Class XII Exam 2023-24
English-Core (301)

Time Allowed : 3 Hrs.   **Maximum Marks: 80**

General Instructions:
1. The Question Paper contains THREE sections READING, WRITING and LITERATURE.
2. Attempt question based on specific instructions for each part.

SECTION A-READING SKILLS   22

Reading Comprehension Through Unseen Passages

1.   Read the following text.   **12**

1.   The arts which admit of exact reproduction are such that the disciple is on the same level as the creator, and so it is with their fruits. These are useful to the imitator, but are not of such high excellence as those which cannot be transmitted as an inheritance like other substances. Among these, painting is the first. Painting cannot be taught to him on whom nature has not conferred the gift of receiving such knowledge, as mathematics can be taught, of which the disciple receives as much as the master gives him.

2.   It cannot be copied, as letters can be, in which the copy equals the original. It cannot be stamped, in the same way as sculpture, in which the impression is in proportion to the source as regards the quality of the work. It does not generate countless children, as do printed books.

3.   It alone remains noble, it alone confers honour on its author and remains precious and unique, and does not beget children equal to itself. And it is more excellent by reason of this quality than by reason of those which are everywhere proclaimed. Now do we not see the great monarchs of the East going about veiled and covered up from the fear of diminishing their glory by the manifestation and the divulgation of their presence? And do we not see that the pictures which represent the divine deity are kept covered up with inestimable veils?

4.   Their unveiling is preceded by great sacred solemnities with various chants and diverse music. When they are unveiled, the vast multitude of people who are there flocked together, immediately prostrate themselves and worship. They invoke those whom such pictures represent that they may regain their lost holiness and win eternal salvation, just as if the deity were present in the flesh.

5.   This does not occur in any other art or work of man. If you say that is owing to the nature of the subject depicted, rather than to the genius of the painter, the answer is that the mind of man could satisfy itself equally well in this case, were the man to remain in bed and not make pilgrimages to places which are perilous and hard to access as we so often see is the case.

6.   But if such pilgrimages continually exist, what is then their unnecessary cause? You will certainly admit that it is an image of this kind, and all the writings in the world could not succeed in representing the semblance and the power of such a deity.

7.   Therefore, it appears that this deity takes pleasure in the pictures and is pleased that it should be loved and revered, and takes a greater delight in being worshipped in that rather than in any other semblance of itself. By this reason, it bestows grace and gifts of salvation according to the belief of those who meet together in such a place.

Answer the following questions, based on the passage above.

i. Select the option that agrees with the information given in the passage. 1

    (a) Painting and mathematics are at par, when it comes to learning.

    (b) Painting can only be taught to one who is capable of receiving this knowledge.

    (c) Painting cannot be taught except as a form of imitation.

    (d) Paintings cannot be transferred as an inheritance.

ii. Which is the statement that shows the writer aimed to change the general outlook about painting, correctly? 1

    (a) It cannot be stamped in the same way as sculptures can in which the impression is in proportion to the source.

    (b) As sculptures are closest to painting and yet there is a fundamental difference.

    (c) It cannot be copied as letters can be.

    (d) It does not generate countless children in the way printed books can.

iii. Share evidence from the text, in about 40 words to support the view that the writer's writing style is descriptive in nature. 2

iv. Complete the sentence appropriately with a characteristic or its description. 1
They invoke those whom such pictures represent that they may regain _____.

v. Select the option that is similar in meaning to 'pilgrimages'. 1

    (a) A journey   (b) A holy expedition

    (c) A trip   (d) An expedition

vi. Explain, in about 40 words, why was the unveiling of painted images is unique? 2

vii. In the line, "... Therefore this deity takes pleasure in the pictures and bestows grace and gifts of salvation to those who meet together in such a place." What does the word 'pleasure' refer to? 1

viii. What is the core idea that displays the most likely reason for including the line, "It alone confers honour on its author and remains precious and unique and does not beget children equal to itself."? Answer in about 40 words. 2

ix. Read the five headlines (1) to (5) given below : 1

    (1) Art is a passion.

    (2) Art is in blood.

    (3) Art cannot be inherited.

    (4) Art can never be copied.

    (5) Art is a chanting.

Identify the option that displays the headline/s that correspond/s with the occurrences in the passage.

    (a) Only (1)   (b) Only (2)

    (c) Both (3) and (4)   (d) (1), (2) and (5)

2. **Read the following text.** **10**

1. A large majority of the elderly in India does not get long-term and palliative care, revealed a study conducted for the United Nations. The survey of more than 10,000 respondents across Northern, Southern, Western, Eastern and Central India during May-June 2018, showed that 62.1% of the elderly did not get such care. More than half of these people, 52.4%, said they primarily need traditional family support, says a study by Age well Research and Advocacy Centre.

2. Older people in India often face problems such as disability, restricted mobility, loneliness, poverty and lack of awareness on accessing old-term care. With a fast growing population of older people, the ever-increasing gap between generations and the fast and demanding lifestyle of young people, for a majority of older people, life is still a struggle for independence.

3. "According to 64% of elderly respondents, loneliness, marginalisation and isolation are the most critical issues faced by bedridden, elderly patients as they cannot visit, meet or interact with their relatives, friends and neighbours," said Himanshu Rath, founder of Agewell Foundation.

4. The elderly have to compromise and make adjustments in their lifestyle according to the wishes of the younger members of their families to ensure they are cared for, the study revealed. It highlighted that 67.6% of the elderly being taken care of their family members have to look after the children of the families. They have to perform tasks such as babysitting in return for proper care and support.

5. "Around 73.7% said they have to take care of the house and other properties of their younger family members to ensure long-term and palliative care in old age", the study report said. "Over 75% of respondents have to limit their personal social interactions as their family members direct them to do so, otherwise their family members can avoid providing their basic needs of food and medicines."Most elderly respondents (68.5%) said breaking up of the joint family system is one of the biggest factors for the challenges they face in getting long-term palliative care.

6. Healthcare equipment such as wheelchairs, relief material such as adult diapers and care-giving service should be provided on a regular basis to destitute older people, who are bedridden and suffering from acute mobility issues, the report said.
"Though providing long-term and palliative care to older persons comes in the purview of family responsibilities in India, it is observed that older persons, who are financially independent, have a high net worth or hold property entitlements, are treated comparatively well by their family members" said Rath.

7. "Managing home care for the elderly is a massive challenge as multiple service providers-nursing agencies, physiotherapists and medical suppliers-are small scale and unorganised and, therefore, provide incomplete care," he said. "In India, health insurance coverage is essentially limited to hospitalisation. The concept of geriatric care has remained a neglected area of medicine so far in the country."

