇ 40 ਅੰਕ ਹੋਣਗੇ। ਇਹ 1. ਸਵੇਰ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਲਿਆ ਜਾਵੇਗਾ। ਇਸ ਦਾ ਸਮਾਂ ਚਾਰ ਘੰਟੇ ਹੋਵੇਗਾ। ਇਸ ਵਿੱਚ ਪਸ਼ੂ, ਪੰਛੀ, ਜਾਨਵਰ ਅਤੇ ਮਨੁੱਖੀ ਸਰੀਰ ਦੇ ਬੁੱਤ ਤਿਆਰ ਕੀਤ ਜਾਣਗੇ।
- ਦੋਨਾਂ ਸੈਸ਼ਨਾਂ ਦੇ ਵਿਚਕਾਰ ਇੱਕ ਘੰਟੇ ਦੀ ਛੁੱਟੀ ਹੋਵੇਗੀ। ਉਸ ਦੌਰਾਨ ਸੈਸ਼ਨਲ ਵਰਕ ਚੈੱਕ ਕਰਕੇ ਮੁਲਾਂਕਣ 2. ਕੀਤਾ ਜਾਵੇਗਾ।
- ਦੂਜੇ ਸ਼ਾਮ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਮਨੁੱਖੀ ਸਿਰ ਦਾ ਬੁੱਤ ਤਿਆਰ ਕਰਵਾਇਆ ਜਾਵੇਗਾ। ਇਹ ਕੰਮ ਚਾਰ ਘੰਟ ਵਿੱਚ 3. ਪੁਰਾ ਕੀਤਾ ਜਾਵੇਗਾ। ਇਸਦੇ 40 ਅੰਕ ਹੋਣਗੇ।
- ਸਾਰੇ ਪੇਪਰਾਂ ਦਾ ਮੁਲਾਂਕਣ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਕਰਕੇ ਨੰਬਰ ਸੁਚੀਆਂ ਸਬੰਧਤ ਅਧਿਕਾਰੀ ਨੂੰ ਆਪਣੇ ਹਸਤਾਖਰ 4. ਕਰਕੇ ਮੋਹਰ ਬੰਦ ਲਿਫ਼ਾਫੇ ਵਿੱਚ ਭੇਜੇਗਾ।
- ਸਾਰ ਸਾਲ ਵਿੱਚ ਘੱਟੋ-ਘੱਟ 20 ਵਸਤੂਆਂ ਤਿਆਰ ਕੀਤੀਆਂ ਜਾਣਗੀਆਂ, ਜਿਸਦੇ 20 ਅੰਕ ਹੋਣਗੇ। 5

ਨੋਟ:- ਮਿੱਟੀ ਜਾਂ ਪੀ.ਓ.ਪੀ. ਪ੍ਰੀਖਿਆਰਥੀ ਖੁਦ ਨਾਲ ਲੈਕੇ ਆਵੇਗਾ।

ਪਾਠ–ਕ੍ਮ

ਭਾਗ–1

ਬਨਾਵਟ ਅੰਕ: 40 1. ਮਿੱਟੀ ਜਾਂ ਪਲਾਸਟਰ ਆਫ ਪੈਰਿਸ (P.O.P) ਦੁਆਰਾ ਪੰਛੀ, ਜਾਨਵਰ ਅਤੇ ਮਨੁੱਖੀ ਸਰੀਰ ਦੇ ਬੁੱਤ ਤਿਆਰ ਕਰਨੇ।

ਭਾਗ–II

ਪੋਰਟਰੇਟ ਸਟਡੀ (Portrait Study)

1. ਮਨੁੱਖੀ ਸਿਰ ਦਾ ਮਿੱਟੀ ਜਾਂ ਪਲਾਸਟਰ ਆਫ ਪੈਰਿਸ (P.O.P) ਦੁਆਰਾ ਬੁੱਤ ਤਿਆਰ ਕਰਨਾ। ਜਿਸ ਵਿੱਚ ਚਿਹਰੇ ਦਾ ਅਨੁਭਵ ਪ੍ਰਗਟ ਹੋਵੇ।

ਸੈਸ਼ਨਲ ਵਰਕ

ਭਾਗ–III

ਸਾਰੇ ਸਾਲ ਵਿੱਚ ਤਿਆਰ ਕੀਤੀਆਂ ਘੱਟੋ-ਘੱਟ ਵੀਹ ਵਸਤੂਆਂ ਜੋ ਕਿ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਚੈੱਕ ਕਰੇਗਾ ਅਤੇ ਅੰਕ ਲਾਵੇਗਾ। ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਦੁਆਰਾ ਵਿਸ਼ੇ ਸਬੰਧੀ ਜ਼ੁਬਾਨੀ ਪ੍ਰਸ਼ਨ ਵੀ ਪੁੱਛੇ ਜਾ ਸਕਦੇ ਹਨ।

ਅੰਕ: 20

ਅੰਕ: 40

CLASS-XII COMMERCIAL ART ਕਮਰਸ਼ੀਅਲ ਆਰਟ

ਸਮਾਂ:8 ਘੰਟ

ਪ੍ਯੋਗੀ: 80 ਅੰਕ ਅੰਤਰਿਕ ਮੁਲਾਂਕਣ : 20 ਅੰਕ

ਕੁੱਲ: 100 ਅੰਕ

ਨੋਟ: ਇਹ ਪੇਪਰ ਪੂਰਨ ਪ੍ਯੋਗੀ ਹੈ ਅਤੇ ਪ੍ਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਰਾਹੀਂ ਬੋਰਡ ਵੱਲੋਂ ਨਿਯਤ ਡੇਟਸ਼ੀਟ ਅਨੁਸਾਰ ਲਿਆ ਜਾਵੇਗਾ।

	ਸਮਾਂ	ਸ਼ੈਸ਼ਨ
ਪਹਿਲਾ ਪੇਪਰ	4 ਘੰਟੇ	ਸਵੇਰ
ਦੂਜਾ ਪੇਪਰ	4 ਘੰਟੇ	ਸ਼ਾਮ

ਪ੍ਰਸ਼ਨ-ਪੱਤਰ ਦੀ ਰਪ ਰੇਖਾ

- ਇਹ ਪੇਪਰ ਪ੍ਰਯੋਗੀ ਡੇਟ ਸ਼ੀਟ ਅਨੁਸਾਰ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਵੱਲੋਂ ਲਿਆ ਜਾਵੇਗਾ। ਪਹਿਲੇ ਸਵੇਰ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਲੇ-ਆਊਟ ਡਿਜ਼ਾਇਨਿੰਗ ਸਬੰਧੀ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ। ਇਹ ਪੇਪਰ ਚਾਰ ਘੰਟੇ ਦਾ ਹੋਵੇਗਾ। ਇਸਦੇ ਕੁੱਲ 40 ਅੰਕ ਹੋਣਗੇ। ਇਸ ਵਿੱਚ ਤਿੰਨ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕਰਨੇ ਹੋਣਗੇ। ਵਿਦਿਆਰਥੀ ਵੱਲੋਂ ਕੋਈ ਇੱਕ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨਾ ਹੋਵੇਗਾ।
- 2. ਦੂਜੇ ਸ਼ਾਮ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਪੋਸਟਰ ਡਿਜਾਇਨਿੰਗ ਦਾ ਪੇਪਰ ਹੋਵੇਗਾ। ਇਹ ਪੇਪਰ ਵੀ ਉਪਰੋਕਤ ਅਨੁਸਾਰ 40 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ। ਇਸ ਦਾ ਸਮਾਂ ਚਾਰ ਘੰਟੇ ਹੋਵੇਗਾ। ਇਸ ਵਿੱਚ ਕੋਈ ਦੋ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕੀਤੇ ਜਾਣਗੇ। ਪ੍ਰੀਖਿਆਰਥੀ ਵੱਲੋਂ ਕੋਈ ਇੱਕ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨਾ ਹੋਵੇਗਾ।
- ਵਿਚਕਾਰ ਇੱਕ ਘਟੇ ਦੇ ਸਮੇਂ ਵਿੱਚ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ, ਪ੍ਰੀਖਿਆਰਥੀਆਂ ਦੇ ਸੈਸ਼ਨਲ ਕੰਮ ਦਾ ਮੁਲਾਂਕਣ ਕਰੇਗਾ।
 ਇਸਦੇ 20 ਅੰਕ ਹੋਣਗੇ।
- ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਸਾਰੇ ਪੇਪਰਾਂ ਦਾ ਮੁਲਾਂਕਣ ਕਰਕੇ ਨੰਬਰ ਸੂਚੀਆਂ ਸਬੰਧਤ ਅਧਿਕਾਰੀ ਨੂੰ ਮੋਹਰ ਬੰਦ ਲਿਫਾਫੇ ਵਿੱਚ ਭੇਜੇਗਾ।
- 5. ਡਰਾਇੰਗ ਸ਼ੀਟਾਂ ਅਤੇ ਪੇਟਿੰਗ ਦਾ ਹੋਰ ਸਾਰਾ ਸਮਾਨ ਪ੍ਰੀਖਿਆਰਥੀ ਖਦ ਨਾਲ ਲੈ ਕੇ ਆਵੇਗਾ।

ਪਾਠ−ਕ੍ਮ

ਭਾਗ–1

ਲੇ−ਆਊਟ ਡਿਜ਼ਾਈਨਿੰਗ

- ਕਾਲੇ ਅਤੇ ਚਿੱਟੇ ਰੰਗਾਂ ਵਿੱਚ ਲੈਟਰ ਪੈਡ ਤਿਆਰ ਕਰਨਾ।
- ਮੈਗਜ਼ੀਨ ਕਵਰ ਜਾਂ ਬੁੱਕ ਕਵਰ ਰੰਗਾਂ ਦੁਆਰਾ ਤਿਆਰ ਕਰਨੇ।
- ਸਾਧਾਰਨ ਮੋਨੋ ਗ੍ਰਾਮ ਬਣਾਉਂਣੇ।
- ਪੇਪਰ ਦਾ ਮਾਪ:− ਪੂਰੇ ਪੇਪਰ ਦਾ 1/4 ਭਾਗ (35 ਸੈਂ: ਮੀ:×25ਸੈਂ: ਮੀ:)

ਭਾਗ–II

ਪੋਸਟਰ ਡਿਜਾਇਨਿੰਗ

ਅੰਕ: 40

ਅੰਕ: 40

- ਦਿੱਤੇ ਹੋਏ ਵਿਸ਼ੇ ਤੇ ਲਿਖਾਈ ਕਰਕੇ ਪੋਸਟਰ ਤਿਆਰ ਕਰਨੇ ਅਤੇ ਸਬੰਧਤ ਰੰਗਾਂ ਨਾਲ ਸਜਾਉਣਾ।
- ਛੋਟੇ ਬੱਚਿਆਂ ਦੀਆਂ ਪੁਸਤਕਾਂ ਦੇ ਕਵਰ ਤਿਆਰ ਕਰਨੇ। ਇਹ ਕਵਰ ਕਾਲੇ, ਚਿੱਟੇ ਜਾਂ ਰੰਗਦਾਰ ਤਿਆਰ ਕੀਤੇ ਜਾ ਸਕਦੇ ਹਨ।

ਪੇਪਰ ਦਾ ਮਾਪ:− ਪੂਰੇ ਪੇਪਰ ਦਾ 1/4 ਭਾਗ (35ਸੈਂ: ਮੀ:×25ਸੈਂ: ਮੀ:)

ਭਾਗ–III

ਅੰਕ: 20

ਸੈਸ਼ਨਲਵਰਕ:– ਸਾਰੇ ਸਾਲ ਵਿੱਚ ਤਿਆਰ ਕੀਤੀਆਂ ਘੱਟੋ-ਘੱਟ ਵੀਹ ਆਈਟਮਾਂ ਜੋ ਕਿ ਪ੍ਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਚੈਕ ਕਰੇਗਾ ਅਤੇ ਅੰਕ ਲਾਵੇਗਾ।

ਨੋਟઃ− ਡਰਾਇੰਗ ਸ਼ੀਟਾਂ ਅਤੇ ਪੇਟਿੰਗ ਦਾ ਹੋਰ ਸਾਰਾ ਸਮਾਨ ਪ੍ਰੀਖਿਆਰੀ ਖੁਦ ਲੈ ਕੇ ਆਵੇਗਾ।

CLASS-XII DRAWING AND PAINTING ਡਰਾਇੰਗ ਅਤੇ ਚਿੱਤਰਕਲਾ

ਸਮਾਂ:8 ਘੰਟੇ

ਪ੍ਰਯੋਗੀ: 80 ਅੰਕ ਅੰਤਰਿਕ ਮੁਲਾਂਕਣ.: 20 ਅੰਕ

ਕੁੱਲ: 100 ਅੰਕ

ਨੋਟ: ਇਹ ਪੇਪਰ ਪੂਰਨ ਪ੍ਯੋਗੀ ਹੈ ਅਤੇ ਪ੍ਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਰਾਹੀਂ ਬੋਰਡ ਵੱਲੋਂ ਨਿਯਤ ਡੇਟਸ਼ੀਟ ਅਨੁਸਾਰ ਲਿਆ ਜਾਵੇਗਾ।

	ਸਮਾਂ	ਸ਼ੈਸ਼ਨ
ਪਹਿਲਾ ਪੇਪਰ	4 ਘੰਟੇ	ਸਵੇਰ
ਦੂਜਾ ਪੇਪਰ	4 ਘੰਟੇ	ਸ਼ਾਮ

STRUCTURE OF QUESTION PAPER

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ ਰੇਖਾ

- ਇਹ ਪੇਪਰ ਪ੍ਰਯੋਗੀ ਡੇਟਸ਼ੀਟ ਅਨੁਸਾਰ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਵੱਲੋਂ ਲਿਆ ਜਾਵਗਾ। ਪਹਿਲਾਂ ਸਵੇਰ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਸਕੱਚਿੰਗ, ਫੁੱਲਾਂ ਦੀ ਚਿੱਤਰਕਾਰੀ, ਡਿਜ਼ਾਈਨ ਅਤੇ ਕੁਦਰਤੀ ਦ੍ਰਿਸ਼ ਦਾ ਪੇਪਰ ਲਿਆ ਜਾਵੇਗਾ। ਇਸਦਾ ਸਮਾਂ ਚਾਰ ਘੰਟੇ ਹੋਵੇਗਾ। ਕੋਈ ਇੱਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਹੋਵੇਗਾ। ਇਸਦੇ 40 ਅੰਕ ਹੋਣਗੇ।
- 2. ਸ਼ਾਮ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਮਾਡਲ ਡਰਾਇੰਗ (Still Life)ਦਾ ਪੇਪਰ ਹੋਵੇਗਾ। ਮਾਡਲ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਵੱਲੋਂ ਸੈੱਟ ਕੀਤਾ ਜਾਵੇਗਾ। ਮਾਡਲ ਦੇ ਪਿੱਛੇ ਡਰਾਪਰੀ(ਪਰਦਾ) ਸੈੱਟ ਕੀਤੀ ਜਾਵੇਗੀ। ਮਾਡਲ ਦਾ ਸਮਾਨ ਕੇਂਦਰ ਕੰਟਰੋਲਰ ਵੱਲੋਂ ਉਪਲੱਬਧ ਕਰਵਾਇਆ ਜਾਵੇਗਾ। ਇਸਦਾ ਸਮਾਂ ਚਾਰ ਘੰਟੇ ਹੋਵੇਗਾ। ਇਸਦੇ 40 ਅੰਕ ਹੋਣਗੇ।
- ਵਿਚਕਾਰ ਇੱਕ ਘੰਟੇ ਦੇ ਸਮੇਂ ਵਿੱਚ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ, ਪ੍ਰੀਖਿਆਰਥੀ ਦੇ ਸੈਸ਼ਨਲ ਕੰਮ ਦਾ ਮੁਲਾਂਕਣ ਕਰੇਗਾ।
 ਇਸਦੇ 20 ਅੰਕ ਹੋਣਗੇ। ਪ੍ਰੀਖਿਅਕ ਕੀਤੇ ਕੰਮ ਅਨੁਸਾਰ ਅੰਕ ਦੇਵੇਗਾ।
- ਸਾਰੇ ਪੇਪਰ ਦਾ ਮੁਲਾਂਕਣ ਕਰਕੇ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਨੰਬਰ ਸੂਚੀਆਂ ਸਬੰਧਤ ਅਧਿਕਾਰੀ ਨੂੰ ਆਪਣੇ ਹਸਤਾਖਰ ਕਰਕੇ ਭੇਜੇਗਾ।
- ਨੋਟ:- ਡਰਾਇੰਗ ਸ਼ੀਟਾਂ ਅਤੇ ਪੇਟਿੰਗ ਦਾ ਹੋਰ ਸਾਰਾ ਸਮਾਨ ਪ੍ਰੀਖਿਆਰਥੀ ਖੁਦ ਲੈ ਕੇ ਆਵੇਗਾ।