Answer the following questions, based on given passage.

i.   List two essential requirements for older people suffering from mobility issues.   2

ii.   Select the option that displays the reason behind financially independent elderly being better off.   1
   (a)   They are seen as one to be revered.
   (b)   They are treated with much more care and respect.
   (c)   They have money to meet their financial needs.
   (d)   They have medical expenses.

iii. According to the passage, what do you think is the primary need of all the elderly people in India?   1

iv. Complete the given sentence by selecting the most appropriate option.   1
According to the study, long-term and palliative care comes under the purview of _____.
  (a) government responsibilities
  (b) liabilities
  (c) social responsibilities

v. Select the option that displays the most likely reason for stating that older people who live with family are no better.   1
It is so because
  (a) they have additional burden of responsibility
  (b) they have no one who loves or cares for them
  (c) they also suffer from loneliness
  (d) All of the above

vi. State a point to challenge the given statement :   2
Joint Family System along with the need for private space has brought challenges to the long term elderly care.

vii. Complete the given sentence with an appropriate inference from the last paragraph of the passage.   1
The concluding paragraph of the passage makes a clear case for _____.

viii. State whether the given statement is TRUE or FALSE.   1
In order to get proper case and support, the old people have to adjust their lifestyle as per the wishes of their children.

SECTION B- CREATIVE WRITING SKILLS   18

Note : All details presented in the questions are imaginary and created for assessment purpose.

3. **Attempt ANY ONE of two, in about 50 words.**   **4**

A. You are the Secretary of your School Literary Association. Write a notice in not more than 50 words for your school notice board, giving details of the proposed inauguration of the Literary Association of your school. You are 'XYZ' of Jain Vidyashram, Cuddalore.

Or

B. You lost your wristwatch in your school auditorium. Write a notice in not more than 50 words for your school notice board giving a detailed description of the watch. You are Anirudh/Arundhati of class XII of Springfield School, Pune.

4. **Attempt ANY ONE of two, in about 50 words.** 4

A. You are the President, Literary Society of Sunshine International School. Draft an invitation to author, Ms Manjul Bajaj requesting her to conduct a workshop on creative writing in your school. You are Romi/Rohit of Zenith Public School.

Or

B. Write a formal reply accepting an invitation to be present in the birthday celebrations of your friend, Suresh's daughter, who lives at 1231, Chattarpur, Delhi. You are Abhishek Khanna.

5. **Attempt ANY ONE of two, in about 120-150 words.** 5

A. Write a letter in about 120-150 words for the post of the Librarian in Vision Senior Secondary School, Calicut. Also, enclose your Bio-data with it. You are Radhika/Rajeev from 21, Cherry Road, Madurai.

Or

B. Write a letter to the Editor, Deccan Times, Bangalore about the inadequate parking facilities in the Commercial Street, M.G. Road, which is causing a lot of inconvenience to the people. Offer your suggestions. You are Anoop/Ritu, 24 Hennus Road, Bangalore.

6. **Attempt ANY ONE of two, in about 120-150 words.** 5

A. On the occasion of Teacher's Day, the Honourable PM of India had an interactive session with students from all over the country through satellite link. Your school also made special arrangements for the students to view the telecast. Write an article in about 120-150 words for your school magazine giving details of the talk and its impact on you. You are Akshay/ Akshita of Brightland Public School.

Or

B. You are Mridul/Mridula, an HT correspondent. You witnessed a protest rally by a youth organisation. Mentioning the purpose of rally, places covered and reaction of public, write a report in 120-150 words for your newspaper.

SECTION C- LITERATURE 40

7. **Read the given extracts and answer the questions for ANY ONE of the two, given.** 6

A.   ...I looked again at her, wan,
pale
as a late winter's moon and felt that
old
familiar ache, my childhood's fear,
but all I said was, see you soon,
Amma,
all I did was smile and smile and
smile

(My mother at Sixty-six)

i. What is the speaker's emotional state when looking at her mother?   1

    (a)   Empathetic and understanding   (b)   Nostalgic and longing

    (c)   Confused and disoriented   (d)   Fearful and apprehensive

ii. What does the use of the word "but" at the beginning of the line, 'but all I said..', suggest ?   1

iii. Select the word that WILL NOT complete the sentence appropriately.   1
The description of the mother as "wan, pale / as a late winter's moon" creates a vivid image of _____.

    (a)   frailty   (b)   sensitivity

    (c)   vulnerability   (d)   mortality

iv. State whether the given statement is TRUE or FALSE.   1
The poetic device used in the line, 'pale as a winter's moon' is the same as the one used in the line, 'the winter wind wistfully wailed at night:

v. What message do these lines highlight, in the context of familial relationships, and the speaker's sense of anxiety and fear at the prospect of losing her mother?   1

vi. Complete the sentence appropriately.   1
The repetition of the word, 'smile' suggests that _____.

Or

B.   Aunt Jennifer's tigers prance across a screen,
        Bright topaz denizens of a world of green.
        They do not fear the men beneath the tree;
        They pace in sleek chivalric certainty.

(Aunt's Jennifer's Tiger)

i. How are Aunt Jennifer's tigers described?   1

    (a)   As sober and serene   (b)   As cruel and menacing

    (c)   As bold and fearless   (d)   As sleek and slender

ii. State whether the given statement is TRUE or FALSE, with reference to the extract.   1
The tigers are describes as having a green colour.

iii. Fill in the blank with reference to the extract.   1
The word from the extract which means 'to move or leap about' is _____.

iv. The fact that Aunt Jennifer is creating the tigers shows her.   1

v. Identify the phrase from the extract, suggests the following.   1
Aunt Jennifer's tigers are not real.

vi. Choose the option that displays the same poetic device as used in the last line of the extract.   1

     (a)   Life is a ride   (b)   Tiger tiger burning bright

     (c)   As cunning as a fox   (d)   Accurate estimate of the work

8. **Read the given extracts and answer the questions for ANY ONE of the two, given.**   **4**

A. He said I was unhappy. That made my wife kind of mad, but he explained that he meant the modern world is full of insecurity, fear, war, worry and all the rest of it and that I just want to escape. Well, who doesn't? Everybody I know wants to escape, but they don't wander down into any third level at Grand Central Station. But that's the reason, he said, and my friends all agreed. Everything points to it, they claimed. My stamp collecting, for example; that's a 'temporary refuge from reality.' Well, maybe, but my grandfather didn't need any refuge from reality.

(The Third Level)

i. Why didn't Charley's grandfather need refuge from reality?   1

ii. Why did Sam's verdict make Charley's wife 'mad'?   1

iii. Select the option that signifies the condition of people of the 'modern world' mentioned in the extract.   1

     (a)   afraid   (b)   anxious

     (c)   unsure   (d)   All of these

iv. Complete the sentence appropriately.   1

Sam's explanation to the reaction of Charley's wife was _____ in nature.

<div align="center">Or</div>

B. Will the West Antarctic ice sheet melt entirely? Will the Gulf Stream ocean current be disrupted? Will it be the end of the world as we know it? Maybe. Maybe not. Either way, Antarctica is a crucial element in this debate – not just because it's the only place in the world, which has never sustained a human population and therefore remains relatively 'pristine' in this respect; but more importantly, because it holds in its ice-cores half-million-year-old carbon records trapped in its layers of ice.

(On the Face of It)

i. What does the phrase 'May be. May be not' in the extract indicate?   1

     (a)   Uncertainty   (b)   Foretelling

     (c)   Suspicion   (d)   Despair

ii. Find a word in the extract which is a synonym of 'perfect'.   1

iii. Why does Antarctica holds importance?   1

iv. Complete the sentence appropriately.   1

The questions asked by the narrator signify _____.

9. **Read the given extracts and answer the questions for ANY ONE of the two, given.** **6**

A. Poor man! It was in the honour of this last lesson that he had out on his fine Sunday clothes, and now I understood why the old men of the village were sitting there in the back of the room. It was because they were sorry, too, that they had not gone to school more. It was their way of thanking our master for his forty years of faithful service and of showering their respect for the country that was theirs no more. While I was thinking of all this, I heard my name called. It was my turn to recite. What would I not have given to be able to say that dreadful rule for the participle all through, very loud and clear, and without one mistake? But I got mixed up on the first words and stood there, holding on to my desk, my heart beating, and not daring to look up.

(The Last Lesson)

i. List any two details M. Hamel discussed in the given extract. 1

ii. How did M. Hamel react to this show of 'non-performance'? 1
  (a) He let the iron ruler talk.
  (b) He ignored his pupil's lack of commitment.
  (c) He didn't utter a harsh word in response.
  (d) He let Franz be free and sent him out.

iii. Complete the sentence appropriately. 1
The old men of the village on the back benches were _____.

iv. Pick out an evidence from the extract given that helps one infer his way of showing patriotic love for his land and language. 1

v. Who is the 'Poor man'? 1

vi. Which of the following headlines best suggests the central idea of the given extract? 1
  (a) Honour to the village people   (b) Respect for human beings
  (c) Faithful services of M. Hamel   (d) Too late for school

Or

B. Unaware of what his name represents, he roams the streets with his friends, an army of barefoot boys who appear like the morning birds and disappear at noon. Over the months, I have come to recognise each of them.
"Why aren't you wearing chappals?" I ask one.
"My mother did not bring them down from the shelf:' he answers simply.
"Even if she did, he will throw them off," adds another who is wearing shoes that do not match.
When I comment on it, he shuffles his feet and says nothing. "I want shoes:' says a third boy who has never owned a pair all his life. Travelling across the country I have seen children walking barefoot, in cities, on village roads. It is not lack of money but a tradition to stay barefoot, is one explanation.

(Lost Spring)

i. What is the writer's purpose in allowing the boys to speak for themselves via dialogue, as opposed to only a writer's commentary ?   1

ii. The line, "It is not lack of money but a tradition to stay barefoot" can be best classified as :   1
   (a) A theme   (b) An opinion
   (c) A fact   (d) A plot point

iii. Explain any one possible inference that can be drawn from the line, "an army of barefoot boys who appear like the morning birds and disappear at noon".   1

iv. Identify the line from the text that bears evidence to the fact that the writer's association with the boys is not a recent one.   1

v. Based on the context provided in the extract, select the most likely comment that the writer would have made, based on the boy's reaction to the mismatched shoes.   1
   (a) "I like your shoes. What matters is that they protect your feet?"
   (b) "Don't worry about your shoes, you can wear a matching pair later."
   (c) "Why are your shoes mismatched? That's not a good look"
   (d) "Have you chosen to mismatch your shoes?

vi. Complete the sentence with ONE word.   1
   The phrase "he answers simply", suggests that the boy's response to the writer's question about why he wasn't wearing chappals was _____.

10. **Answer ANY FIVE of the following six questions, in about 40-50 words.** $5 \times 2 = 10$

i. How is the bangle industry of Firozabad a curse for the bangle makers?

(Lost Spring)

ii. What did the gift of the rattrap signify?

(The Rattrap)

iii. The poem 'Aunt Jennifer's Tigers' is replete with symbols. Interpret any two symbols used in the poem.
(Aunt Jennifer's Tigers)

iv. What different images does the poet use to convey the idea of her mother's old age?
(My Mother at Sixty-Six)

v. What tempted Franz to stay away from school?

(The Last Lesson)

vi. Why did Gandhiji feel that taking the Champaran case to the court was useless?

(Indigo)

11. **Answer ANY TWO of the following three questions, in about 40-50 words.** $2 \times 2 = 4$

i. "But Sadao searching the spot of black in the twilight sea that night, had his reward". What was the reward?

(The Enemy)

ii. How did 'The World' help Charley to confirm his doubts regarding the existence of a third level?

(The Third Level)

iii. What considerations influenced the Tiger King to get married?

(The Tiger King)

12. **Answer ANY ONE of the following two questions, in about 120-150 words.** **5**

A. Why do you think Gandhiji considered the Champaran episode to be a turning-point in his life?

(Indigo)

Or

B. The story 'The Rattrap' is both entertaining and philosophical. Discuss.

(The Rattrap)

13. **Answer ANY ONE of the following two questions, in about 120-150 words.** **5**

A. What is the bond that unites old Mr. Lamb and Derry, the boy? How does the old man inspire the boy?

(On the Face of It)

Or

B. 'We too are Human Beings' highlights high caste - low caste discrimination in society. How do low caste people suffer on account of this? What advice is given to Bama to overcome this problem?

(Memories of Childhood)

□□□□□□□

Mathematics (Code-041)
Class XII Session 2023-24

Time Allowed: 3 Hours   **Maximum Marks : 80**

General Instructions :
1. This Question Paper contains - five sections A, B, C, D and E. Each section is compulsory. However, there are internal choices in some questions.
2. Section A has 18 MCQs and 02 Assertion-Reason based questions of 1 mark each.
3. Section B has 5 Very Short Answer (VSA)-type questions of 2 marks each.
4. Section C has 6 Short Answer (SA)-type questions of 3 marks each.
5. Section D has 4 Long Answer (LA)-type questions of 5 marks each.
6. Section E has 3 source based/case based/passage based/integrated units of assessment (4 marks each) with sub-parts.

Section - A

Multiple Choice Questions each question carries 1 mark.

1. Which of the following function is decreasing on $(0, \pi/2)$?
   (a) $\sin 2x$ (b) $\cos 3x$
   (c) $\tan x$ (d) $\cos 2x$

2. $\int \dfrac{\sin 2x}{\sin^2 x + 2\cos^2 x} dx$ is equal to

   (a) $-\log(1 + \sin^2 x) + C$ (b) $\log(1 + \cos^2 x) + C$
   (c) $-\log(1 + \cos^2 x) + C$ (d) $\log(1 + \tan^2 x) + C$

3. The value of $\int_{-2}^{2}(x \cos x + \sin x + 1)\, dx$ is

   (a) 2   (b) 0
   (c) -2 (d) 4

4. $\int_{0}^{\pi/2} \dfrac{\sin x - \cos x}{1 + \sin x \cos x} dx$ is equal to
   (a) 0   (b) $\dfrac{\pi}{4}$
   (c) $\dfrac{\pi}{2}$ (d) π

5. If A and B are two equivalence relations defined on set C, then
   (a) $A \cap B$ is an equivalence relation   (b) $A \cap B$ is not an equivalence relation
   (c) $A \cap B$ is an equivalence relation   (d) $A \cap B$ is not an equivalence relation