ਪਾਠ−ਕ੍ਮ ਭਾਗ−1 (ਸਕੈੱਚਿੰਗ ਅਤੇ ਬਨਾਵਟ)

ਅੰਕ: 40

ਮਨੁੱਖੀ ਸ਼ਰੀਰ, ਜਾਨਵਰ, ਪਸ਼ੂ ਅਤੇ ਪੰਛੀਆਂ ਦੇ ਕੁਦਰਤੀ ਦ੍ਰਿਸ਼ ਅਤੇ ਚਿੱਤਰ ਬਣਾਉਣੇ।

ਜਾਂ

ਇੱਕ ਫ਼ੁੱਲਦਾਨ ਵਿੱਚ ਫ਼ੁੱਲ ਇੱਕਠੇ ਕਰਕੇ ਇਹਨਾਂ ਦੀ ਚਿੱਤਰਕਾਰੀ ਕਰਨੀ।

ਜਾਂ

ਕੋਈ ਕੁਦਰਤੀ ਦ੍ਰਿਸ਼ ਬਣਾਉਣਾ ਜਿਸ ਵਿੱਚ ਦਰਿਆ ਝੀਲ, ਘਰ, ਚੌਂਪੜੀ, ਦਰਖ਼ਤ, ਪਹਾੜ ਅਤੇ ਅਸਮਾਨ ਦਰਸਾਏ ਜਾਣ।

ਜਾਂ

ਕੋਈ ਆਲ ਓਵਰ ਪੈਂਟਰਨ, ਸਾੜੀ ਬਾਡਰ, ਪਰਦਾ ਅਤੇ ਸਿਰਹਾਣੇ ਦਾ ਨਮੂਨਾ ਬਣਾਉਣਾ। ਪੇਪਰ ਦਾ ਮਾਪ :− 1/4 ਭਾਗ (35 ਸੈਂ:ਮੀ: ×25 ਸੈਂ:ਮੀ:)

ਭਾਗ–II

ਮਾਡਲ ਡਰਾਇੰਗ (Still Life)

ਅੰਕ: 40

ਕਿਸੇ ਚਾਰ ਵਸਤੂਆਂ ਦਾ ਚਿੱਤਰਨ ਕਰਨਾ ਅਤੇ ਇਨ੍ਹਾਂ ਵਸਤੂਆਂ ਦੇ ਪਿੱਛੇ ਡਰਾਪਰੀ (ਪਰਦਾ) ਹੋਵੇ। ਪੇਪਰ ਦਾ ਮਾਪ :- 1/2 ਭਾਗ (35 ਸੈਂ:ਮੀ: ×55 ਸੈਂ:ਮੀ:)

ਮਾਧਿਅਮ :ਪੇਸਟਲ, ਪਾਣੀ ਜਾਂ ਤੇਲ ਵਾਲੇ ਰੰਗ

ਭਾਗ –III

ਅੰਕ: 20

<mark>ਸੈਸ਼ਨਲ ਵਰਕ</mark>ः− ਸਾਰੇ ਸਾਲ ਵਿੱਚ ਤਿਆਰ ਕੀਤੀਆਂ ਘੱਟੋ−ਘੱਟ ਵੀਹ ਆਈਟਮਾਂ ਜੋ ਕਿ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਚੈੱਕ ਕਰੇਗਾ ਅਤੇ ਅੰਕ ਲਾਵੇਗਾ।

ਨੋਟ:- ਡਰਾਇੰਗ ਸ਼ੀਟਾਂ ਅਤੇ ਪੇਟਿੰਗ ਦਾ ਹੋਰ ਸਾਰਾ ਸਮਾਨ ਪ੍ਰੀਖਿਆਰਥੀ ਖੁਦ ਲੈ ਕੇ ਆਵੇਗਾ।

CLASS-XII HISTORY AND APPRECIATION OF ART (ਕਲਾ ਦਾ ਇਤਿਹਾਸ ਅਤੇ ਪ੍ਰਸੰਸਾ)

ਸਮਾਂ: 3 ਘੰਟੇ

ਲਿਖਤੀ: 90 ਅੰਕ ਅੰਤਰਿਕ ਮੁਲਾਂਕਣ.: 10 ਅੰਕ ਕੱਲ: 100 ਅੰਕ

STRUCTURE OF QUESTION PAPER ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ ਰੇਖਾ

- 1. ਇਹ ਪੇਪਰ ਪ੍ਰੀਖਿਆ ਭਵਨ ਵਿੱਚ ਬਾਕੀ ਥਿਊਰੀ ਪੇਪਰਾਂ ਵਾਂਗ ਕੇਂਦਰ ਸੁਪਰਡੰਟ ਵੱਲੋਂ ਲਿਆ ਜਾਵੇਗਾ।
- ਇਸ ਪੇਪਰ ਦੇ ਦੋ ਭਾਗ ਹੋਣਗੇ। ਪਹਿਲੇ ਭਾਗ ਵਿੱਚ ਪੰਜ ਪ੍ਰਸ਼ਨ ਅਤੇ ਦੂਜੇ ਭਾਗ ਵਿੱਚ ਵੀ ਪੰਜ ਪ੍ਰਸ਼ਨ ਪਾਏ ਜਾਣਗੇ। ਪਹਿਲੇ ਭਾਗ ਵਿੱਚੋਂ ਕੋਈ ਤਿੰਨ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਹਨ ਅਤੇ ਦੂਜੇ ਭਾਗ ਵਿੱਚੋਂ ਕੋਈ ਦੋ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਹਨ।
- 3. ਹਰ ਪ੍ਰਸ਼ਨ ਦੇ 18 ਅੰਕ ਹੋਣਗੇ।
- 4. ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਬੋਰਡ ਵੱਲਾਂ ਨਿਰਧਾਰਤ ਕੀਤੇ ਗਏ ਪਾਠਕ੍ਰਮ ਵਿੱਚੋਂ ਹੀ ਹੋਣਗੇ ।
- ਪੇਪਰ ਸੈਂਟਰ ਵੱਲੋਂ ਪੇਪਰ ਦਾ ਮੁਲਾਂਕਣ ਕਰਨ ਲਈ ਮੁੱਖ ਅਤੇ ਉਪ ਪ੍ਰੀਖਿਅਕਾਂ ਨੂੰ ਹਦਾਇਤਾਂ ਭੇਜੀਆਂ ਜਾਣਗੀਆਂ

ਪਾਠ–ਕ੍ਮ

ਭਾਗ–I

ਅੰਕ – 54

- 1. ਪੱਛਮੀ ਭਾਰਤੀ ਲਘੁ ਚਿੱਤਰਕਾਰੀ
- 2. ਪੱਛਮੀ ਭਾਰਤੀ ਮਿੰਨੀ ਚਿੱਤਰਾਂ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਦੱਸੋ?
- 3. ਪਾਲ ਸਕੂਲ
- 4 . ਰਾਜਸਥਾਨੀ ਚਿੱਤਰਕਲਾ ਦਾ ਸਕੂਲ
- 5. ਪਹਾੜੀ ਚਿੱਤਰਕਾਰੀ ਸਕੂਲ
- 6. ਅਮਰਾਵਤੀ, ਪਲਵਾ, ਚੋਲਾ (ਕਾਂਸੀ), ਚਾਲੁਕਿਅਨ, ਅਲੋਰਾ, ਐਲੀਫੈਂਟਾ

ਭਾਗ–II

ਅੰਕ – 36

- 1 ਕਲਾ ਅਤੇ ਸੁੰਦਰਤਾ
- 2 ਭਾਰਤੀ ਚਿੱਤਰਕਲਾ ਦੇ ਛੇ ਅੰਗ
- 3. ਇੱਕ ਚੰਗੇ ਕਲਾਕਾਰ ਦੇ ਗੁਣ ਜਾਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ
- 4. ਕਲਾ ਦੀ ਸਮੱਗਰੀ ਅਤੇ ਤਕਨੀਕ
- 5. ਸਮਾਜ ਅਤੇ ਕਲਾ
- 6. ਕਲਾ ਦੇ ਕੰਮ ਦੀ ਪ੍ਰਸ਼ੰਸਾ
- 7. ਭਾਰਤੀ ਕਲਾ ਦੀ ਕਿਸੇ ਮੁੱਖ ਕਲਾਕ੍ਰਿਤੀ ਦੀ ਪ੍ਰਸ਼ੰਸਾ:-ਸਾਰਨਾਥ ਬੁੱਧ, ਅਸ਼ੋਕ ਸਤੰਭ ਤੇ ਪਸ਼ੂਆਂ ਦੇ ਨਮੂਨੇ,ਨਟਰਾਜ ਕਾਂਸੀ ਮੂਰਤੀ (ਚੋਲਾ) ਬੁੱਤਕਾਰੀ, ਬੋਧੀ ਸਤਵਾ, ਪਦਮ ਪਾਣੀ (ਅਜੰਤਾ), ਮਾਂ ਤੇ ਬੱਚਾ (ਅਜੰਤਾ), ਸੋਹਣੀ ਮਹੀਵਾਲ (ਸੋਭਾ ਸਿੰਘ), ਆਫਟਰ ਬਾਥ (ਠਾਕੁਰ ਸਿੰਘ)
- ਨੋਟ: ਇਹ ਪੇਪਰ ਪ੍ਰੀਖਿਆ ਭਵਨ ਵਿੱਚ ਬਾਕੀ ਥਿਊਰੀ ਪੇਪਰਾਂ ਵਾਂਗ ਕੇਂਦਰ ਸੁਪਰਡੰਟ ਵੱਲੋਂ ਲਿਆ ਜਾਵੇਗਾ।

ਚਿੱਤਰਕਲਾ ਅਤੇ ਬੁੱਤਤਰਾਸ਼ੀ ਸਮੇਤ ਭਾਰਤੀ ਕਲਾ ਦਾ ਇਤਿਹਾਸ।
CLASS-XII PHYSICAL EDUCATION AND SPORTS

Time : 1 ¹/₂ Hours

Theory Marks:20 Practical:75 Internal Assessment:5 (Book Bank-2 Project Work-3) Total :100 Marks

Structure of Question Paper (Theory)

There will be three parts in this question paper A,B and C having total 13 Questions.

- A. There will be 6 questions in part A. Each question carries 1 mark. These can also be objective type.
 6×1=6
- B. There will be 3 questions in part B. Each question carries 2 marks. Answer should be approximately 20 words. 3×2=6
- C. There will 4 questions in part C. Attempt any 2 questions .Each question carries 4 Marks. 2×4=8

THEORY

- 1. Physical Fitness
- 2. Sport Training
- 3. Careers in Physical Education and Sports Awards
- 4. Sport Injuries
- 5. Disability

Time:4 Hrs

6. Sociological and Psychological Aspects of Physical Education

PRACTICALS

Max.Marks=75

(A) Track and field events (Common for boys and girls)

Any two events can be opted .Each event carry 12 Marks. 12+12=24 marks

- 1) Sprints-100 m. 200 m.400 m.800 m.3000 m.
- 2) 110 m Hurdles for Boys (Hurdle should be 96.4 cm high and ten heights) 100 m hurdle for girls(Hurdle should be 76.2 cm high and eight heights) relay race 4x100 m(for boys),4x100 m(for girls).
- 3) Hammer throw, Discus throw, Javelin throw, Shotput, Long jump, High jump, Triple jump, Pole vault.

(B) Any two games can be opted. Each game carry 8Marks. 8+8=16 marks

Games(for boys and girls)

Group 1 . Cricket, Kho Kho, Wrestling, Swimming, lawan tennis.

Group 2 .Hockey,Badminton, Soft ball,Judo,Wieght lifting.

Achievements in sports (Max.15 Marks) as listed below				
School Representation	3 Marks			
Zonal Representation	5 Marks			
Distt. Representation	8 Marks			
State Representation	10 Marks			
National Representation	15 Marks			
Practical copy , Chart or Model	10 Marks			
Viva Voce	10 Marks			
	Achievements in sports (Max.15 Ma School Representation Zonal Representation Distt. Representation State Representation National Representation Practical copy , Chart or Model Viva Voce			

Note: At the time of practical the student must be in the sports kit.

CLASS-XII MEDIA STUDIES (2020-21)

Time: 3 Hours

Theory: 80 Marks Project/INA/B. bank: 20 Marks Total: 100 Marks

OBJECTIVES

Communication media have under gone big changes during a couple of decades and made its importance more meaningfully and abundantly felt. This has made our society awake in era of various new concepts and phenomena such as globalization, social media, civil society, new media and so on. It is being felt that communication media are playing an important role in shaping young minds, hence introductory information and practice is to be provided to students in this subject, at this stage.

STRUCTURE OF QUESTION PAPER (THEORY)

- 1. The questions shall be set keeping in mind that the subject matter is for beginners in this subject/ field.
- 2. There will be 27 questions, all compulsory.
- 3. Part- I of the question paper shall consist of 9 questions of 1 mark each, all objective type or multiple choice questions to be set from whole of syllabus.
 - 1×9=9
- 4. Part- II of the question paper shall consist of 9 Short Answer questions of 3 marks each. The answer to such questions may run into four to five sentences. All questions shall cover whole of the syllabus, at least two from each group. $3 \times 9 = 27$
- 5. Part- III of the question paper shall consist of 5 Short Answer questions of 4 marks each with internal choice. The examinees shall answer these in a paragraph or two in size or length. Paper setter shall select three questions and choice questions too each from each unit.

4×5=20

6. Fourth part of the question paper shall contain 4 questions of 6 marks each, with 100% external choice, equally chosen from each unit. Each answer shall run into 300 words minimum.

6×4=24

Question wise breakup:

Type of Question	Marks Per Question	Total no. of Questions	Total Marks	Percentage
Objective Type/ Multiple choice ques.	1	9	09	11
Short Answer (SA-I)	3	9	27	34
Short Answer (SA-II)	4	5	20	25
Long Answer (LA)	6	4	24	30
Total		27	80	100

Weightage to Difficulty Level:

Estimated Difficulty Level	Percentage
(i) Easy (E)	30%
(ii) Average (Av)	50%
(iii) Difficult (D)	20%

Question Paper Design:

Typology of questions	MCQ/ Objective type (1 Mark)	Short Answer (SA- I) (3 Marks)	Short Answer- II (SA- II) (4 Marks)	Long Answer (LA) (6 Marks)	Total Marks	Percentage
Remembering- (Knowledge basedSimple recallquestions, to knowspecific facts,terms, concepts,principles ortheories; Identify,defined or recite,information)	9	3	-	1	24	30
Understanding- (Comprehension-to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase, or interpret information	_	4	4	2	40	50
Application- (Use abstract information in concrete situation, to apply knowledge to new situation; Use given content to interpret a situation, provide an example, or solve a problem)	-	2	1	1	16	20
Project/INA/B. bank – 20 Marks	1×9=09	3×9=27	4×5=20	6×4=18	80	100

SYLLABUS Unit – I History and Development of Media Group – A

1. Brief history and development of media in India, with special reference to Punjab;

- Evolution of Print Media – Evolution of Radio – Evolution of Television – Evolution of Cinema – Evolution of Internet.

2. History of Punjabi Journalism;
- Evolutionary period – 1850 A.D. to 1900 A.D. – 1900 A.D. to 1947 A.D. – 1947 A.D. to 2000 A.D. – After 2000 A.D.

Group – B

3. Radio Programmes – Characteristics, Types and Impact.

(Expected and Achieved)

4. T.V. Programmes – Characteristics, Types and Impact.

(Expected and Achieved)

5. Script writing for Radio and Television Programmes.

Unit – II Films and Cyber Journalism

Group – C

- 6. Indian Cinema; Types (Commercial & Art), Characteristics and Impact.
- Punjabi Cinema; Characteristics and Impact. (Special Reference to: Chann Pardesi, Marhi da Diva, Desh hoeya Padeis, Nabar and Asees; Semi-Punjabi and Hindi Films; Pinjar, Chakravyuh, Udta Punjab, Page 3 & Peepli Live)
- 8. Cyber/Online Journalism:
 - i. Social Networking; Facebook, Twitter, Blogging, Websites, Portal, Instagram
 - ii. Communication through Cell phones; WhatsApp, SMS

Group – D

- 9. Media Advertising; Selling and Marketing products through advertising.
- 10. Introduction to Media Ethics.
- 11. Basic Terminology and use reference materials.

Project/INA/Book Bank

1. **Printed material or Aired programmes:** Each student shall have to send their articles, features and letters to various newspapers or magazines and (Or) they may take part in any of the radio programmes. They shall have to maintain record of their practical work. Printed/Broadcasted/Telecasted materials in accordance with syllabus shall be assessed out of maximum 6 marks.

6 Marks

2. **Teleboard Display and news reading:** Display of tileboard and putting the candidate any questions out of topics mentioned in syllabus shall also be awarded out of maximum 6 marks.

6 Marks

3. **Viva:** The examiner may ask the candidates questions on visit to any Radio or T.V. station and Current Affairs related to running academic session period.

6 Marks

4. **Book Bank:** The examinees shall submit their study material for students to follow and their this endure will be evaluated.

2 Marks

Time 3 hrs

Theory :70 marks Practical :25 marks INA : 5 marks Total : 100 marks

STRUCTURE OF QUESTION PAPER (THEORY)

- 1. There will be one theory paper comprising of 18 questions.
- 2. Question No 1 will be carrying 20 objective type questions of one marks each. In objective type questions there will be 10 multiple choice questions [2 questions of internal choice one theory type and one numerical type in choice from unit 6 (optics) and from unit 7 (Dual Nature of matter)], 3 true/false statements, 2 fill in the blanks and 5 one word answers or definitions.
- 3. Question number 2 to 8 will be carrying two marks each. There will be three questions of internal choice from unit-I, unit-II and unit-IV. Each one will have one theory type question and one numerical type in choice.
- 4. Question number 9 to 15 will be carrying three marks each. There will be two questions of internal choice from unit-III (Magnetic effects of current and magnetism) and from unit-VI (Optics). Each one will have one theory question and one numerical type in choice.
- 5. Question number 16 to 18 will be carrying 5 marks each and there will be internal choice in each of all these questions. From unit VI (optics) internal choice questions will have one question from ray optics and choice question from wave optics.
- 6. Distribution of marks over different dimensions of the paper will be as follows.

LEARNING	MARKS	PERCENTAGE OF
OUTCOMES		MARKS
KNOWLEDGE	26	36%
UNDERSTANDING	30	44%
APPLICATION	14	20%
TOTAL	70	100%

- 7. Use of un-programmable calculator is allowed. The log tables can be used.
- 8. Total weightage of numberical will be 20% i.e. 14 marks. There will be two numericals of 1 marks, 3 numericals of 2 marks and 2 numericals of 3 marks.

Unit No.	Title	Marks
UNIT-I	Electrostatics	09
UNIT-II	Current Electricity	07
UNIT-III	Magnetic effects of current and magnetism	10
UNIT-IV	Electromagnetic Induction & current	07
UNIT-V	Electromagnetic waves	04
UNIT-VI	Optics	14
UNIT-VII	Dual nature of matter	05
UNIT-VIII	Atoms and Nuclei	07
UNIT-IX	Electronics devices	07
	Total Marks	70

UNIT WISE DISTRIBUTION OF MARKS

SCHEMATIC DISTRIBUTION OF MARKS

UNIT	Title	1 Mark	2 Marks Question	3 Marks	5 Marks	Total Marks
		each	each	each	each	Mains
1	Electrostatic	2	1 or N	-	1	09
2	Current Electricity	2	1 or N	1	-	07
3	Magnetic effects of	2	-	1 or N	1	10
	current & magnetism					
4	Electromagnetic	2	1 or N	1	-	07
	Induction &					
	Alternating current					
5	Electromagnetic waves	2	1	-	-	04
6	Optics	4 or N	1	1 or N	1	14
7	Dual Nature of matter	2 or N	-	1	-	05
8	Atoms & Nuclei	2	1	1	-	07
9	Electronic devices	2	1	1	-	07
Total	Questions	1(20 sub	7	7	3	18
		parts)				
Total	Marks	20	14	21	15	70

INSTRUCTIONS FOR PAPER SETTER

Note : There will be one theory paper comprising of 18 questions.

- Question No 1 will be carrying 20 objective type questions of one marks each. There will be 2 questions of internal choice one theory type and one numerical type from unit 6 (Optics) and unit 7(Dual Nature of matter), 10 multiple choice questions, 3 true/false statements, 2 fill in the blanks and 5 one word answers or definitions.
- 2. Question number 2 to 8 total 7 questions will be carrying two marks each. There will be three questions of internal

choice, from unit-I, unit-II and unit-IV. Each one will have one theory type question and one numerical in choice.

- 3. Question number 9 to 15 total 7 questions will be carrying three marks each. There will be two questions of internal choice from unit-III (Magnetic effects of current & magnetism) and unit-VI (Optics). Each one will have one theory type question and one numerical type in choice.
- 4. Question number 16 to 18 will be carrying 5 marks each and there will be internal choice each of all these questions. From Unit-VI (optics) choice question will have one question from ray optics and one from wave optics.
- 5. Questions paper should cover all the syllabus.
- 6. No question or topic should be repeated in the question paper.
- 7. Questions in the paper can be asked only from mentioned PSEB syllabus. Questions from any topic which is not mentioned in the syllabus will be considered as out of syllabus question.
- 8. All 3 sets must be of equal standard and difficulty level questions.
- 9. At the end of each question, paper setter must write detailed distribution of marks of each sub-question.
- 10.Vague, many possible answer questions, confusing answer question etc type of question should not be asked in the paper. One mark questions, answer should be of one word or one line only.
- 11. Language used should be clearly understood & specific.
- 12. Time and length limit of paper should be kept in mind while setting the paper.
- 13. Questions paper should be made according to knowledge, understanding and applications part marks distribution.

THEORY

Unit-1: Electrostatics

Electric Charges; charging by induction, basic properties of electric charge (addition of charges, quantisation of charges and their Conservation)

Coulomb's law-force between two point charges, forces between multiple charges; superposition principle and cotineous charge distribution.

Electrical field, electric field due to a point charge, electric field due to system of charge, physical significance of electric field, electric-field lines; electric dipole, electric field due to a dipole;(on its axis,on equatorial plane)physical significance of dipoles; torque on a dipole in uniform electric field.Electric field due to continuous charge distribution.

Electric flux, statement of Gauss's theorem proof of Gauss's theorem for a charge enclosed in sphere, and its applications to find electric field due to infinitely long straight wire, uniformly charged infinite thin plane sheet and uniformly charged thin spherical shell (Field inside and outside).

Electric potential, potential difference, electric potential due to a point charge, potential due to an electric dipole with special cases for axis and equatorial plane and system of charges; equipotential surfaces, its properties, relation between field and potential electrical potential energy of a system of two point charges potential energy in external field and of electric dipole in an electrostatic field.

Conductors and insulators, electrostatics of conductors, free charges and bound charges inside a conductor. Electrostatic shielding its uses, Dielectrics and electric polarisation, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor.

Unit-II: Current Electricity

Electric current, flow of electric charges in a metallic conductor, drift velocity, drift of electron mobility and their relation with electric current: Ohm's law, electrical resistance. V-1 characteristics (linear and non linear), electrical energy and power, electrical resistivity and conductivity. Carbon resistors, colour code for carbon resistors; series and parallel combinations of resistors; temperature dependence of resistance and resistivity.Internal resistance of a cell, potential difference and emf of cell, combination of cells in series and in parallel.

Kirchhoff's laws and simple applications of Wheatstone

bridge, meter bridge.Potentiometer-principle and its applications to measure potential difference and for comparing emf of two cells, measurement of internal resistance of a cell.

Unit-III: Magnetic Effects of Current and Magnetism

Concept of magnetic field. Oersted's experiment;

Biot-savart law and its application to find mangnetic field on the axis of a current carrying circular loop, Ampere's circuital law (no proof) and its applications to infinitely long straight wire, straight and toroidal solenoids.

Force on a moving charge in uniform magnetic and electric fields.

Cyclotron.

Force on a current-carrying conductor in a uniform magnetic field Force between two parallel current-carrying conductors, definition of ampere. Torque experienced by a current loop in uniform magnetic field; moving coil galvanometers- its current sensitivity and conversion to ammeter and voltmeter.

> Current loop as a magnetic dipole and its magnetic dipole moment. Magnetic dipole moment of a revolving electron. Magnetic field intensity due to a magnetic dipole (Bar magnet) along its axis and perpendicular to its axis. Torque on a magnetic dipole (bar magnet) in a uniform magnetic field; bar magnet as an equivalent solenoid, magnetic field lines; magnetism and Gauss's law; Earth's magnetic field and magnetic elements, magnetisation and magnetic intensity, magnetic properties of materials, Para-, dia-and ferromagnetic substances with examples, Electromagnets and factors affecting their strengths. Permanent magnets.

Unit-IV: Electromagnetic Induction and Alternating Currents

Electromagnetic induction, Faraday's and henry experiments,magnetic flux,Faraday laws, induced emf and current, Lenz's Law and conservation of energy, motional emf, Eddy currents: Self and mutual inductance.

Alternating current, peak and rms value of alternating current/voltage; reactance and impedances; phasors, ac applied across resistance, ac applied across inductor, as applied across capacitor, ac applied across LCR, LC oscillations, across inductor, ac applied across capacitor ,ac applLC oscillations, (qualitative treatment only), LCR series circuit resonance; power in AC circuit, wattless current.

AC generator and transformer.

Unit-V: Electromagnetic Waves

Need for displacement current, Electromagnetic waves and their characteristics (qualitative ideas only). Transverse nature of electromagnetic waves.

Electromagnetic spectrum (Radio waves, Radiomicrowaves, infra-red, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses.

Unit-VI: Optics

Reflection of light, spherical mirrors, mirror formula. Refraction of light, total internal reflection and its applications, optical fibers, refraction at spherical surfaces, refraction by lens, lenses, thin lens formula/equation, lensmaker's formula. Magnification, power of a lens, combination of thin lenses in contact, combination of lens and mirror. Refraction and dispersion of light through a prism. Some natural phenomenon due to sunlight,Scattering of light-blue colour of the sky and reddish appearance of the sun at sunrise and sunset.

Optical instruments:

Microscopes and astronomical tetescopes (reflecting and refracting) and their magnifying powers.

Waves optics :

wave front and Huygens' Principle, reflection and refraction of plane wave at a plane surface using Huygens' Principle, wave fronts. Proof of laws of reflection and refraction using Huygens 'Principle. Interference Young's double hole experiment and expression for fringe width, coherent sources and incoherent addition of waves and sustained interference of light. Diffraction due to a single slit, width of central maximum. Resolving power of microscopes and astronomical telescopes. Polarisation, polarization by scattering and reflection, plane polarised light -Brewster's law, uses of plane polarised light and Polaroids.

Unit-VII: Dual nature of Matter and Radiation

Electron emission, Photoelectric effect, Hertz and Lenard's observations'; experimental study of photoelectric effect, and wave theory of light, Einstein's photoelectric equation, particle nature of light, the photon, Matter waves-wave nature of particles, de Broglie relation. Davission-Germer experiment (experimental details should be omitted; only conclusion should be explained).

Unit-VIII: Atoms & Nuclei

Alpha-particle scattering experiment; Rutherford's model of atom; Bohar modal of hydrogen atom, expression for radius, velocity and energy of electron in orbit, energy levels, line spectrum of hydrogen atom, atomic spectra,de-Broglie's explanation of Bohr' s second postulate of quantization.

Composition and size of nucleus, atomic masses, isotopes, isobars; isotones. Radioactivity- alpha, beta and gamma particles/rays and their properties; radioactive decay law, alpha, beta and gamma decay. Mass-energy relation, mass-defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear force,nuclear reactor, Nuclear energy.

Unit-XI: Electronic Devices

Classification of metal insulator and semiconductor, Energy bands in solids (qualitative idea only) conductor, insulators and Semiconductors; intrinsic and extrinsic semiconductors,p-n junction, semiconductor Diode-1-V characteristics in forward and reverse bias, diode as a rectifier, 1-V characteristics of LED, photodiode, solar cell and Zener diode, Zener diode as a voltage regulator.

STRUCTURE OF PAPER (PRACTICAL)

Time: 3 hrs.		Total: 25 Marks
Two experiment	10	
Record of Activities	2	
Viva on Activities	3	
Record of Experiments	2	
Viva of Experiments	3	
Investigatory Project	5	
	TOTAL 25	-

PRACTICALS SYLLABUS

Experiments

SECTION-A

- 1. To determine resistance per unit length of a given wire by plotting a graph of potential difference versus current.
- 2. To find resistance of a given wire using meter bridge and hence determine the specific resistance of its material.
- 3. To verify the laws of combination (series/parallel) of resistance using a meter bridge.
- 4. To compare the emf of two given primary cells using potentiometer.
- 5. To determine the internal resistance of given primary cell using potentiometer.
- 6. To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.
- 7. To convert the given galvanometer of known resistance and figure of merit into an ammeter and voltmeter of desired range and to verify the same.
- 8. To find the frequency of the A.C. mains using a sonometer and electromagnet.

SECTION-B

- To find the value of v for different values of u in case of a concave mirror and find their focal length.
- 2. To find the focal length of a convex lens by plotting graphs between u and v or between 1/u and I/v.
- 3. To find the local length of a convex mirror, using a convex lens.
- 4. To find the focal length of a concave lens, using a convex lens.
- 5. To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation.
- 6. To draw the I-V characteristic curve of a p-n junction in forward bias and reverse bias.
- 7. To draw the characteristic curve of a zener diode and to determine its reverse breakdown voltage.
- 8. To study the characteristics of a common-emitter npn or pnp transistor and to find out the values of current and voltage gains.
- 9. To determine the reflective index of a glass slab using a traveling microscope.

10. To find refractive index of a liquid by using (i) Concave mirror. (ii) Convex lens and plane mirror.

Activities Section-A

- 1. To assemble the components of a given electrical circuit.
- 2. To draw the diagram of a given open circuit comprising at least a battery, resistor rheostat, key ammeter and volt meter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.
- To assemble a household circuit comprising three, bulbs, three (on/off) switches, a fuse and a power source.
- 4. To study the variation in potential drop with length of a wire for a steady current.
- 5. To measure resistance, voltage (AC/DC), current (AC) and check continuity of a given circuit using multimeter.
- 6. To measure the resistance and impedance of an inductor with or without iron core.

7. To demonstrate

(i) The use of an improvised fuse that melts with the flow of a certain current through it and

(ii) Different kinds of fuses used in everyday life.

- 8. To demonstrate that a current measuring device has finite nonzero resistonce. (measurement of resistance of an ammeter).
- 9. To demonstrate that a voltage measuring device has noninfinite resistance (measurement of resistance of an voetmeter).
- 10. To show that earth's magnetic field has both vertical & horizontal components, by using dip needle.
- 11. To show the magnetic field lines with the help of iron fillings of bar magnet solenoid.
- 12. To show the production of induced emf. in a coil due to movement of (i) a magnet towards and away from it (ii) similar coil carrying current towards & away from it.
- 13. To show that there are two kinds of charges and that like charges repel and unlike charges attract each other.
- 14. To demonstrate that a large emf is induced when direct current is switched off in an inductive circuit.
- 15. Make a solenoid for study of its magnetic field.