6. If A and B are two symmetric matrices of same order. Then, the matrix $AB - BA$ is equal to

    (a)   a symmetric matrix   (b) a skew-symmetric matrix

    (c)   a null matrix   (d) the identity matrix

7. If $x = e^{y + e^{y + e^{y + \cdots}}}$, then $\dfrac{dy}{dx}$ is equal to

    (a) $\dfrac{1}{x}$ (b) $\dfrac{1-x}{x}$

    (c) $\dfrac{x}{1+x}$ (d) None of these

8. The derivative of $\log|x|$ is

    (a) $\dfrac{1}{x}, \; x > 0$ (b) $\dfrac{1}{|x|}, \; x \neq 0$

    (c) $\dfrac{1}{x}, \; x \neq 0$ (d) None of these

9. The condition that $f(x) = ax^3 + bx^2 + cx + d$ has no extreme value is

    (a) $b^2 > 3ac$ (b) $b^2 = 4ac$

    (c) $b^2 = 3ac$ (d) $b^2 < 3ac$

10. The area bounded by the curve $y = \dfrac{1}{2}x^2$, the X-axis and the ordinate $x = 2$ is

    (a) $\dfrac{1}{3}$ sq unit   (b) $\dfrac{2}{3}$ sq unit

    (c)   1 sq unit   (d) $\dfrac{4}{3}$ sq unit

11. The solution of $\dfrac{dy}{dx} = \dfrac{ax + g}{by + f}$ represents a circle, when

    (a) $a = b$ (b) $a = -b$

    (c) $a = -2b$ (d) $a = 2b$

12. The family of curves $y = e^{a \sin x}$, where a is an arbitrary constant is represented by the differential equation

    (a) $\log y = \tan x \dfrac{dy}{dx}$ (b) $y \log y = \tan x \dfrac{dy}{dx}$

    (c) $y \log y = \sin \dfrac{dy}{dx}$ (d) $\log y = \cos x \dfrac{dy}{dx}$

13. The order of the differential equation whose solution is $y = a \cos x + b \sin x + ce^{-x}$, is

    (a)   3   (b) 1

    (c)   2   (d) 4

14. If $\left|\vec{a} \times \vec{b}\right|^2 + \left|\vec{a} \cdot \vec{b}\right|^2 = 144$ and $\left|\vec{a}\right| = 4$, then $\left|\vec{b}\right|$ is equal to

(a)   16

(b) 8

(c)   3

(d) 12

15. If $\vec{x}$ and $\vec{y}$ are unit vectors and $\vec{x} \cdot \vec{y} = 0$, then

(a) $\left|\vec{x} + \vec{y}\right| = 1$

(b) $\left|\vec{x} + \vec{y}\right| = \sqrt{3}$

(c) $\left|\vec{x} + \vec{y}\right| = 2$

(d) $\left|\vec{x} + \vec{y}\right| = \sqrt{2}$

16. The distance of the plane $6x - 3y + 2z - 14 = 0$ from the origin is

(a)   2

(b) 1

(c)   14

(d) 8

17. If $P(A \cup B) = 0.83$, $P(A) = 0.3$ and $P(B) = 0.6$, then the events will be

(a)   dependent

(b) independent

(c)   cannot say anything

(d) None of the above

18. If A and B are two independent events such that $P(A) = \frac{1}{2}$ and $P(B) = \frac{1}{3}$, then P (neither A nor B) is equal to

(a) $\frac{2}{3}$

(b) $\frac{1}{6}$

(c) $\frac{5}{6}$

(d) $\frac{1}{3}$

19. Let us define $\tan^{-1}A + \tan^{-1}B = \tan^{-1}\left(\frac{A+B}{1-AB}\right)$

Assertion : The value of $\tan^{-1}\left(\frac{3}{4}\right) + \tan^{-1}\left(\frac{1}{7}\right)$ is $\frac{\pi}{4}$.

Reason : If $x > 0, y > 0$ than $\tan^{-1}\left(\frac{x}{y}\right) + \tan^{-1}\left(\frac{y-x}{y+x}\right) = \frac{\pi}{4}$

(a)   Assertion is true, reason is true, reason is a correct explanation for assertion.

(b)   Assertion is true,reason is true, reason is not a correct explanation for assertion.

(c)   Assertion is true, reason is false.

(d)   Assertion is false, reason is true.

20. **Assertion :** If A is a matrix of order 2×2, then $\left|\text{adj A}\right| = \left|A\right|$
Reason : $\left|A\right| = \left|A^{\mathrm{T}}\right|$

(a)   Assertion is true, reason is true, reason is a correct explanation for assertion.

(b)   Assertion is true,reason is true, reason is not a correct explanation for assertion.

(c)   Assertion is true, reason is false.

(d)   Assertion is false, reason is true.

Section - B

This section comprises of very short answer type-questions (VSA) of 2 marks each.

21. Write the vector equation of a line passing through point $(1, -1, 2)$ and parallel to the line whose equation is $\frac{x-3}{1} = \frac{y-1}{2} = \frac{z+1}{-2}$.

22. Write the value of $\int_0^1 \frac{e^x}{1 + e^{2x}} \, dx$.

23. Find the differential equation representing the family of curves $y = ae^{bx+5}$, where a and b are arbitrary constants.

24. Write a unit vector in the direction of the sum of the vectors $\vec{a} = 2\hat{i} + 2\hat{j} - 5\hat{k}$ and $\vec{b} = 2\hat{i} + \hat{j} - 7\hat{k}$.

OR

If $\vec{a} = \hat{i} - \hat{j} + 7\hat{k}$ and $\vec{b} = 5\hat{i} - \hat{j} + \lambda\hat{k}$, then find the value of λ, so that $\vec{a} + \vec{b}$ and $\vec{a} - \vec{b}$ are perpendicular vectors.

25. Two groups are computing for the positions of the Board of Directors of a corporation. The probabilities that the first and second groups will win are 0.6 and 0.4 respectively. Further, if the first group wins, the probability of introducing a new product introduced way by the second group.

Section - C

This section comprises of short answer type questions (SA) of 3 marks each.

26. If $A = \{1, 2, 3\}, B = \{4, 5, 6, 7\}$ and
$f = \{(1, 4), (2, 5), (3, 6)\}$ is a function from A to B. State whether f is one-one or not.

27. Solve for x, $\cos^{-1} x + \sin^{-1}\left(\frac{x}{2}\right) = \frac{\pi}{6}$.

28. Given $A = \begin{bmatrix} 2 & -3 \\ -4 & 7 \end{bmatrix}$, compute A^{-1} and show that $2A^{-1} = 9I - A$.

OR

If $A = \begin{bmatrix} 2 & 3 \\ 5 & -2 \end{bmatrix}$ be such that $A^{-1} = kA$, then find the value of k.

29. Evaluate $\int \frac{x^2 + x + 1}{(x^2 + 1)(x + 2)} \, dx$.

30. Evaluate $\int_0^{\pi/2} x^2 \sin x \, dx$.

OR

Evaluate $\int_{\pi/4}^{\pi/2} \cos 2x \cdot \log(\sin x) \, dx$.