SECTION-B

- 1. To identify a diode, an LED, a transistor and 1C, a resistor and a capacity from mixed collection of such items.
- 2. Use of multimeter to (i) identify base of transistor, (ii) distinguish between npn ad pnp type transistors, (iii) see the unidirectional flow of current in case of a diode and an LED. iv) Check whether a given electronic component (e.g. diode, transistor or IC) is in working order.
- 3. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass stab.
- 4. To study the nature arid size of the image formed by (i) convex lens (ii) concave mirror, on a screen by using a candle and a screen (for different distances of the candle from the lens/mirror).
- 5. To obtain a lens combination with the specified focal length by using two lenses from the given set of lenses.
- 6. To observe polarization of light using two Polaroids.
- 7. To observe diffraction of light due to a thin slit.
- 8. To study effect of intensity of light (by varying distance of the source) on an D.R

CLASS-XII CHEMISTRY

Time: 3 Hrs

Theory: 70 Marks Practical: 25 Marks INA : 5 Marks Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

- 1. There will be one theory paper comprising of 18 questions. All questions are compulsory.
- 2. Question no. 1 will have 20 sub parts and each part will carry 1 mark. All questions are compulsory. This question will be of multiple choice, numerical, one word answers, true false and comprehensive.
- 3. Question no. 2 to 8 will be of two marks each. There will be internal choice in two questions. All questions are compulsory.
- 4. Question no.9 to 15 will be of three marks each. There will be internal choice in two questions. All questions are compulsory
- 5. Question no.16 to 18 will be of five marks each. There will be internal choice in them.
- 6. Distribution of marks over different dimensions of the paper will be as follows.

LEARNING OUTCOMES	PERCENTAGE OF MARKS
KNOWLEDGE	36%
UNDERSTANDING	44%
APPLICATION	20%
Total	100%

- 7. Use of un-programmable calculator is allowed. The log tables can be used.
- 8. 8.Total weightage of numerical will around 20%

UNITWISE DISTRIBUTION OF MARKS

SR.NO	UNIT	TOTAL
		MARK
1	Solutions	07
2	Electro-chemistry	06
3	Chemical-kinetics	05
4	Surface chemistry	05
5	General principles & process of isolation of elements	02
6	p-block elements	08
7	d &f-block elements	07
8	Coordination number	02
9	Haloalkanes & Haloarenes	06
10	Alcohol, Phenols & Ether	05
11	Aldehyde, Ketons & Carbooxalic acids	05
12	Organic compounds containing Nitrogen compounds	03
13	Biomolecules	03
14	Polymers	04
15	Chemistry in everyday life	02
	TOTAL QUESTIONS & TOTAL MARKS	T.Q=18
		T.M=70

Total Question in paper =18

SCHEMATIC DISTRIBUTION OF MARKS

Sr. No	UNIT	1 MARK	2 MARK	3 MARK	5 MARK	TOTAL MARK
1	Solutions	1 N(M.C.Q.)	-	1N+1(T)	-	07
2	Electro-chemistry	-	-	1N+1(T)	-	06
3	Chemical-kinetics	1N (M.C.Q.)	2N (1 (internal choice question)	-	-	05
4	Surface chemistry	5 (comprehension)	-	-	-	05
5	General principles &process of isolation of elements	-	1	-	-	02
6	p-block elements	1(O.W)	1	-	1(interna l choice question)	08
7	d &f-block elements	-	1	-	1(interna l choice question)	07
8	Coordination number	-	1(interna l choice question)	-	-	02
9	Haloalkanes & Haloarenes	1 (T/F)	-	-	1(interna l choice question)	06
10	Alcohol, Phenols &Ether	2 (M.C.Q.,T/F)	-	1(internal choice question)	-	05
11	Aldehyde, Ketons & Carbooxalic acids	2 (O.W, T/F)	-	1(internal choice question)	-	05
12	Organic compounds containing Nitrogen compounds	3 (T/F, O.W.,M.C.Q)	-	-	-	03
13	Biomolecules	1 (T/F)	1	-	-	03
14	Polymers	1 (0.W)	-	1	-	04
15	Chemistry in everyday life	2 (0.W,M.C.Q)	-	-	-	02
	TOTAL QUESTIONS &TOTAL MARKS	20 sub parts T.M=20	T.Q=7 TM=14	T.Q=7 T.M=21	T.Q=3 T.M=15	T.Q=18 T.M=70

Note: In above SCHEMATIC DISTRIBUTION OF MARKS

T=Theory, N=Numerical, M.C.Q. = Multiple choice questions, O.W= One word, T/F= True and False

Total Question in paper =18 questions

INSTRUCTIONS FOR PAPER SETTER

Note:

- 1. There will be one theory paper comprising of 18 questions. All questions are compulsory.
- 2. Question no. 1 will have 20 sub parts and each part will carry 1 mark. All questions are compulsory. This question will be of multiple choice, numerical, one word answers, true false and comprehensive.
- Question no. 2 to 8 will be of two marks each. There will be internal choice in two questions. All questions are compulsory.
- 4. Question no.9 to 15 will be of three marks each. There will be internal choice in two questions. All questions are compulsory
- 5. Question no.16 to 18 will be of five marks each. There will be internal choice in them.
- 6. Questions paper should cover all the syllabus.
- 7. No question or topic should be repeated in the question paper.
- 8. Questions in the paper can be asked only from mentioned PSEB syllabus. Questions from any topic which is not mentioned in the syllabus will be considered as out of syllabus question.
- 9. All sets must be of equal standard and difficulty level questions.
- 10. At the end of each question, paper setter must write detailed distribution of marks of each sub-question.
- Vague, many possible answer questions, confusing answer question etc type of question will not be asked in the paper.
- 12. Language used should be clearly understood & specific.
- 13. Time and length limit of paper should be kept in mind while setting the paper.

SYALLBUS (THEORY)

Unit I:

Solutions

Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, colligative properties - relative lowering of vapour pressure, Raoults Law, elevation of B.P., depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties, abnormal molecular mass. Vant Hoff factor.

Unit II: Electrochemistry

Redox reactions; conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and laws of electrolysis (elementary idea) dry cell-electrolytic cells and Galvanic cells; lead accumulator, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, fuel cells; corrosion. Relation between Gibbs Energy change and EMF of cell.

Unit III: Chemical Kinetics

Rate of a reaction (average and instantaneous), factors affecting rates of reaction; concentration, temperature, catalyst; order and molecularity of a reaction: rate law and specific rate constant, integrated rate equations and' half life (only for zero and first order reactions); concept of collision theory (elementary idea, no mathematical treatment). Activation Energy, Arrhenious equation.

Unit IV: Surface Chemistry

Absorption physiorption and chemisorption; factors affecting adsorption of gases on solids; catalysis; homogenous and heterogeneous, activity and selectivity; enzyme catalysis; colloidal state: distinction between true solutions, colloids and suspensions; lyophillic, lyophobic, multimolecular and macromolecular/colloids; properties of colloids; Tyndall effect, Brownian movement, electrophoresis, coagulation; emulsion-types of emulsions.

Unit V: General Principles and Processes of Isolation of Elements

Principles and methods of extraction - concentration, oxidation, reduction electrolytic method and refining; occurrence and principles of extraction of aluminum, copper, zinc and Iron.

Unit VI: p-Block Element

Group16 elements: General introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties; dioxygen; preparation, properties and uses; classification of oxides; Ozone. Sulphur - allotropic forms; compounds of sulphur preparation, properties and uses of sulphur dioxide, sulphuric acid, industrial process of manufacture, properties and uses, oxoacids of sulphur (structures only).

Group 17 elements: (General introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties; compounds of halogens; preparation, properties and uses of chlorine and hydrochloric acid, interhalogen compounds, oxoacids of halogens (structures only).

Group 18 elements: General introduction, electronic configuration. Occurrence, trends in physical and chemical properties, uses.

Unit-VII:d and f Block Elements

General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transition metals-metallic character, ionization, enthalpy, oxidation states, ionic

radii, colour, catalytic properties, magnetic properties, interstitial compounds, alloy formation. Preparation and properties of K₂Cr₂O₇, and KM_nO₄. **Lanthanoids-** electronic configuration, oxidation states, chemical reactivity and lanthanoid contraction and consequences. **Actenoids** - Electronic configuration, oxidation states.

Unit-VIII: Coordination Compounds

Coordination compounds - introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds, bonding; Werner's theory VBT, CFT, Isomerism (structure and stereo) importance of coordination compounds (in qualitative analysis, extraction of metals and biological systems).

Unit-IX: Haloalkanes and Haloarenes.

Haloalkanes: Nomenclature, nature of C-X bond, physical and chemical properties, mechanism of substitution reactions, optical rotation.

Halearenes: Nature of C-X bond, substitution reactions (directive influence of halogen for monosubstituted compounds only)Uses and environmental effects of - dichloromethane, trichlromethane, tetrachloromethane, iodoform, freons, DDT.

Unit -X: Alcohols, Phenols and Ethers

Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only); identification of primary, secondary and tertiary alcohols; mechanism of dehydration, uses, with special reference to - methanol and ethanol.

Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols.

Ethers: Nomenclature, methods of preparation, physical and chemical properties, uses.

Unit-XI: Aldehydes, Ketones aml Carboxylic Acids

Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, and mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes; uses.

Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses.

Unit-XII: Organic compounds containing Nitrogen

Amines: Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines.

Cyanides and Isocyanides - will be mentioned at relevant places in context.

Dizonium Salts: Preparation, chemical reactions and importance in synthetic organic chemistry.

Unit-XIII: Biomolecules

Carbohydrates - Classification (aldoses and ketoses), monosaccaharides (glucose and fructose), oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); importance

Proteins - Elementary idea of amino acids, peptide bond, polypeptides proteins, primary structure, secondary structure, tertiary structure and quaternary structure (qualitative idea only), denaturation of proteins; enzymes.

Vitamins: Classification and functions. Harmones: Elementary idea (excluding structure) Nucleic Acids: DNA & RNA

Unit-XIV: Polymers

Classification - natural and synthetic, methods of polymerization (addition and condensation), copolymerization. Some important polymers; natural and synthetic like polythene, nylon, polyesters, bakelite, rubber. Biodegradable and Non-Biodegradable Polymers.

Unit-XV: Chemistry in everyday life :

1. Chemicals in medicines analgesic, transquilizers, antiseptics, disinfectants, antimicrobials, antifertility drugs, antibiotics, antacids, antihistamines.

2. Chemicals in food- preservatives, artificial sweetening agents. Elementary idea of antioxidents.

3. Cleansing agents- soaps and detergents, cleansing action.

STRUCTURE OF QUESTION PAPER (PRACTICAL)

		marks: Z
Evaluation Scheme for Examination		Marks
Volumetric Analysis		07
Salt Analysis		07
Content Based Experiment		05
Project Work		03
Class record and viva		03
	Total	25

Marks: 25

PRACTICAL SYLLABUS

A. **Surface Chemistry**

- Preparation of one lyophilic and one lyophobic sol. Lyophilic sol starch, egg a. albumin and gum. Lyophobic sol - aluminum hydroxide, ferric hydroxide, arsenious sulphide.
- b. Study of the role of emulsifying in stabilizing the emulsions of different oils.

В. **Chemical Kinetics**

- Effect of concentration and temperature on the rate of reaction between sodium a. thiosulphate and hydrochloric acid.
- b. Study of reaction rates of any one of the following:
 - i. Reaction of iodide ion with hydrogen peroxide at room temperature using different concentration of iodide ions.
 - Reaction between potassium iodate, KIO₃, and sodium ii. sulphite: (Na₂ SO₃) using starch solution as indicator (clock reaction).

- C. Thermochemistry: Any one of the following experiments
 - a. Enthalphy of dissolution of copper sulphate or potassium nitrate.
 - b. Enthalphy of neutralization of strong acid (HCl) and strong base (NaOH)
 - c. Determination of enthalpy change during interaction (Hydrogen bond formation) between acetone and chloroform.
- D. Electrochemistry: Variation of cell potential in Zn/Zn⁺²IICu⁺²/Cu with change in concentration of electrolytes (CuSO₄ or ZnSO₄ at room temperature.

E. Chromatography

- a. Separation of pigments from extracts of leaves and flowers by paper chromatography and determination of $R_{\rm f}$ values.
- b. Separation of constituents present in an inorganic mixture containing two cations only (constituents having wide difference in R_f , values to be provided).

F. Determination of concentration/morality of KMnO₄, solution by

titrating it against a standard Solution of:

- a. Oxalic acid.
- b. Ferrous ammonium sulphate.

(Students will be required to prepare standard solutions by weighing themselves).

G. Preparation of Inorganic Compounds

- a. Preparation of double salt of ferrous ammonium sulphate or potash alum.
- b. Preparation of potassium ferric oxalate.
- H. Preparation of Organic Compounds: Preparation of any two of the following compounds
 - a. Acetanilide
 - b. Di-benzal acetone
 - c. p-Nitroacetanilide,
 - d. Aniline yellow òr 2-Napthol aniline dye.
 - e. Lodoform
- I. Test for the functional groups present in organic compounds: Unsaturation, alcoholic, pheholic, aldehydic, ketonic, carboxylic and amino (primary) groups.
- J. Study of carbohydrates, fats and proteins in pure form and detection of their presence in given food stuffs.
- K. Qualitative analysis: Determination of one catiop and one anion in a given salt.

Cations- Pb²⁺, Cu²⁺, As³⁺, Al³⁺, Fe³⁺, M_n²⁺, Zn²⁺, Co²⁺, N_i²⁺, Ca²⁺, Sr²⁺, Ba²⁺, Mg²⁺, NH₄⁺

Anions- \

(Note: Insoluble salts excluded)

PROJECT

Scientific investigations involving laboratory testing and collecting information from other sources.

A few suggested Projects

- 1. Study of presence of oxalate ions in guava fruit at different stages of ripening.
- 2. Study of quantity of casein present in different samples of milk.
- 3. Preparation of soyabean milk and its comparison with the natural milk with respect to curd formation, effect of temperature etc.
- 4. Study of the effect of potassium bisulphate as food preservative under various conditions (temperature, concentration, time etc,)
- 5. Study of digestion of starch by salivary amylase and effect of PH and temperature on it.
- 6. Comparative study of the rate of fermentation of following material wheat flour. gram flour, Potato juice, carrot juice etc.
- 7. Extraction of essential oils present in saunf (aniseed), Ajwain (carum) illaichi (cardamom).
- 8. Study of common food adulterants in fat, oil, butter, sugar, turmeric powder, chilli powder and pepper.

Note: Any investigatory project, which involves about 10 periods of work, can be chosen with the approval of the teacher.

CLASS-XII BIOLOGY (Code No. 054) Session 2020-21

Time: 3 Hrs

Theory: 70 Marks Practical: 25 Marks Internal assessment : 05 Marks Total: 100 Marks

Syllabus (Theory)

Max Marks 70

Time allowed 3 Hours

Unit	Title	No. of periods	Marks
Ι	Reproduction	30	14
II	Genetics and Evolution	40	18
III	Biology and Human Welfare	30	14
IV	Biotechnology and its Applications	30	10
V	Ecology and Environment	30	14
	Total	160	70

SCHEMATIC DISTRIBUTION OF MARKS

Unit	Chapter	Section A 1 mark questions	Section B 2 marks questions	Section C 3 marks questions	Section D 3marks questions (Diagram based)	Section E 5 marks question s	Total marks
Reproduction	1 . Reproduction in organisms	1 or 1	-	-	-		1
	2. Sexual reproduction in flowering plants	-		-	1	1 or 1(One questio	8
	3. Human Reproduction	-	1 or 1	-	-	should be from chapter 2 and other choice questio n should be from chapter 3)	2
	4. Reproductive health	-	-	1	-		3
Genetics and Evolution	5. Heredity and variation	-	1	1	-	-	5

	6. Molecular	-	1	1	-	1 OR 1	10
	bases of					(One	
	inheretance					questio	
	7. Evolution	_	_	1 or 1	_	n should be from chapter 6 and other choice questio n should be from chapter 7)	3
						• •	-
Biology and Human	8.Human health and diseases		1	-		-	6
wellare	9. Strategies for enhancement in food production	Or 1	-	1	-	-	3
	10. Microbes in human welfare	-	1	1	-	-	5
Biotechnolog y and its applications	Biotechnology- Principles and processes	1	-	1	-	-	4
	Biotechnology and its applications	1	1	1	-	-	6
Ecology and environment	13. Organisms and populations	-	-	1	-	-	3
	14. Ecosystem	-	-	-	1	1	8
	15. Biodiversity and conservation	1	-	-	-	Or 1	1
	16. Environmenta l issues	-	1	Or 1	-	-	2
No. Of questions		5	7	9	3	3	70

Instructions to the paper setter

- 1. There are a total of 27 questions and five sections in the question paper. All questions are compulsory.
- 2. Section A contains question numbers 1 to 5, multiple choice questions of one mark each.
- 3. Section B contains question numbers 6 to 12, short answer type I questions of two marks each.
- 4. Section C contains question numbers 13 to 21, short answer type II questions of three marks each.
- 5. Section D contains question number 22 to 24, diagram/illustration/graph based short answer type questions of three marks each.
- 6. Section E contains question numbers 25 to 27, long answer type questions of five marks each.
- 7. There is no overall choice in the question paper. However, internal choices are provided in two questions of one mark, one question of two marks, two questions of three marks and all three questions of five marks. An examinee is to attempt any one of the questions out of the two given in the question paper with the same question number.
- 8. There should be at least one comparison based question.
- 9. Language used should be clearly understood and specific.

Syllabus (Theory)

Unit I: Reproduction

Chapter 1 Reproduction in organisms:

Reproduction, a characteristic feature of all organism for continuation of species; Modes of reproduction-Asexual and sexual reproduction; Modes – Binary fission, sporulation, budding, gemmule, fragmentation; vegetative propagation in plants.

Chapter 2 Sexual reproduction in flowering plants:

Flower structure; Development of male and female gametophytes; Pollinationtypes, agencies and examples; Outbreedings devices; Pollen-Pistil interaction; Double fertilization; Post fertilization events-Development of endosperm and embryo, Development of seed and formation of fruit; Special modes-apomixis, parthenocarpy, polyembryony; Significance of seed dispersal and fruit formation.

Chapter 3 Human Reproduction:

Male and female reproductive systems; Microscopic anatomy of testis and ovary; Gametogenesis-spermatogenesis & oogenesis; Menstrual cycle; Fertilisation, embryo development upto blastocyst formation, implantation; Pregnancy and placenta formation (Elementary idea); Parturition (Elementary idea); Lactation (Elementary idea).

Chapter 4 Reproductive health:

Need for reproductive health and prevention of sexually transmitted diseases (STD); Birth control – Need and Methods, Contraception and Medical Termination of Pregnancy (MTP); Amniocentesis; Infertility and assisted reproductive technologies-IVF, ZIFT, GIFT (Elementary ides for general awareness).

Unit II.Genetics and EvolutionChapter 5Heredity and variation:

Mendelian Inheritance; Deviations from Mendelism-Incomplete dominance, Codominance, Multiple alleles and Inheritance of blood groups, Pleiotropy; Elementary idea of polygenic inheritance; Chromosome theory of inheritance; Chromosomes and genes; Sex determination-In humans, birds, honey bee; Linkage and crossing over; Sex linked inheritance – Haemophilia, Colour blindness; Mendelian disorders in humans- Thalassemia; Chromosomal disorders in humans; Down's syndrome, Turner's and Klinefelter's syndromes.

Chapter 6 Molecular Basis of Inheritance:

Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central dogma; Transcription, genetic code, translation; Gene expression and regulation- Lac Operon; Genome and human genome project; DNA finger printing.

Chapter 7 Evolution:

Origin of life; Biological evolution and evidences for biological evolution (Paleontological, Comparative anatomy, embryology and molecular evidence); Darwin's contribution, Modern Synthetic theory of Evolution; Mechanism of evolution-Variation (Mutation and Recombination) and Natural Selection with examples, types of natural selection; Gene flow and genetic drift; Hardy-Weinberg's principle; Adaptive Radiation; Human evolution.

Unit III. Biology and Human Welfare

Chapter 8 Human Health and Disease:

Pathogens/ parasites causing human diseases (Malaria, Filariasis, Ascariasis, Typhoid, Pneumonia, common cold, amoebiasis, dengue, chickengunia, ring worm); Basic concepts of immunology-vaccines; Cancer, HIV and AID's; Adolescence, drug and alcochol abuse.

Chapter 9 Strategies for Enhancement in Food Production

Improvement in food production: plant breeding, tissues culture, single cell protein, Bifortification, Apiculture and animal husbandary.

Chapter 10 Microbes in human welfare:

In household food processing, industrial production, sewage treatment, energy generation and Microbes as biocontrol agents and biofertilizers, Antibioticsproduction.

Unit IV. Biotechnology and its applications

Chapter 11 Biotechnology: Principles and processes:

Genetic engineering (Recombinant DNA technology).

Chapter 12 Biotechnology and its applications

Application of Biotechnology in health and agriculture: Human insulin and vaccine production, gene therapy; genetically modified organisms- Bt crops; Transgenic Animals; Biosafety issues-Biopiracy and patents.

Unit V. Ecology and environment

Chapter 13 Organisms and populations

Organisms and environment: Habitat and niche; Population and ecological adaptations; Population interactions-mutualism, competition, predation, parasitism; Population attributes-growth, birth rate and death rate, age distribution.

Chapter 14 Ecosystem:

Patterns, components; productivity and decompositions; Energy flow; Pyramids of number, biomass, energy; Nutrients cycling (carbon and phosphorous); Ecological succession; Ecological Services-Carbon fixation, pollination, oxygen release.

Chapter 15 Biodiversity and Conservation:

Concepts of Biodiversity; Patterns of Biodiversity; Importance of Biodiversity; Loss of Biodiversity; Biodiversity conservation; Hotspots, endangered organisms, extinction, Red Data Book, biosphere reserves, National parks and sanctuaries.

Chapter 16 Environmental issues:

Air pollution and its control; Water pollution and its control; Agrochemicals and their effects; Solid waste management; Radioactive waste management; Greenhouse effect and global warming; Ozone depletion; Deforestation; Any three case studies as success stories addressing environmental issues.

STRUCTURE OF QUESTION PAPER (PRACTICAL)

Time Allowed : Three hours Max. Marks: 25

Evalu		
Sch		
One Major Experiment		4 Marks
One Minor Experiment		3 Marks
Slide Preparation		3 Marks
Spotting		7 Marks
Practical Record + Viva Voce	Credit to the students' work over	4 Marks
Project Record + Viva Voce	the academic session may be	4 Marks
Тс	25 Marks	

A. List of Experiments

60 Periods

- 1. Study pollen germination on a slide.
- 2. Collect and study soil from at least two different sites and study them for texture, moisture content, pH and water holding capacity. Correlate with the kinds of plants found in them.
- 3. Collect water from two different water bodies around you and study them for pH, clarity and presence of any living organism.
- 4. Study the presence of suspended particulate matter in air at two widely different sites.
- 5. Study the plant population density by quadrat method.
- 6. Study the plant population frequency by quadrat method.
- 7. Prepare a temporary mount of onion root tip to study mitosis.
- 8. Study the effect of different temperatures and three different pH on the activity of salivary amylase on starch.
- 9. Isolate DNA from available plant material such as spinach, green pea seeds, papaya,etc.

B. Study/observation of the following (Spotting)

- 1. Flowers adapted to pollination by different agencies (wind, insects, birds).
- 2. Pollen germination on stigma through a permanent slide.
- 3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).
- 4. Meiosis in onion bud cell or grasshopper testis through permanent slides.
- 5. T.S. of blastula through permanent slides(Mammalian).
- 6. Mendelian inheritance using seeds of different colour/sizes of any plant.
- 7. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colourblindness.
- 8. Controlled pollination emasculation, tagging and bagging.
- 9. Common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides or specimens. Comment on symptoms of diseases that they cause.
- 10. Two plants and two animals (models/virtual images) found in xeric conditions. Comment upon their morphological adaptations.
- 11. Two plants and two animals (models/virtual images) found in aquatic conditions. Comment upon their morphological adaptations.

Internal assessment :

Total = 05 Marks Book Bank =2 marks Average of Periodic assessment tests = 3 marks

CLASS-XII

COMPUTER APPLICATION Instructions (Theory Paper)

Time: 3 hours

Theory : 60 Marks IA : 05 Marks Practical : 35Marks

Structure of Question Paper

- 1. There will be four sections of Question Paper (Part- A, Part- B, Part- C and Part- D).
- In Part- A , there will be 6 objective type question from Question No. 1 to 6 , each question will be of one marks each.
- 3. In Part -B ,there will be 6 Questions from Question no. 7 to 12, each questions will be of two marks.
- 4. In Part -C ,there will be 6 Questions from Question no. 13 to 18, each questions will be of four marks.
- 5. In Part –D, there will be three questions from Question no. 19 to 21 , each question will be of 6 marks.
- 6. All questions of Part-A , Part-B, Part-C and Part-D are compulsory. However internal choice may be given in part-D.

Sr. No	Chapter	Total	marks 1	Marks 2	Marks 4	marks 6
		Marks	question	question	question	question
1.	Introduction to C++	7	1	1	1	-
2.	Data types variables and constant	7	1	1	1	_
3.	Control statements	7	1	-	-	1
4.	Functions	6		1	1	_
5.	Arrays	6	_	1	1	_
6.	Classes and Objects	7	1	1	1	_
7.	Constructor , Destructor and function overloading	6	_	1	1	_
8.	Inheritance	7	1	-	-	1
9.	Information Technology	7	1	_	_	1
	Total Marks	60	6	12	24	18

Lesson 1: Introduction to C ++

- 1.1 Introduction to Object Orientation
- 1.2 Difference between Structured & Object Oriented Language
- 1.3 Introduction to C ++
- 1.4 Program Structure
- 1.5 Program Design & Implementation Issues
- 1.6 Character set of C++
- 1.7 C++ Basic Elements
- 1.8 Structure of a Program
- 1.9 What is meant by an Object?

Lesson 2: Data Types Variables and Constants

- 2.1 Concepts of Data Types
- 2.2 Data Types Modifiers
- 2.3 Constants
- 2.4 String Literals
- 2.5 Variables

- 2.6 Operators in C++
- 2.7 Expressions and Statements
- 2.8 Conditional Expression
- 2.9 Operators Precedence in C++

Lesson3: Control Statements

- 3.1 Conditional Statements
- 3.2 Selection Statements: if and else
- 3.3 Nested if (Nested blocks)
- 3.4 Another selection statements: switch.
- 3.5 Jump statement
- 3.6 The break statement
- 3.7 The continue statement
- 3.8 The goto statement
- 3.9 Exit() Function
- 3.10 Iteration Statement (C++)
- 3.11 Loop & Nested Loops
- 3.12 Console I/O functions
- 3.13 Header Files
- Lesson 4 Functions
 - 4.1 Definition of function
 - 4.2 Function Prototype
 - 4.3 Objective of using function prototype
 - 4.4 Accessing a function
 - 4.5 Passing argument to a function
 - 4.6 Default values for Parameters:
 - 4.7 THE const ARGUMENT
 - 4.8 C++ function call by value
 - 4.9 C++ function call by reference
 - 4.10 Parameter pass by reference
 - 4.11 Return statement
 - 4.12 Passing Arrays as Function Arguments in C++
 - 4.13 C++ Variable Scope
 - 4.14 Local Variables
- Lesson 5 Arrays
 - 5.1 Declaring Arrays
 - 5.2 One Dimensional Array
 - 5.3 Nature of subscript
 - 5.4 Multidimensional Array
 - 5.5 Two-Dimensional Arrays
 - 5.6 Arrays of strings
- Lesson 6: Classes and Objects
 - 6.1 Classes
 - 6.2 Access specifiers and default labels
 - 6.3 Scope of class & its members
 - 6.4 Member functions
 - 6.5 Data hiding & encapsulation
 - 6.6 Inline Functions
 - 6.7 Nesting of Member Functions
 - 6.7 Nesting of Member Functions
 - 6.8 Arrays within a class
 - 6.9 Static Function Members
- Lesson 7: Constructors, Destructors and Function Overloading
 - 7.1 Need for Constructors

- 7.2 Default Constructors
- 7.3 Parameterized Constructor:
- 7.4 Default Copy Constructor
- 7.5 Dynamic Initialization Using Constructors
- 7.6 The Class Destructor:
- 7.7 Function overloading in C++
- 7.8 Steps involved in finding the best match

Lesson 8: Inheritance

- 8.1 Inheritance : Extending Classes
- 8.2 Need for Inheritance
- 8.3 Defining Derived Class
- 8.4 Different Forms of Inheritance
- 8.5 Visibility Modes
- 8.6 Inherit private members of base class
- Lesson 9: Information Technology
 - 9.1 Introduction
 - 9.2 Computer Networks
 - 9.3 Network Topology
 - 9.4 Advantages & Disadvantages of Network
 - 9.5 Data Communication
 - 9.6 Transmission Channel
 - 9.7 Types of Networks

EVALUATION SCHEME FOR PRACTICAL

1. **Programming in C++**

There will be 5 questions / Program will be set from which candidate has to attempt any four program/ Questions. Each Program or Question will be of 5 marks. Mark for the programming are to be given on the basis of program documentation / indentation, algorithm and result (output) $5\times4=20$ Marks

2. Viva-Voce

3. Practical record file

10 Marks 5 Marks

Record of at least 20 programs in C++ (with listing and Outputs) based on programming concepts and on data base concepts

SYLLABUS: All the relevant practical exercise will be based upon the relevant chapters mentioned in the Theory Syllabus.

CLASS-XII BUSINESS STUDIES – II (COMMERCE and HUMANITIES GROUP)

Time: 3 Hrs

Theory: 80 Marks Project work: 20 marks Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

- 1. The question paper will cover whole of the syllabus.
- 2. 21 Questions will be set in the question paper.
- 3. All units of the syllabus should be given adequate representation in the question paper.
- 4. There will be 4 sections in the paper and all sections will be compulsory.

Section-A

5. Question No. 1 consists of 20 sub parts (1a to 1t) carrying 1 mark each. Answer of each Part should be given in 1-15 words. Objective type questions may include questions with one word to one sentence answer/fill in the blank/true or false/multiple choice type questions.

Section-B

6. Question No. 2 to 10 will carry 2 marks each. Answer of each question should be given in 5-10 lines.

Section-C

7. Do any 6 questions out of 8 questions. Question No. 11 to 18 will carry 4 marks each. Answer of each question should be given in 15-20 lines.

Section-D

8. Question No. 19 to 21 will carry 6 marks each with internal choice. Answer of each question should be given in 3-5 pages. Internal choice question should not be set from the same unit.

Detail of questions set from each unit							
UNIT	NAME OF THE	SECTION -	SECTION –	SECTION -	SECTION -		
NO.	UNIT	Α	В	С	D		
		(1 mark	(2 mark	(4 mark	(6 mark		
		question)	question)	question)	question)		
1	NATURE AND						
	SIGNIFICANCE	1	1		1Question		
	OF			1	from units		
	MANAGEMENT				1,2,3, and 4		
2	PRINCIPLES OF	2	1		with internal		
	MANAGEMENT				choice not		
					from same		
3	BUSINESS	1	1		unit.		
	ENVIRONMENT						
4	PLANNING	2		1			
5	ORGANISATION	2	1		1Question		
				1	from units		

Detail of questions set from each unit

6	STAFFING	2			5,6,7, 8 and
7	DIRECTING	2	1		9 with
8	CONTROLLING	1		1	internal
9	COORDINATION	1	1		choice not
					from same
					unit.
10	BUSINESS	1		1	1Q. from
	FINANCE				units
11	FINANCIAL	2	1	1	10,11,12and
	MARKETS				13 with
12	MARKETING	2	1	1	internal
13	CONSUMER	1	1	1	choice not
	PROTECTION				from same
					unit.
		20	09	08	03
				(DO ANY 6)	(with
					internal
					choice)

SYLLABUS (THEORY)

PART – A PRINCIPLES AND FUNCTIONS OF MANAGEMENT

Unit 1: Nature and Significance of Management

- Management concept, objectives, and importance
- Management as Science, Art and Profession
- Levels of Management

• Management functions-planning, organizing, staffing, directing and controlling

Unit 2: Principles of Management

- Principles of Management- concept and significance
- Fayol's principles of management
- Taylor's Scientific management- principles and techniques

Unit 3: Business Environment

• Business Environment- concept and importance

• Dimensions of Business Environment- Economic, Social, Technological, Political and Legal

• Demonetization - concept and features

• Impact of Government policy changes on business with special reference to liberalization, privatization and globalization in India

Unit 4: Planning

- Concept, importance and limitation
- Planning process

• Single use and standing plans. Objectives, Strategy, Policy, Procedure, method, Rules, budget and Programme

Unit 5: Organising

- Concept and importance
- Organising Process
- Structure of organisation- functional and divisional concept. Formal and informal organisation- concept
- Delegation: concept, elements and importance
- Centralisation concept and features
- Decentralization: concept, features and importance

Unit 6: Staffing

- Concept and importance of staffing
- Staffing as a part of Human Resource Management concept
- Staffing process
- Recruitment process
- Selection process
- Training and Development Concept and importance, Methods of training on the job and off the job vestibule training, apprenticeship training and internship training

Unit 7: Directing

Concept and importance

Elements of Directing

- Supervision- Concept and importance
- Motivation **concept, Maslow's hierarc**hy of needs, Financial and non-financial incentives
- Leadership concept, styles authoritative, democratic and laissez faire
- Communication concept, formal and informal communication; barriers to effective communication, how to overcome the barriers.