31. Let $\vec{a} = \hat{i} + \hat{j} + \hat{k}$, $\vec{b} = 4\hat{i} - 2\hat{j} + 3\hat{k}$ and $\vec{c} = \hat{i} - 2\hat{j} + \hat{k}$. Find a vector of magnitude 6 units, which is parallel to the vector $2\vec{a} - \vec{b} + 3\vec{c}$.

Section - D

This section comprises of long answer-type questions (LA) of 5 marks each.

32. If $A = \begin{bmatrix} 1 & -1 \\ 2 & -1 \end{bmatrix}$, $B = \begin{bmatrix} a & 1 \\ b & -1 \end{bmatrix}$ and $(A + B)^2 = A^2 + B^2$, then find the values of a and b.

OR

Find the adjoint of the matrix $A = \begin{bmatrix} -1 & -2 & -2 \\ 2 & 1 & -2 \\ 2 & -2 & 1 \end{bmatrix}$ and hence show that $A(adj\ A) = |A|I_3$.

33. If $x = \cos t + \log \tan\left(\dfrac{t}{2}\right)$, $y = \sin t$, then find the values of $\dfrac{d^2 y}{dt^2}$ and $\dfrac{d^2 y}{dx^2}$ at $t = \dfrac{\pi}{4}$.

OR

Find the values of a and b, if the function f defined by $f(x) = \begin{cases} x^2 + 3x + a, & x \leq 1 \\ bx + 2, & x > 1 \end{cases}$ is differentiable at $x = 1$.

34. Find the particular solution of the differential equation satisfying the given condition.

$$x^2\,dy + (xy + y^2)\,dx\ = 0, \text{ when } y(1) = 1$$

OR

Find the particular solution of the differential equation

$$x\frac{dy}{dx} - y + x\,\text{cosec}\left(\frac{y}{x}\right) = 0$$

35. Let $\vec{a} = \hat{i} + 4\hat{j} + 2\hat{k}$, $\vec{b} = 3\hat{i} - 2\hat{j} + 7\hat{k}$ and $\vec{c} = 2\hat{i} - \hat{j} + 4\hat{k}$. Find a vector $\vec{p}$, which is perpendicular to both $\vec{a}$ and $\vec{b}$ and $\vec{p} \cdot \vec{c} = 18$.

Section - E

Case study based questions are compulsory.

36. An insurance company believes that people can be divided into two classes: those who are accident prone and those who are not. The company's statistics show that an accident-prone person will have an accident at sometime within a fixed one-year period with probability 0.6, whereas this probability is 0.2 for a person who is not accident prone. The company knows that 20% of the population is accident prone.

On the basis of above information, answer the following questions.

(i)   What is the probability that a new policyholder will have an accident within a year of purchasing a policy?
(ii) Suppose that a new policy holder has an accident within a year of purchasing a policy. What is the probability that he or she is accident prone?

37.   Chemical reaction, a process in which one or more substances, the reactants, are converted to one or more different substances, the products. Substances are either chemical elements or compounds. A chemical reaction rearranges the constituent atoms of the reactants to create different substances as products.

In a certain chemical reaction, a substance is converted into another substance at a rate proportional to the square of the amount of the first substance present at any time t. Initially $(t = 0)$ 50 g of the first substance was present; 1 hr later, only 10 g of it remained.
(i)   Find an expression that gives the amount of the first substance present at any time t.
(ii) What is the amount present after 2 hr?

38.   Vitamins are nutritional substances which you need in small amounts in your diet. Vitamins A and E are fat-soluble vitamins, meaning they're stored in your body's fat cells, but they need to have their levels topped up regularly. Vitamin C is a water-soluble vitamin found in citrus and other fruits and vegetables, and also sold as a dietary supplement. It is used to prevent and treat scurvy. Vitamin C is an essential nutrient involved in the repair of tissue, the formation of collagen, and the enzymatic production of certain neurotransmitters.

A dietician wishes to mix two types of foods in such a way that the vitamin contents of mixture contains atleast 8 units of vitamin A and 10 units of vitamin C. Food I contains 2 units per kg of vitamin A and 1 unit per kg of vitamin C, while food II contains 1 unit per kg of vitamin A an 2 units per kg of vitamin C. It costs Rs. 30 per kg to purchase food I and Rs. 42 per kg to purchase food II.
(i)   Formulate above as an LPP and solve it graphically.
(ii) Find the minimum cost of such a mixture.

# Biology (044)

Class XII Session 2023-24

Time: 3 Hours
Max. Marks: 70

General Instructions:

1. All questions are compulsory.
2. The question paper has five sections and 33 questions. All questions are compulsory.
3. Section—A has 16 questions of 1 mark each; Section—B has 5 questions of 2 marks each; Section—C has 7 questions of 3 marks each: Section—D has 2 case-based questions of 4 marks each; and Section—E has 3 questions of 5 marks each.
4. There is no overall choice. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.
5. Wherever necessary, neat and properly labeled diagrams should be drawn.

SECTION - A

1. Along with nicotine, cigarette smokers also have the intake tars, phenols, hydrocarbons, arsenic and many other chemicals. Which of the following is not an effect of smoking tobacco?

   (a) Narrowing or hardening of blood vessels in the heart and brain

   (b) A higher frequency of respiratory infections (e.g., colds, pneumonia)

   (c) A higher risk of cancer, including cancer of the lungs, mouth, larynx, bladder and kidneys

   (d) None of these

2. Big holes in Swiss cheese are made by a
   (a) a machine
   (b) a bacterium that produces methane gas
   (c) a bacterium producing a large amount of carbon dioxide
   (d) a fungus that releases a lot of gases during its metabolic activities.

3. Fitness according to Darwin refers to
   (a) number of species in a community
   (b) useful variation in population
   (c) strength of an individual
   (d) reproductive fitness of an organism.

4. What does the shape of the given age pyramids reflects about the growth status of the related population?
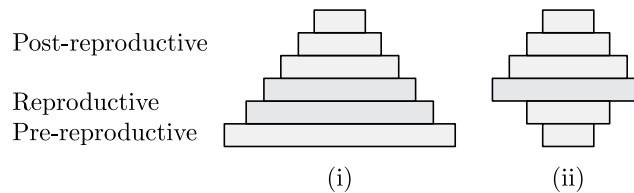
   (a) Expanding Stable
   (b) Stable   Declining
   (c) Expanding Declining
   (d) Declining Stable

5. In pBR322, tetracycline resistance gene (tet^R) has recognition site for which of the following restriction endonuclease?

(a) *Hind* III　　　　　　　　　　　　　　(b) *Bam*H I

(c) *Eco*R I　　　　　　　　　　　　　　(d) *Pst* I

6. What is the correct sequence of sperm formation?
(a) Spermatogonia, spermatozoa, spermatocytes, spermatids

(b) Spermatogonia, spermatocytes, spermatids, spermatozoa

(c) Spermatids, spermatocytes, spermatogonia, spermatozoa

(d) Spermatogonia, spermatocytes, spermatozoa, spermatids

7. The biomass available for consumption to heterotrophs and the rate of formation of new organic matter by consumers are referred to as
(a) gross primary productivity and net primary productivity respectively

(b) net primary productivity and gross primary productivity respectively

(c) gross primary productivity and secondary productivity respectively

(d) net primary productivity and secondary productivity respectively.