Unit 8: Controlling

- Controlling Concept and importance
- Relationship between planning and controlling
• Steps in process of control

Unit 9- Coordination

Coordination: Meaning, Nature and importance.

PART – B BUSINESS FINANCE & MARKETING

Unit 10: Business Finance

•Financial decisions: investment, financing and dividend- Meaning and factors affecting financial decisions.

•Financial Planning - concept and importance

•Capital Structure – concept and factors affecting capital structure

•Fixed and Working Capital - Concept and factors affecting their requirements

Unit 11: Financial Markets

• Financial Markets: Concept, Functions and types

• Money market and its instruments

• Capital market and its types (primary and secondary), methods of floatation in the primary market

- Stock Exchange Functions and trading procedure
- Securities and Exchange Board of India (SEBI) Objectives and functions

Unit 12: Marketing

- Marketing Concept, functions and philosophies
- Marketing Mix Concept and elements
- Product branding, labelling and packaging Concept
- Price Concept, Factors determining price
- Physical Distribution concept, components and channels of distribution

• Promotion – Concept and elements; Advertising, Personal Selling, Sales Promotion and Public Relations

Unit 13: Consumer Protection

- Concept and importance of consumer protection
- Consumer Protection Act 1986: Meaning of consumer
- Rights and responsibilities of consumers
- Who can file a complaint?
- Redressal machinery
- Remedies available

• Consumer awareness - Role of consumer organizations and Non-

Governmental Organizations (NGOs)

PROJECT WORK

The marks will be allocated on the following heads.

1	Initiative, cooperativeness and participation	2 Marks
2	Creativity in presentation	2 Mark
3	Content, observation and research work	4 Marks
4	Analysis of situations	6 Marks
5	Viva	6 Marks
	Total	20 Marks

Students are supposed to select one unit out of four and are required to make only ONE project from the selected unit (consist of one project of 20 marks)

- PROJECT 1: Elements of business environment (students can select any one of the topic)(g) Changes witnessed over the last few years on mode of packaging, labelling and its impact.
 - (h) Changing role of women in the past 25 years.
 - (i) Types of packaging and its impact.
 - (j) Sources of business finance based on a real life company.
 - (k) The changes in the pattern of import and export of different products.
 - (1) Climate change on business environment.

PROJECT 2: Principles of Management. (Henry Fayol and Taylor)

Students are required to observe the application of the general principles of management given by Henry Fayol in a departmental store or an industrial unit, fast food outlet or any small business unit.

OR

They may observe the application of scientific management techniques by FW Taylor in a departmental store or an industrial unit, fast food outlet or any small business unit.

Project 3: Stock Exchange.

(e) Brief history of Stock Exchange in India.

- (f) Listing procedure of securities in stock exchange.
- (g) Dematerialisation of securities in stock exchange.
- (h) Causes of fluctuations of prices in stock exchange.

Project 4: Marketing Management

Students can take the example of any consumer product like moisturizer, noodles, wipes, air conditioners, baby diapers, fruit candy, hair oil, bike, inverter, blanket, bread, ladies bag, kurti, footwear, coffee, chocolate, mobile, microwave oven, newspaper, washing powder, etc and give information about:

- (n) Why they have selected this product?
- (o) Name of the product.
- (p) Feature of product
- (q) Benefits and demerits of the product
- (r) Its 5 competitive brands in the market
- (s) Its unique selling proposition.
- (t) The product's brand strategy
- (u) Logo and tag line of the product.
- (v) Developing a promotion plan for the product.
- (w) Packing of the product.
- (x) Explanation of its labelling.
- (y) Social message for the label.
- (z) What means of transport will be used and why?

Presentation and submission of project report.

At the end of the stipulated term, each student will prepare and submit his/her project report.

Following essentials are required to be fulfilled for its preparation and submission.

1. The whole project will be in a file format

2. The project will be handwritten.

- 3. The project will be presented in a neat folder.
- 4. The students will prepare project on ruled sheets or will use an interleaf practical notebook.
- 5. The project report will be developed in the following sequence-
 - Cover page should project the title, student information, school and year.
 - List of contents.
 - Acknowledgements and preface (acknowledging the institution, the newspapers read, T.V. channels viewed, places visited and persons who have helped).
 - Introduction.
 - Topic with suitable heading.
 - Planning and activities done during the project, if any.
 - Observations and findings while conducting the project.
 - Conclusions (summarised suggestions or findings, future scope of study).
 - Appendix (if needed).

CLASS-XII ACCOUNTANCY-II (COMMERCE GROUP& HUMANITIES GROUP)

Time: 3 Hrs

Theory: 80Marks Project work/Practical: 15Marks IA: 05 Marks Total: 100 Marks N PAPER (THEORY)

STRUCTURE OF QUESTION PAPER (THEORY)

- 1. The question paper will cover whole of the syllabus.
- 2. There are 3 sections in the question paper i.e. Section A, Section B and Section C. Section A is compulsory for all the students and students may choose only one section from Section B and Section C. Section A, Section B and Section C will be set from the Part-I and Part-II and Part- III of the syllabus respectively.
- 3. 16 Questions will be set in the question paper.
- 4. All units of the syllabus should be given adequate representation in the question paper.
- 5. There is no word, line or page limit for numerical questions.
- 6. The use of non-programmable simple calculator is allowed.

SECTION-A

7. Question No. 1 consists of 12 sub parts (1a to 1l) carrying 1 mark each. Answer of each Part should be given in 1-15 words. Objective type questions may include questions with one word to one sentence answer/fill in the blank/true or false/multiple choice type questions. Question No. 2 to 6 (Out of which 2 will be theoretical and 3 will be numerical) will carry 2 marks each. Answer of theoretical question should be given in 2-5 lines.

Question No. 7 consists of 5 sub parts (i, ii, iii, iv, v) out of which 3 will be numerical and 2 will be theoretical (Attempt any 4 questions out of Five) Each question will carry 4 marks. Answer of theoretical question should be given in 10-15 lines.

Question No.8 will be numerical with numerical question as internal choice. This question will be set from any of the first four unit (unit1, 2, 3, and 4) and will carry 6 marks. Internal choice question will not be set from the same unit.

Question No.9 will be numerical with numerical question as internal choice. This question will be set from any of the unit 5 and 6 and will carry 6 marks. Internal choice question will not be set from the same unit.

SECTION B AND C

8. In Question No. 10 consists of 8 sub parts (8a to 8h) carrying 1 mark each. Answer of each Part should be given in 1-15 words. Objective type questions may include questions with one word to one sentence answer/fill in the blank/true or false/multiple choice type questions. Question No. 11, 12, 13 and 14 (Out of which two will be theoretical and two numerical) will carry 2 marks each. Answer of theoretical question should be given in 2-5 lines.

Question No. 15 consists of 3 sub parts (i, ii, iii) out of which 2 will be numerical and one theoretical (Attempt any two questions out of three).

Each question will be 4 marks. Answer of theoretical question should be given in 10-15 lines.

Question No. 16 with internal choice between theoretical and numerical questions will be set out of units 7, 8, 9 and 10 and will carry 6 marks. Internal choice question will not be set from the same unit. Answer of theoretical question should be given in 3-4 pages of answer book.

Unit No.	Name of the unit1 mark2 marksquestionsquestions		4 marks question	6 marks questions			
Section A (Part-I)							
1.	Financial Statements of not – for- profit Organizations	2	1	1	1 numerical question from units 1, 2, 3		
2.	Accounting for partnership Firms	2	1	1	and 4 with numerical		
3.	Change in the profit sharing ratio	2	1	1	question as internal		
4.	Admission of a partner	2	1		from same unit.		
5.	Retirement and Death of a Partner	2		1	1 numerical question from units 5 and 6		
6.	Dissolution of Partnership Firms	2	1	1	with numerical question as internal choice not from same unit.		
	Section	B (Part-	·II)				
7.	Accounting for share capital	2	1	1	1 numerical question from units		
8.	Accounting for debentures	2	1	1	7,8,9 and 10 with		
9.	Analysis of Financial Statements	2	1	1	theoretical question as internal		
10.	Cash Flow Statements	2	1		from same unit.		
Or Section C (Part-III)							
7.	Overview of computerized accounting system	2	1	1	1 numerical question from units 7,8,9		
8.	Using computerized accounting system	2	1	1	and 10 with theoretical question as		
9.	Accounting using DBMS	2	1	1	internal choice not		
10.	Accounting application of electronic spread sheet	2	1	1	trom same unit.		

Detail of questions set from each unit

SYLLABUS (THEORY) PART-I

UNIT 1: FINANCIAL STATEMENTS OF NOT-FOR-PROFIT ORGANIZATIONS.

- Meaning, Basic Concepts
- Receipts and Payments Account : Features and Preparation.
- Income and Expenditure Account : Features, Preparation of income and Expenditure account and Balance Sheet from the given Receipt and Payments Account with additional information.

UNIT 2 : ACCOUNTING FOR PARTNERSHIP FIRMS

- Partnership : Features, Partnership Deed (Meaning, Contents and Importance).
- Provisions of the Indian Partnership Act 1932 in the absence of partnership deed.
- Final Accounts of Partnership: Fixed v/s Fluctuating Capital accounts, Division of Profit among Partners (excluding guarantee and past adjustments). Preparation of Profit and Loss Appropriation Account.
- Goodwill: Meaning, Nature, Factors affecting and Methods of Valuation-Average Profits, Super Profits and Capitalization.
 Note : Interest on partner's loan is to be treated as charge against profits.

Goodwill to be adjusted through partners capital/current account or by raising and writing of goodwill (AS 26).

ACCOUNTING FOR PARTNERSHIP FIRMS-RECONSTITUTION

UNIT 3: CHANGE IN THE PROFIT-SHARING RATIO :

- Change in Profit Sharing Ratio among the existing Partners-Sacrificing Ratio and Gaining Ratio.
- Accounting for Revaluation of Assets and re-assessment of Liabilities and treatment of reserves and Accumulated Profits.
- Preparation of revaluation account and balance sheet.

UNIT 4 : ADMISSION OF A PARTNER :

• Admission of a Partner:- Effect of Admission of Partner, Change in Profit Sharing Ratio, Accounting Treatment of Goodwill (as per accounting standard 26). Revaluation of Assets and re-assessment of Liabilities, Treatment of Reserves and Accumulated profits, Adjustment of Capital Accounts and Preparation of balance sheet.

UNIT 5 : RETIREMENT AND DEATH OF A PARTNER :

- Effect of Retirement/Death of a Partner on change in Profit Sharing Ratio, Treatment of Goodwill (As per AS 26),
- Treatment of Revaluation of Assets and re-assessment of liabilities,
- Adjustment of Accumulated Profits and Reserves. Adjustment of capitals accounts and preparation of balance sheet.
- Preparation of loan account of retiring partner. Calculation of deceased partner's share of profit till the date of death.

UNIT 6 : DISSOLUTION OF PARTNERSHIP FIRMS

- Dissolution of partnership firm: Meaning Dissolution of Partnership and partnership Firm,
- Types of dissolution of firm,
- Settlement of Accounts : Preparation of Realisation Account, Capital Accounts of partners and Cash/Bank Account (excluding Piecemeal Distribution, Sale to a Company and Insolvency of a Partners). Note : (i) The realized value of each asset must be given at the time of dissolution. (ii) In case, realisation expenses are borne by a partner, clear indication should be given regarding the payment thereof.

NOTE: Students may choose only one Part from Part II and Part III. PART -II

UNIT-7: ACCOUNTING FOR SHARE CAPITAL

- Share and Share Capital : Meaning, Nature and Types
- Accounting for Share Capital : Issue and Allotment of Equity and Preference Shares, Public subscription of shares - over subscription (prorata adjustment of excess application money) and under subscription share.

- Issue of shares at Par and at Premium, Calls in Advance and Calls in Arrears (excluding interest), Issue of Shares for Consideration other than cash.
- Accounting Treatment of Forfeiture and Re-issue of Forfeited Shares.

UNIT 8 : ACCOUNTING FOR DEBENTURES :

- Debentures: Meaning, Types of Debentures, Issue at Par, Premium and at a Discount,
- Issue of Debentures for Consideration other than cash, Debenture Issues as Collateral Security -concept, interest on debentures. Writing of discount/loss on issue of debentures.
- Redemption of Debentures:-Methods, Lump sum Draw of lots.
- Creation of Debenture Redemption Reserve.

Note : Related sections of the Companies Act, 2013 will apply.

UNIT 9: ANALYSIS OF FINANCIAL STATEMENTS

• Financial Statement of Company: Statement of Profit and loss and Balance Sheet in the prescribed form with major heading and sub heading (As per schedule III to the Companies Act, 2013).

Note : Exceptional items, extraordinary items and profit/loss from discontinued operations are excluded.

- Financial Statement Analysis:- Meaning, Objectives, Importance, and Limitations.
- Tools for Financial Statements Analysis:- Comparative Statements, Common Size Statement.
- Accounting Ratio:- Meaning, Objectives, Types and Computation.
 - (a) Liquidity Ratio:- Current Ratio, Liquidity Ratio.
 - (b) Solvency Ratio:- Debt to Equity Ratio, Total Assets to Debt Ratio, Proprietary Ratio and Interest Coverage Ratio.
 - (c) Activity Ratio: Inventory Turnover, Trade Receivables Turnover Ratio, Trade Payables Turnover Ratio and Working Capital Turnover Ratio.
 - (d) Profitability Ratio:- Gross Profit Ratio, Operating Ratio, Operating Profit Ratio, Net Profit Ratio and Return on Investment.

Note: Net profit ratio is to be calculated on the basis of profit before and after tax.

UNIT 10: CASH FLOW STATEMENT

- Cash Flow Statement: Meaning, Objectives and Preparation (As per AS-3 Revised) (Indirect Method only),
- Adjustments related to Depreciation and amortisation, profit or loss on sale of assets including investments, Dividend (final and interim) and Tax
- Bank overdraft and cash credit to be treated as short term borrowings.
- Current investments to be taken as Marketable securities unless otherwise specified.

Note: Previous years' Proposed dividend to be given effect, as per prescribed in AS-4, Events occurring after the balance sheet date. Current years' proposed dividend will be accounted for in the next year after it is declare by the shareholders.

PART-III

COMPUTERISED ACCOUNTING SYSTEM

UNIT 7: OVERVIEW OF COMPUTERIZED ACCOUNTING SYSTEM

- 1. Concepts and Types of Computerized Accounting System(CAS)
- 2. Features of a Computerized Accounting System
- 3. Structure of a Computerized Accounting System

UNIT 8: USING COMPUTERIZED ACCOUNTING SYSTEM

- 1. Steps in installation of CAS, preparation of chart of accounts, codification and hierarchy of account heads.
- 2. Data Entry, Data Validation and Data Verification.
- 3. Adjustment Entries, Preparation of Financial Statements, Closing Entries and Opening Entries.
- 4. Security of CAS and security features generally available in CAS (Students are expected to understand and practice the entire accounting process using an accounting package). TALLY ERP-9 (Educational Version)

UNIT 9: ACCOUNTING USING DATA BASE MANAGEMENT SYSTEM (DBMS)

- 1. Concepts of DBMS.
- 2. Objective in DBMS: Tables, Queries, Forms, Reports.
- 3. Creating Data Tables for Accounting
- 4. Using forms queries, and reports for generating accounting information, Applications of DBMS in generating accounting information such as shareholders records, sale reports, customers profile, suppliers profile payroll, employees' profile and petty cash register.

UNIT 10: ACCOUNTING APPLICATION OF ELECTRONIC SPREAD SHEET

- 1. Concept of an Electronic Spread Sheet (ES).
- 2. Features offered by Electronic Spread Sheet.
- 3. Applications of Electronic Spread Sheet in generating Accounting Information,

Preparing Depreciation Schedule, Loan Repayment Schedule, Payroll Accounting and other such applications.