8. Which of the following approaches does not give the defined action of contraceptive?

|		
(a)	Hormonal contraceptives	Prevent/retard entry of sperms, prevent ovulation and fertilisation
(b)	Vasectomy	Prevents spermatogenesis
(c)	Barrier methods	Prevent fertilisation
(d)	Intra uterine devices	Increase phagocytosis of sperms, suppress sperm motility and fertilising capacity of sperms

9. Refer to the given table of contrasting traits in pea plants studied by Mendel.

Which of the given traits are incorrectly placed?
(a) (i), (ii) and (iii) only　　　　　　　(b) (ii), (iii) and (iv) only

(c) (i) and (iv) only　　　　　　　　　(d) (iii) only

10. Study the following figures and identify the enzymes involved in steps I and II respectively.
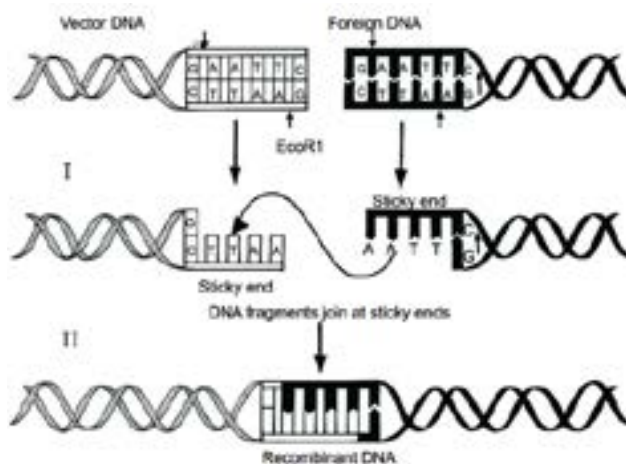
(a) *Eco*R I and DNA ligase   (b) *Hind* II and DNA ligase

(c) *Eco*R I and *Hind* II   (d) Restriction endonuclease and exonuclease

11. Ernst Chain and Howard Florey's contribution was

(a) establishing the potential of penicillin as an effective antibiotic

(b) discovery of streptokinase

(c) production of genetically engineered insulin

(d) discovery of DNA sequence

12. Which of the following phenomena was experimentally proved by Meselson and Stahl?

(a) Transformation   (b) Transduction

(c) Semi-conservative DNA replication   (d) Central dogma

13. **Assertion :** Offsite collections can be used to restock depleted populations, reintroduce species in the wild and restore degraded habitats.
Reason : In situ conservation refers to the conservation of endangered species in their natural habitats.

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true and R is not the correct explanation of A.

(c) A is true but R is false.

(d) A is false but R is true.

14. **Assertion :** The introduction of Nile perch in lake Victoria caused cichlids to become extinct.
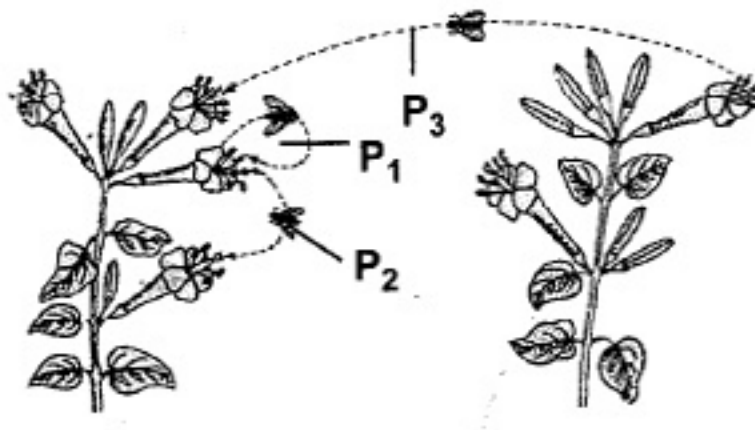**Reason :** Nile perch is an indigenous species of East Africa.

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true and R is not the correct explanation of A.

(c) A is true but R is false.

(d) A is false but R is true.

15. In the given diagram two plants of the same species depict different types of pollination indicated by the labellings P_1, P_2 and P_3. Study this diagram and comment upon the appropriateness of the Assertion and Reason.

Assertion : P_1 is a type of self pollination.
Reason : In P_1, complete flower is pollinated by its own pollen.

(a)   Both A and R are true and R is the correct explanation of A.

(b)   Both A and R are true and R is not the correct explanation of A.

(c)   A is true but R is false.

(d)   A is false but R is true.

16. **Assertion :** Biodiversity hotspots are the regions which possess low levels of species richness, high degree of endemism and no loss to habitats.

Reason : Total number of biodiversity hotspots in the world is 34 with three of these hotspots found in India.

(a)   Both A and R are true and R is the correct explanation of A.

(b)   Both A and R are true and R is not the correct explanation of A.

(c)   A is true but R is false.

(d)   A is false but R is true.

SECTION - B

17. Write the relationship between productivity, gross primary productivity, net primary productivity and secondary productivity.

OR

State the difference between the first trophic levels of detritus food chain and grazing food chain.

18. Tallness of pea plant is a dominant trait, while dwarfness is the alternate recessive trait. When a pure-line tall is crossed with pure-line dwarf, what fraction of tall plant in F_2 shall be heterozygous? Give reasons.

19. Refer to the given figure and answer the following questions.
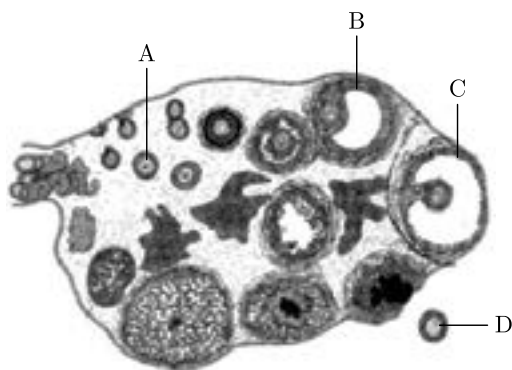
(i)   Which of the labelled structures is a pre-birth structure and is not formed thereafter?

(ii) Which of the labelled structures responds to LH surge by rupturing?

20. A young boy when brought a pet dog home started to complaint of watery eyes and running nose. The symptoms disappeared when the boy was kept away from the pet.

(a)   Name the type of antibody and the chemicals responsible for such a response in the boy.

(b)   Mention the name of any one drug that could be given to the boy for immediate relief from such a response.

21. State the functions of the following in the cloning vector pBR322 :

(a)   ori   (b) rop

SECTION - C

22. Explain the steps in the formation of an ovum from an oogonium in humans.

23. (a)   Can a plant flowering in Mumbai be pollinated by pollen grains of the same species growing in New Delhi? Provide explanations to your answer.

(b)   Draw the diagram of a pistil where pollination has successfully occurred. Label the parts involved in transferring the male gametes to their desired destination.