Practical work

Practical work is for those students who choose Part-II of the syllabus.

Time: 1 ¹/₂ Hours

Max Marks 15

- The syllabus of project work is same as prescribed for the theory paper i.e. Part I and Part II.
- 2. Project Note book will consist of at least one comprehensive project and some short answer questions based on the prescribed syllabus.

3. Division of Marks:

1	Project Note Book	3 marks
2	Total five questions of 3 marks each will be set. The students are required to attempt any three	(3×3)=9 marks
3	Viva Voce	3 marks

Division of Marks for internal assessment

1	Book Bank	2 marks
2	Average of Periodic Tests	3 marks

Practical

Practical is for those students who choose Part-III of the syllabus.

Time: 1 ¹/₂ Hours

Max Marks: 15

- 1. The syllabus of project work is same as prescribed for the theory paper of part-III.
- 2. Practical Note book will consist of the entire practical performed in the computer laboratory based on the prescribed syllabus.
- 3. Division of Marks:

1	Practical Note Book	3 marks
2	The students are required to perform any three practical out of the given Five of 3 marks each.	(3×3)=9 marks
3	Viva Voce	3 marks

Division of Marks for internal assessment

1	Book Bank	2 marks
2	Average of Periodic Tests	3 marks

FUNDAMENTAL OF E-BUSINESS

(COMMERCE GROUP)

Time: 3 Hrs

Theory: 80 Marks Practical: 15 Marks IA:05 Marks Total: 100 Marks

STRUCTURE OF QUESTION PAPER

- 1. The Question Paper will cover whole of the Syllabus.
- 2. 21 Questions will be set in the Question paper. Do any six questions from Section-C.
- 3. All units should be given adequate representation in the question paper.
- 4. The Question paper will have 4 sections i.e. A, B,C & D.

SECTION-A

5. Question No. 1 consists of 20 subparts carrying 1 mark each. Answer of each part should be given in 1-15 words. Objective type questions may include questions with one word or one sentence answer/fill in the blanks/true or false/multiple choice type questions. Two Questions will be set from each unit of the syllabus.

SECTION-B

 Question No. 2 to 10 will carry 2 marks each. Nine Questions will be set as per unit wise distribution. Answer of these questions should be given in 5 to 10 lines.

SECTION-C

7. Question No. 11 to 18 will carry 4 marks each. Attempt any six questions from this section. Question will be set as per unit wise distribution. Answer of these questions should be given in 15 to 20 lines.

SECTION-D

8. Question No. 19 to 21 will carry 6 marks each with internal choice. Q.No.19 will be set from Units I to II, with internal choice but not from same unit and Q.No. 20 will be set from Units III, IV and V, with internal choice but not from same unit. Question No. 21 will be set from unit VI to X with internal choice, but not from same unit. Each question will carry six marks each. Answer of these questions should be given in 3-4 pages of the answer book. Internal choice question will not be set from the same unit.

Unit wise division of the Marks

Unit No.	Name of the Unit	1 Marks Questions	2 Marks Questions	4 Marks Questions (Do any Six)	6 Marks Questions
I	 Concept and Scope of Information Technology Fundamentals of Computers 	2	1	1	1 (with internal
II	 Hardware Concepts Memory system of Computers Software Concepts 	2	1	1	not from same unit)
III	• Multimedia	2	1		
IV	 Fundamentals of internet Working with internet 	2		1	1 (with internal choice but
V	 Introducaion to E-Commerce E- Commerce in India 	2	1		not from same unit)
VI	• E- Payments	2	1	1	1(with internal
VII	• E- Security	2	1	1	choice but
VIII	• E- Banking	2	1	1	not from
IX	• E- Trading	2	1	1	same unit)
X	• E- Marketing	2	1	1	
	Total Marks	1×20=20	2×9=18	4×6=24	6×3=18

SYLLABUS (THEORY)

Rationale of the Course:

Information technology has great influence on all aspects of our life. All our work places and the living environments are being computerized. In order to prepare students to work in these environments, it is essential that they are exposed to various applications of information technology. One of the important applications of IT is e-business. The term applies to the use of computer network to search and retrieve information in support of human and corporate decision making. It is a modern business methodology that addresses the needs of business organizations, merchants and consumers to out costs while improving the quality of goods and services and increasing the speed of service- delivery. This exposure will enable the students to enter the world with confidence, live in these environments in a harmonious way and contribute to the productivity.

- **UNIT I:** Concepts and Scope of Information Tecnology,Fundamentals of Computers
- UNIT II: Elements of Computer System: Computer Hardware and Software. Computer Organization, CPU: Memory Input Devices, Output Devices, Storage Devices, and Communication Devices.
- **UNIT III:** Multimedia.
- **UNIT IV:** Fundamentals of internet and Working of Internet: Concept of Internet, Use of Internet, Requirements of Internet, Internet Domain, Internet Server, establishing connectivity on the Internet, Types of Internet Providers, Constitute of Internet Protocol, Browsing the Internet Tools and Service of Internet, Procedure of opening e-mail account on internet.
- UNIT V: Introduction to E- Commerce and E- Commerce in India: Meaning, Features, Functions and Benefit of E-Commerce, E-Commerce Practicevs Traditional Practice, Scope and Basic Models of E-Commerce, Limitations of E-Commerce, Precautions for secure E-Commerce, Proxy Services. Types of E-Commerce, Meaning of B2C, B2B, C2C & P2P. Status of E-Commerce in India, Problems and Opportunity in E- Commerce in India, Future of E-Commerce, Legal issues involved E-Commerce.
- **UNIT VI:** E-Payments: Transaction through Internet, Requirements of E-Payment System, Post Paid Payment System, Credit Card Solutions, Cyber Cash Internal Cheques, Instant Paid Payment System, Debit Card, Prepaid Payment System, Electronic Cash, Digi Cash, Net Cash, Cyber Cash, Smart Cards.
- **UNIT VII:** E-Security: Areas of Internet Security, Security Threats, Security Breach Avoidance, Defection and Recovery, Confidentiality and Integrity, Electronic Signature, Access Control, Authentication Precaution for Secure E-Commerce.
- **UNIT VIII:** E-Banking: Meaning, Importance and Types of E-Banking Services.Traditional vs E-Banking, Process of E-Banking, Advantages and Disadvantages of E-Banking, Status of E-Banking in India.
- **UNIT IX:** E- Trading: Meaning and Importance of E- Trading, Traditional Trading vs E-Trading, Operational Aspects of E-Trading, Advantages of E-Trading, Status of E-Trading in India.

UNIT X: E-Marketing: Concept of E- Marketing, 5Ps of E-Marketing, Traditional Marketing vs E-Marketing, Advantages of E-Marketing, Status of E-Marketing in India.

STRUCTURE OF PRACTICAL QUESTION PAPER

(PRACTICAL)

Time: 1¹/₂ Hours

Max. Marks: 15

3 marks

- 1. Practical Note Book
- 2. Total five questions (two from part-I and three from Part-II) of 3 marks each will be set out of list prescribed for practical. The students are required to perform three practicals selecting at least one from each part.

(3×3) =9 marks 3 marks

3. Viva Voce

Structure & Division of marks for Internal Assessment

1	Book Bank	2 Marks
2	Avarage of Periodic Tests	3 Marks
	Grand Total	(2+3) Marks
		=5 Marks

SYLLABUS (PRACTICAL) LIST OF PRACTICALS Part-I

Internet and its applications:

Log into internet.

Navigation for seeking information.

Downloading information from internet.

Part-II

Sending and receiving e-mail.

(a) Create e-mail account

- (b) Creating a message
- (c) Creating an address book
- (d) Attaching a file with e-mail
- (e) Receiving a message
- (f) Deleting a message

Purchasing through the net.

On-line banking - Operating an ATM.

ਬਾਰ੍ਹਵੀਂ ਖੇਤੀਬਾੜੀ (065)

ਸਮਾਂ : 3 ਘੰਟੇ ਸਮਾਂ : 3 ਘੰਟੇ ਲਿਖਤੀ :70 ਅੰਕ ਪ੍ਰਯੋਗੀ : 20 ਅੰਕ ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ:10 ਅੰਕ ਕੁੱਲ ਅੰਕ: 100 ਅੰਕ

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ-ਰੇਖਾ (ਲਿਖਤੀ)

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਨੂੰ ਚਾਰ ਭਾਗਾਂ ਵਿੱਚ ਵੰਡਿਆ ਗਿਆ ਹੈ । ਇਸ ਵਿੱਚ ਕੁੱਲ 28 ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ । ਅੰਕਾਂ ਦੀ ਵੰਡ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਹੈ :

- ਭਾਗ ਨੰ. I ਪ੍ਰਸ਼ਨ ਨੰ. 1 ਤੋਂ 10 ਤੱਕ ਇੱਕ-ਇੱਕ ਅੰਕ ਵਾਲੇ ਹੋਣਗੇ । ਇਹ ਪ੍ਰਸ਼ਨ ਬਹੁਤ ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲੇ / ਬਹੁ-ਭਾਂਤੀ ਉੱਤਰਾਂ / ਖ਼ਾਲੀ ਥਾਂ ਭਰੋ / ਸਹੀ ਜਾਂ ਗ਼ਲਤ ਕਥਨ ਚੁਣੋ ਵਾਲੇ ਹੋ ਸਕਦੇ ਹਨ । ਇਹ ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਲਾਜ਼ਮੀ ਹੋਣਗੇ ।
- ਭਾਗ ਨੰ. II ਪ੍ਰਸ਼ਨ ਨੰ. 11 ਤੋਂ 20 ਤੱਕ **ਦੋ-ਦੋ ਅੰਕਾਂ** ਵਾਲੇ ਹੋਣਗੇ ।ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦਾ ਉੱਤਰ 20–30 ਸ਼ਬਦਾਂ ਵਿੱਚ ਹੋ ਸਕਦਾ ਹੈ ।ਇਹ ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਲਾਜ਼ਮੀ ਹੋਣਗੇ ।
- ਭਾਗ ਨੰ. III ਪ੍ਰਸ਼ਨ ਨੰ. 21 ਤੋਂ 24 ਤੱਕ **ਚਾਰ–ਚਾਰ ਅੰਕਾਂ** ਵਾਲੇ ਹੋਣਗੇ । ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦਾ ਉੱਤਰ 80–100 ਸ਼ਬਦਾਂ ਦਾ ਹੋ ਸਕਦਾ ਹੈ । ਇਹ ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਲਾਜ਼ਮੀ ਹੋਣਗੇ ।
- ਭਾਗ ਨੰ. IV ਪ੍ਰਸ਼ਨ ਨੰ. 25 ਤੋਂ 28 ਤੱਕ ਛੇ–ਛੇ ਅੰਕਾਂ ਵਾਲੇ ਹੋਣਗੇ । ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦਾ ਉੱਤਰ 120–150 ਸ਼ਬਦਾਂ ਦਾ ਹੋ ਸਕਦਾ ਹੈ । ਇਨ੍ਹਾਂ ਸਾਰੇ ਪ੍ਰਸ਼ਨਾਂ ਵਿੱਚ 100% ਅੰਦਰੂਨੀ ਛੋਟ ਹੋਵੇਗੀ । ਅੰਦਰੂਨੀ ਛੋਟ ਵਾਲਾ ਪ੍ਰਸ਼ਨ ਉਸੇ ਇਕਾਈ ਵਿੱਚੋਂ ਹੋਵੇਗਾ ।

ਇਕਾਈਵਾਰ ਅੰਕਾਂ ਦੀ ਵੰਡ :

ਇਕਾਈ	1 ਅੰਕ ਵਾਲੇ ਪ੍ਰਸ਼ਨ	2 ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ	4 ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ	6 ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ	ਕੁੱਲ
ਪਹਿਲੀ ਇਕਾਈ	3	3	1	1	19 ਅੰਕ
ਦੂਜੀ ਇਕਾਈ	3	3	1	1	19 ਅੰਕ
ਤੀਜੀ ਇਕਾਈ	2	2	1	1	16 ਅੰਕ
ਚੌਥੀ ਇਕਾਈ	2	2	1	1	16 ਅੰਕ
ਕੁੱਲ ਅੰਕ	10	20	16	24	70 ਅੰਕ
ਕੁੱਲ ਪ੍ਰਸ਼ਨ	10	10	4	4	28 ਪ੍ਰਸ਼ਨ

ਪਾਠਕ੍ਰਮ (ਲਿਖਤੀ) ਇਕਾਈ – ਪਹਿਲੀ

ਭੂਮੀ ਅਤੇ ਫ਼ਸਲ ਪ੍ਰਬੰਧ ਕਿਰਿਆਵਾਂ

ਭੂੰਮੀ ਵਾਧੇ ਲਈ ਇੱਕ ਮਾਧਿਅਮ ਵਜੋਂ : ਜ਼ਰੂਰੀ ਤੱਤ, ਕਾਰਬਨਿਕ ਖਾਦਾਂ, ਰਸਾਇਣਿਕ ਖਾਦਾਂ ਅਤੇ ਜੈਵਿਕ ਖਾਦਾਂ । ਤੇਜ਼ਾਬੀ ਅਤੇ ਖਾਰੀਆਂ ਭੂਮੀਆਂ ਦਾ ਸੁਧਾਰ । ਭੂਮੀ ਦਾ ਖੁਰਨਾ, ਕਾਰਨ ਅਤੇ ਰੋਕਥਾਮ ਦੇ ਉਪਾਅ ਕਰਨਾ । ਫ਼ਸਲ ਪ੍ਰਬੰਧ ਕਿਰਿਆਵਾਂ : ਕਣਕ, ਧਾਨ, ਮੱਕੀ, ਨਰਮਾ, ਗੰਨਾ, ਸੂਰਜਮੁਖੀ, ਸਰੌਂ, ਛੋਲੇ, ਮੂੰਗੀ, ਜਵਾਰ, ਬਰਸੀਮ, ਮਟਰ, ਟਮਾਟਰ ਅਤੇ ਬੈਂਗਣ ਦੀਆਂ ਕਿਸਮਾਂ ਦੀ ਚੋਣ, ਭੂਮੀ ਦੀ ਤਿਆਰੀ, ਬੀਜ ਦੀ ਮਾਤਰਾ, ਬਿਜਾਈ ਦਾ ਢੰਗ, ਦੇਸੀ ਅਤੇ ਰਸਾਇਣਿਕ ਖਾਦਾਂ ਦੀ ਵਰਤੋਂ, ਸਿੰਚਾਈ, ਨਦੀਨਾਂ ਦੀ ਰੋਕਥਾਮ, ਕਟਾਈ, ਗਹਾਈ ਅਤੇ ਮੰਡੀਕਰਨ ਕਰਨਾ । ਬੇਰ, ਅਮਰੂਦ ਅਤੇ ਅੰਗੂਰ ਵਰਗੇ ਮਹੱਤਵਪੂਰਨ ਫਲਾਂ ਦੀ ਕਾਸ਼ਤ । ਉਕਤ ਫ਼ਸਲਾਂ ਨੂੰ ਲੱਗਣ ਵਾਲੇ ਪ੍ਰਮੁੱਖ ਕੀੜਿਆਂ ਅਤੇ ਬਿਮਾਰੀਆਂ ਦੇ ਲੱਛਣ ਅਤੇ ਇਹਨਾਂ ਦੀ ਰੋਕਥਾਮ ਦੇ ਉਪਾਅ ।

ਇਕਾਈ – ਦੂਜੀ

ਪਸ਼ੂ ਧਨ ਪਾਲਣ ਅਤੇ ਮੁਰਗ਼ੀ ਪਾਲਣ

ਪਸ਼ੂ ਧਨ ਪਾਲਣ : ਪਸ਼ੂ ਪਾਲਣ ਅਤੇ ਮੁਰਗ਼ੀ ਪਾਲਣ ਦੀ ਖੇਤੀਬਾੜੀ ਵਿੱਚ ਭੂਮਿਕਾ । ਦੁਧਾਰੂ ਪਸ਼ੂਆਂ ਅਤੇ ਮੁਰਗ਼ੀਆਂ ਦੀਆਂ ਨਸਲਾਂ । ਵਪਾਰਕ ਪੱਧਰ ਤੇ ਦੁਧਾਰੂ ਪਸ਼ੂ ਅਤੇ ਮੁਰਗ਼ੀਆਂ ਪਾਲਣਾ । ਨਵੇਂ ਜੰਮੇ ਕੱਟੜੂ, ਗਰਭਵਤੀ ਪਸ਼ੂ ਅਤੇ ਦੁਧਾਰੁ ਪਸ਼ੂਆਂ ਦੀ ਸੰਭਾਲ । ਬਣਾਉਟੀ ਗਰਭਦਾਨ, ਗਰਭ ਦੀ ਪਛਾਣ ਅਤੇ ਦੁਧਾਰੁ ਪਸ਼ੂਆਂ ਦੇ ਦਿਲ ਦੇ