24. (a)   What do 'Y' and 'B' stand for in 'YAC' and 'BAC' used for DNA sequencing in Human Genome Project (HGP)? Mention their role in the project.

(b)   Write the percentage of human genome that codes for proteins and the percentage of discovered genes whose functions are unknown.

(c)   Expand `SNPs' identified by scientists in HGP.

25. (a)   Explain adaptive radiation with the help of a suitable example.

(b)   Cite an example where more than one adaptive radiation have occurred in an isolated geographical area. Name the type of a evolution your example depict and state why it is so named.

26. (a)   Explain the basis on which the gel electrophoresis technique works.

(b)   Write any two ways by which products obtained through this technique can be utilised.

27. Why are lymph nodes and bone marrows called lymphoid organs? Explain the functions of each one.

<div align="center">OR</div>

(a) Name the causative organisms for the following diseases :

    (i)   Elephantiasis
    (ii)   Ringworm
    (iii) Amoebiasis

(b) How can public hygiene help control infectious diseases?

**28.** Name and describe any three causes of biodiversity losses.

SECTION - D

DIRECTION : Question No. 29 and 30 are case based questions. Each question has subparts with internal choice in one subpart.

29. Acquired immunity is pathogen specific and characterised by memory. Whenever our body encounters a pathogen for the first time, it produces a response. Subsequent encounter with the same pathogen elicts a highly intensified secondary response.

(a) Name the two lymphocytes which are responsible for acquired immunity.

(b) Identify the structure shown in the figure.
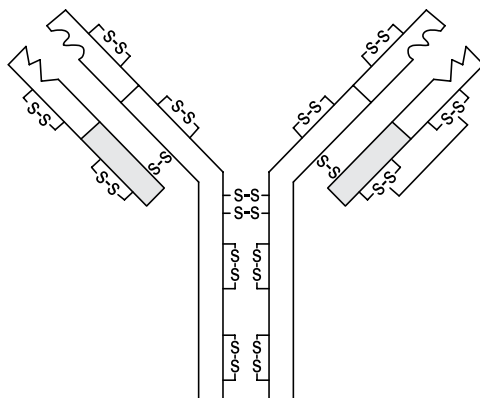
(c) It is generally observed that the children who had suffered from chicken-pox in their childhood may not contract the same disease in their adulthood. Explain giving reasons the basis of such an immunity in an individual. Name this kind of immunity.

<div align="center">OR</div>

(c) Differentiate between the two lymphocytes responsible for acquired immunity.

30. The process of copying genetic information from template strand of DNA into RNA is called transcription. It is mediated by RNA polymerase. Transcription takes place in the nucleus of eukaryotic cells. In transcription, only a segment of DNA and only one of the strands is copied into RNA. Transcription mainly consists of three steps. One of the steps of transcription is given below.
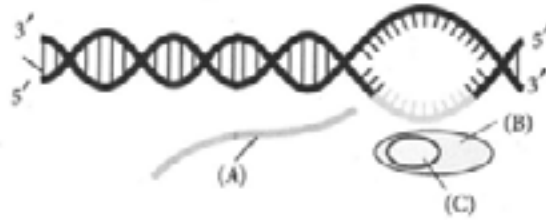
(a) Identify the given step and name the labels B and C.

(b) What will happen if C is not available in the above process?

(c) What changes will take place in A after the completion of above process in eukaryotes?

OR

(c) Briefly explain the previous step or given figure taking place in prokaryotes.

SECTION - E

31. (a) Forelimbs of given animals have the same basic structural plan. Such organs have similar developmental pattern and they develop in related organisms, but these do differ morphologically. What type of evolution and structure is exhibited by the organisms given in the figure.
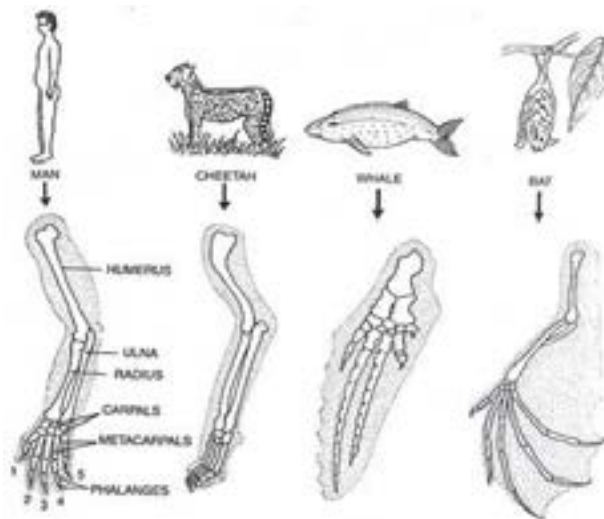
(b) (i)   Differentiate between analogy and homology giving one example each of plant and animal.

     (ii) How analogy and homology considered as an evidence in support of evolution?

OR

Refer to the given information regarding human evolution given below and answer the following questions.
The fossil evidence clearly indicates that origin of man occured in Central Asia. About 15 mya, primates called Dryopithecus and Ramapithecus were existing. Among the stories of evolution, the story of evolution of modern man appears to parallel evolution of human brain and their charactristics development.

(a) Where did Australopithecus evolve?

(b) Write the scientific name of Java man.

(c) Name the first human like hominid. Mention his food habit and brain capacity.

(d) Write the characteristics of Ramapithecus and Neanderthal man.

32. Describe the roles of pituitary and ovarian hormones during the menstrual cycle in a human female.

<div align="center">OR</div>

(i) Trace the development of megaspore mother cell up to the formation of a mature embryo sac in a flowering plant.

(ii) Draw a labelled diagram of the structure of mature dicot embryo.

33. (i) What is *Eco*RI? How does *Eco*RI differ from an exonuclease?

(ii) EcoRI is used to cut a segment of foreign DNA and that of a vector DNA to form a recombinant DNA.

Show with the help of schematic diagrams.

    (a) The set of palindromic nucleotide sequence of base pairs the EcoRI will recognise in both the DNA segments. Mark the site at which EcoRI will act and cut both the segments.

    (b) Sticky ends formed on both the segments where the two DNA segments will join later to form a recombinant DNA.

<div align="center">OR</div>

(i) (a) Identify Ⓐ and Ⓑ illustrations in the following:
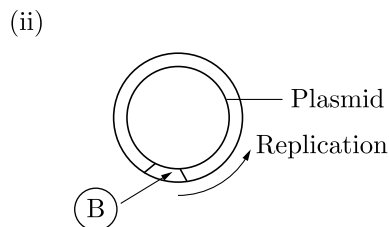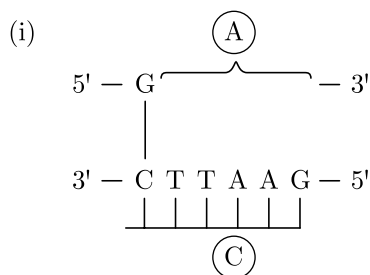
(b) Write the term given to Ⓐ and Ⓒ and why?

(ii) (a) Expand PCR. Mention its importance in biotechnology.