19 ਅੰਕ

19 ਅੰਕ

ਰੋਗਾਂ ਦਾ ਪਤਾ ਲਗਾਉਣਾ । ਦੋਗਲਾ ਨਸਲੀ ਕਰਨ । ਦੁਧਾਰੂ ਪਸ਼ੂਆਂ ਅਤੇ ਮੁਰਗ਼ੀਆਂ ਦੀ ਬਿਮਾਰੀਆਂ : ਮੂੰਹ-ਖੁਰ, ਗਲ ਘੋਟੂ, ਲੇਵੇ ਦੀ ਸੋਜ, ਪੱਟ ਦੀ ਸੋਜ, ਰਾਣੀ ਖੇਤ, ਬਰਡ ਫਲੂ । ਦੁਧਾਰੂ ਪਸ਼ੂਆਂ ਦੀ ਖ਼ੁਰਾਕ । ਮਨੁੱਖੀ ਖ਼ੁਰਾਕ ਵਿੱਚ ਮਾਸ ਅਤੇ ਆਂਡਿਆਂ ਦੀ ਮਹੱਤਤਾ ।

ਇਕਾਈ – ਤੀਜੀ ਖੇਤੀਬਾੜੀ ਜੀਵ ਵਿਗਿਆਨ – ਬਨਸਪਤੀ ਵਿਗਿਆਨ

16 ਅੰਕ

- ਅਣੁਵੰਸ਼ਕਿਤਾ ਮੈਂਡਲ ਦਾ ਅਣੁਵੰਸ਼ਿਕੀ ਨਿਯਮ ।
- 2. ਇੱਕ ਬੀਜ ਪੱਤਰੀ ਅਤੇ ਦੋ ਬੀਜ ਪੱਤਰੀ ਤਣੇ, ਜੜ੍ਹ ਅਤੇ ਪੱਤੇ ਦੀ ਅੰਦਰੂਨੀ ਸੰਰਚਨਾ ਦਾ ਸਰੀਰਕ ਅਧਿਐਨ।
- 3. ਸਧਾਰਨ, ਸੰਯੁਕਤ ਅਤੇ ਵਿਸ਼ੇਸ਼ ਪ੍ਰਕਾਰ ਦੇ ਫੁੱਲ ਕ੍ਰਮ ।
- 4. ਪਰਾਗਣ ਦੀਆਂ ਕਿਸਮਾਂ ਅਤੇ ਪਰਾਗਣ ਲਈ ਜ਼ਿੰਮੇਵਾਰ ਸਾਧਨ ।
- 5. ਬੀਜ ਅਤੇ ਫਲ ਦਾ ਨਿਸੇਚਨ ਅਤੇ ਵਿਕਾਸ ।
- ਫਲਾਂ ਦੇ ਪ੍ਰਕਾਰ ਅਤੇ ਬੀਜ ਦਾ ਪਸਾਰ (ਖਿੱਲਰਨਾ) ।
- ਹੇਠ ਲਿਖੇ ਬਰੈਕਟ ਵਿੱਚ ਦਿੱਤੇ ਫੁੱਲਦਾਰ ਪੌਦਿਆਂ ਦੇ ਸਧਾਰਨ ਲੱਛਣ ਅਤੇ ਆਰਥਿਕ ਮਹੱਤਤਾ ਦਾ ਅਧਿਐਨ :
 - (ੳ) ਕਰੁਸੀਫੇਰੀ (ਸਰੌਂ, ਸ਼ਲਗਮ)
 - (ਅ) ਮਾਲਵੇਸੀ (ਨਰਮਾ, ਭਿੰਡੀ)
 - (ए) वुटेमी (तिंघु नाडी, बज्जी थॅडा)
 - (ਸ) นิ้นไซชิ่งหา้ (ห้อา ห่อง, ห่อง)
 - (ਹ) ਰੋਜ਼ੇਸੀ (ਗੁਲਾਬ, ਆਲੂ ਬੁਖਾਰਾ)
 - (ਕ) ਸੋਲੇਨੇਸੀ (ਪਿਟੂਨੀਆ, ਆਲੂ)
 - (ਖ) ਕੁਕਰਬਿਟੇਸੀ (ਤੋਰੀ, ਕੱਦੂ)
 - (ग) ग्रेभिती (नहीं, वरुव)
- 8. ਪ੍ਰਕਾਸ਼ ਸੰਸ਼ਲੇਸ਼ਣ, ਸਾਹ ਕਿਰਿਆ ਅਤੇ ਵਾਸ਼ਪ ਉਤਸਰਜਨ ਬਾਰੇ ਸੰਖੇਪ ਜਾਣਕਾਰੀ ।

ਇਕਾਈ – ਚੌਥੀ

ਖੇਤੀਬਾੜੀ ਜੀਵ ਵਿਗਿਆਨ – ਜੰਤੂ ਵਿਗਿਆਨ

- ਜਾਣ-ਪਛਾਣ : ਜੰਤੂ ਵਿਗਿਆਨ, ਸਜੀਵ ਵਸਤੂਆਂ ਦੇ ਲੱਛਣ, ਡੀ. ਐੱਨ. ਏ., ਆਰ. ਐੱਨ. ਏ., ਐਨਜਾਈਮਾਂ ਅਤੇ ਹਾਰਮੋਨਾਂ ਬਾਰੇ ਮੁੱਢਲੀ ਜਾਣਕਾਰੀ ।
- 2. ਜੰਤੂਆਂ ਦਾ ਵਿਗਿਆਨਕ ਨਾਮਕਰਨ ਅਤੇ ਵਰਗੀਕਰਨ ਦੇ ਸਿਧਾਂਤ । ਜੀਵਨ ਦੀ ਮੂਲ ਉਤਪਤੀ । ਵਿਕਾਸ ਦੇ ਸਿਧਾਂਤ ਅਤੇ ਪ੍ਰਮਾਣ ।
- ਬਣਧਾਰੀ ਪਸ਼ੂਆਂ ਦੇ ਆਮ ਲੱਛਣ । ਖ਼ਰਗੋਸ਼ ਦੀ ਮੁੱਢਲੀ ਕਿਰਿਆਤਮਿਕ ਸਰੀਰਕ ਬਣਤਰ ਵਿਸ਼ੇਸ਼ ਰੂਪ ਵਿੱਚ ਪਾਚਨ, ਸਾਹ, ਲਹੁ-ਗੇੜ ਅਤੇ ਮੁਤਰ ਪ੍ਰਣਾਲੀ ਬਾਰੇ ਜਾਣਕਾਰੀ ।
- 4. ਕੀੜੇ ਕੀਟਾਂ ਦਾ ਵਾਧਾ ਅਤੇ ਵਿਕਾਸ⁽¹⁾ ਘਾਹ ਦੇ ਟਿੱਡੇ ਦੀ ਸਰੀਰਕ ਬਣਤਰ ਦਾ ਅਧਿਐਨ ਕਰਨਾ ।
- 5. ਖੇਤੀ ਲਈ ਆਰਥਿਕ ਮਹੱਤਤਾ ਰੱਖਣ ਵਾਲੇ ਪਸ਼ੁਆਂ ਬਾਰੇ ਅਧਿਐਨ ਕਰਨਾ ।

ਪ੍ਰਯੋਗੀ ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ–ਰੇਖਾ

ਅੰਕ : 20

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- ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਪ੍ਰੀਖਿਅਕ ਵੱਲੋਂ ਮੌਕੇ ਤੇ ਹੀ ਸੈੱਟ ਕੀਤਾ ਜਾਵੇਗਾ ।
- ਇੱਕ ਗਰੁੱਪ ਵਿੱਚ 20 ਤੋਂ ਵੱਧ ਪ੍ਰੀਖਿਆਰਥੀ ਨਹੀਂ ਹੋਣਗੇ ।
- ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਦੋ ਭਾਗ ਹੋਣਗੇ । ਹਰੇਕ ਭਾਗ ਵਿੱਚੋਂ ਇੱਕ-ਇੱਕ ਪ੍ਰਯੋਗ ਦਿੱਤਾ ਜਾਵੇਗਾ :
 - (ੳ) ਭੂਮੀ ਅਤੇ ਫ਼ਸਲ ਪ੍ਰਬੰਧ ਕਿਰਿਆਵਾਂ, ਪਸ਼ੂ ਪਾਲਣ ਅਤੇ ਮੁਰਗੀ ਪਾਲਣ
 - (ਅ) ਖੇਤੀਬਾੜੀ ਜੀਵ ਵਿਗਿਆਨ
 - ਅੰਕਾਂ ਦੀ ਵੰਡ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਹੈ :

4-4 ਅੰਕਾਂ ਦੇ ਦੋ ਪ੍ਰਯੋਗ / ਕਿਰਿਆਵਾਂ 8 ਅੰਕ
ਪ੍ਰਯੋਗੀ ਨੋਟ ਬੁੱਕ, ਚਾਰਟ ਅਤੇ ਹੋਰ ਪੇਸ਼ਕਾਰੀ 4 ਅੰਕ

ਜ਼ਬਾਨੀ ਪ੍ਰਸ਼ਨ

ਸਮਾਂ : 3 ਘੰਟੇ

• ਬੀਜਾਂ, ਖਾਦਾਂ, ਸੰਦਾਂ, ਮਸ਼ੀਨਾਂ, ਨਦੀਨਾਂ, ਕੀੜਿਆਂ, ਬੀਮਾਰੀਆਂ ਆਦਿ ਦੀ ਪਛਾਣ ਕਰਨਾ । 4 ਅੰਕ

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ਪਾਠਕ੍ਰਮ (ਪ੍ਰਯੋਗੀ)

ਸਮਾਂ : 3 ਘੰਟੇ

1.

ਭਾਗ – (ੳ)

ਅੰਕ : 20

ਭੂਮੀ ਅਤੇ ਫ਼ਸਲ ਪ੍ਰਬੰਧ ਕਿਰਿਆਵਾਂ, ਪਸ਼ੂ ਪਾਲਣ ਅਤੇ ਮੁਰਗੀ ਪਾਲਣ

ਪ੍ਰਮੁੱਖ ਫ਼ਸਲਾਂ ਦੀ ਬਿਜਾਈ ਲਈ ਕਿਆਰੀ ਤਿਆਰ[ਂ] ਕਰਨਾ ।

- ਨਦੀਨਾਂ ਦੀ ਰੋਕਥਾਮ ਦੀਆਂ ਵਿਧੀਆਂ ।
- ਸਿੰਚਾਈ ਦੀਆਂ ਵਿਧੀਆਂ ।
- ਰਸਾਇਣਿਕ ਖਾਦਾਂ ਦੀਆਂ ਕਿਸਮਾਂ ਅਤੇ ਇਹਨਾਂ ਦੀ ਵਰਤੋਂ ।
- 5. ਰੜੀ ਦੀ ਖਾਦ ਅਤੇ ਇਸ ਦੇ ਤਿਆਰ ਕਰਨ ਦਾ ਢੰਗ ।
- ਵੱਖ-ਵੱਖ ਫ਼ਸਲਾਂ ਦੇ ਪ੍ਰਮੁੱਖ ਕੀੜਿਆਂ ਅਤੇ ਬਿਮਾਰੀਆਂ ਦੀ ਪਛਾਣ ਕਰਨਾ ।
- 7. ਬਾਗ਼ਬਾਨੀ ਅਧੀਨ ਪੌਦਿਆਂ ਦੀ ਸਿਧਾਈ ਅਤੇ ਛੰਗਾਈ ਕਰਨਾ, ਖਾਦ ਦੇਣਾ ਅਤੇ ਸਿੰਚਾਈ ਕਰਨਾ ।
- 8. ਪਸ਼ੁ ਪਾਲਣਾ ।
- ਮੁਰੋਗ਼ੀਆਂ ਪਾਲਣਾ ।
- 10. ਦੁਧਾਰੁ ਪਸ਼ੁਆਂ ਦੀ ਚੋਣ ਕਰਨਾ ।
- 11. ਫਲਾਂ ਨੂੰ ਸੁਰੱਖਿਅਤ ਸਾਂਭਣਾ ।
- 12. ਖੇਤੀ ਦੇ ਰਿਕਾਰਡ ਦੀ ਸੰਭਾਲ ਅਤੇ ਇਸ ਦੀ ਵਰਤੋਂ ।

ਭਾਗ – (ਅ)

ਖੇਤੀਬਾੜੀ ਜੀਵ ਵਿਗਿਆਨ

ਬਨਸਪਤੀ ਵਿਗਿਆਨ :

- ਸਥਾਈ ਸਲਾਈਡਾਂ ਰਾਹੀਂ ਇੱਕ ਬੀਜ ਪੱਤਰੀ ਅਤੇ ਦੋ ਬੀਜ ਪੱਤਰੀ ਤਣੇ, ਜੜ ਅਤੇ ਪੱਤੇ ਦੀ ਬਣਤਰ ਦਾ ਅਧਿਐਨ ਕਰਨਾ।
- ਵੱਖ-ਵੱਖ ਫੁੱਲ ਕ੍ਰਮ ਦੇ ਨਮੁਨਿਆਂ ਦੀ ਪਛਾਣ ਅਤੇ ਅਧਿਐਨ ਕਰਨਾ ।
- ਵੱਖ-ਵੱਖ ਕਿਸਮਾਂ ਦੇ ਫਲਾਂ ਦੇ ਨਮੂਨਿਆਂ ਦੀ ਪਛਾਣ ਅਤੇ ਅਧਿਐਨ ਕਰਨਾ ।
- 4. ਲਿਖਤੀ ਪਾਠਕ੍ਰਮ ਅਨੁਸਾਰ ਵੱਖ–ਵੱਖ ਕੁੱਲ ਦੇ ਪੌਦਿਆਂ/ਪੌਦਿਆਂ ਦੇ ਭਾਗਾਂ ਦੀ ਪਛਾਣ ਅਤੇ ਅਧਿਐਨ ਕਰਨਾ।
- 5. ਪ੍ਰਕਾਸ਼ ਸੰਸ਼ਲੇਸ਼ਨ, ਸਾਹ ਕਿਰਿਆ ਅਤੇ ਵਾਸ਼ਪ ਉਤਸਰਜਨ ਸਬੰਧੀ ਵੱਖ–ਵੱਖ ਪ੍ਰਯੋਗ ਕਰਨਾ । ਜੰਤੂ ਵਿਗਿਆਨ :
- ਖੇਤੀਬਾੜੀ ਵਿੱਚ ਪਸ਼ੂਆਂ ਦੀ ਆਰਥਿਕ ਮਹੱਤਤਾ ਬਾਰੇ ਜਾਣਕਾਰੀ ।
- 2. ਸੰਯੁਕਤ ਟਿਸ਼ੁਆਂ ਅੱਤੇ ਅੰਗਾਂ ਦਾ ਤੰਤੁ ਵਿਗਿਆਨ ਅਨੁਸਾਰ ਸਲਾਈਡਾਂ ਰਾਹੀਂ ਅਧਿਐਨ ਕਰਨਾ ।
- ਮਾਡਲ ਰਾਹੀਂ ਥਣ ਧਾਰੀ ਜੀਵ ਦੀ ਅੱਖ ਅਤੇ ਦਿਲ ਸੰਬੰਧੀ ਅਧਿਐਨ ਕਰਨਾ ।
- ਮਾਡਲ/ਚਾਰਟ ਰਾਹੀਂ ਖ਼ਰਗੋਸ਼ ਦੀਆਂ ਵੱਖ-ਵੱਖ ਪ੍ਰਣਾਲੀਆਂ ਬਾਰੇ ਅਧਿਐਨ ਕਰਨਾ ।
- 5. ਫ਼ਸਲਾਂ ਦੇ ਪ੍ਰਮੁੱਖ ਕੀੜਿਆਂ ਅਤੇ ਰੋਗਾਂ ਦੀ ਪਛਾਣ ਕਰਨਾ ।