(b) Describe the roles of heat, primers and the bacterium Thermus aquaticus in the process of PCR.

Class XII 2023-24

Physics

Time: 3 Hours   **Max. Marks: 70**

General Instructions:

1. There are 33 questions in all. All questions are compulsory.
2. This question paper has five sections: Section A, Section B, Section C, Section D and Section E.
3. All the sections are compulsory.
4. Section A contains sixteen questions, twelve MCQ and four assertion reasoning based of 1 mark each, Section B contains five questions of 2 marks each, Section C contains seven questions of 3 marks each, Section D contains two case study based questions of 4 marks each and Section E contains three long questions of 5 marks each.
5. There is no overall choice. However, an internal choice has been provided in one question in Section B, one question in Section C, one question in each CBQ in Section D and all three questions in Section E. You have to attempt only one of the choices in such questions
6. Use of calculators is not allowed.
7. You may use the following values of physical constants where ever necessary

   i. $c = 3 \times 10^8$ m/s
   ii. $m_e = 9.1 \times 10^{-31}$ kg
   iii. $e = 1.6 \times 10^{-19}$ C
   iv. $\mu_0 = 4\pi \times 10^{-7}$ TmA^{-1}

   v. $h = 6.63 \times 10^{-34}$ Js
   vi. $\varepsilon_0 = 8.854 \times 10^{-12} C^2 N^{-1} m^{-2}$
   vii. Avogadro's number $= 6.023 \times 10^{23}$ per gram mole

---

SECTION-A

1. Lenz's law is associated with principle of conservation of

(a) charge   (b) mass

(c) energy   (d) momentum

2. When a body is connected to the earth, then electrons from the earth, flow into the body. It means that the body is

(a) unchanged   (b) an insulator

(c) positively charged   (d) negatively charged

3. The interference occurs in which of the following waves?

(a) transverse   (b) longitudinal

(c) electromagnetic   (d) all of these

4. If the uniform electric field exists along X-axis,then equipotential is along
(a) XY-plane
(b) XZ-plane
(c) YZ-plane
(d) anywhere

5. Rutherfrd's α-particle experiment showed that the atoms have
(a) proton
(b) nucleus
(c) neutron
(d) electrons

6. The net charge on a current carrying conductor is
(a) zero
(b) constant
(c) varying
(d) negative

7. The radius of curvature of plane mirror is
(a) infinite
(b) zero
(c) $+5\,\text{cm}$
(d) $-5\,\text{cm}$

8. The direction of magnetic field produced by a current-carrying small element of any shape is given by
(a) lenz law
(b) newton's law
(c) right-hand thumb rule
(d) fleming left-hand rule

9. The value of peak AC in a 220 V mains is
(a) 220 V
(b) $110\sqrt{2}$ V
(c) $220\sqrt{2}$ V
(d) $440\sqrt{2}$ V

10. A bar magnet of magnetic moment M is cut into two parts of equal length. The magnetic moment of either part is
(a) M
(b) $M/2$
(c) $2M$
(d) Zero

11. The direction of transmission of electromagnetic wave is
(a) Parallel to $\vec{E}$
(b) Parallel to $\vec{B}$
(c) Parallel to $\vec{B} \times \vec{E}$
(d) Parallel to $\vec{E} \times \vec{B}$

12. If momentum of a particle is doubled, then its de-Broglie's wavelength will
(a) be half
(b) be two times
(c) be four times
(d) remain unchanged

13. **Assertion (A) :** A small metal ball is suspended in a uniform electric field with an insulated thread. If high energy X-ray beam falls on the ball, the ball will be deflected in the electric field.
    Reason (R) : X-rays emits photoelectrons and metal becomes negatively charged.
    (a) Both Assertion and Reason are correct and Reason is the correct explanation of Assertion.
    (b) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
    (c) Assertion is correct but Reason is incorrect.
    (d) Assertion is incorrect but Reason is correct.

14. **Assertion :** X-ray travel with the speed of light.
    Reason : X-rays are electromagnetic rays.
    (a) Both Assertion and Reason are correct and Reason is the correct explanation of Assertion.
    (b) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
    (c) Assertion is correct but Reason is incorrect.
    (d) Assertion is incorrect but Reason is correct.

15. **Assertion :** Standard optical diffraction gratings can not be used for discriminating between X-ray wavelength.
    Reason : The grating spacing is not of the order of X-ray wavelengths.
    (a) Both Assertion and Reason are correct and Reason is the correct explanation of Assertion.
    (b) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
    (c) Assertion is correct but Reason is incorrect.
    (d) Assertion is incorrect but Reason is correct.

16. **Assertion :** Blue colour of sky appears due to scattering of blue colour.
    Reason : Blue colour has shortest wave length in visible spectrum.
    (a) Both Assertion and Reason are correct and Reason is the correct explanation of Assertion.
    (b) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
    (c) Assertion is correct but Reason is incorrect.
    (d) Assertion is incorrect but Reason is correct.

SECTION-B

17. A hollow metal sphere of radius 5 cm is charged such that potential on its surface is 10 V. What is the potential at the centre of the sphere ?

18. Two identical cells, each of emf E, having negligible internal resistance, are connected in parallel with each other access an external resistance R. What is the current through this resistance?

19. State two characteristic properties distinguishing behaviour of paramagnetic and diamagnetic materials.

20. How does oscillating charge produce electromagnetic waves?

21. Define stopping potential.

<div align="center">**OR**</div>

Write the expression for the de-Broglie wavelength associated with a charged particle having charge q and mass m, when it is accelerated by a potential.

SECTION-C

22. What is the nature of electrostatic force between two point electric charges q_1 and q_2 if

1. $q_1 + q_2 > 0$?
2. $q_1 + q_2 < 0$?

23. A circular coil of closely wound N turns and radius r carries a current I. Write the expressions for the following:

1. The magnetic field at its centre.
2. The magnetic moment of this coil.

24. A bar magnet is moved in the direction indicated by the arrow between two coils PQ and CD. Predict the directions of induced current in each coil.
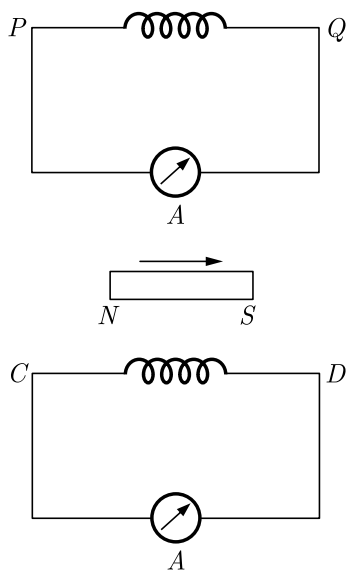
25. What is difference between diffraction and interference?

26. Draw path of rays for astronomical telescope in normal adjustment.

27. In a typical nuclear reaction, e.g.,
$$^2_1\text{H} + ^2_1\text{H} \longrightarrow ^3_2\text{He} + \,_0n^1 + 3.27 \text{ MeV}$$
although number of nucleons is conserved, yet energy is released. How? Explain.

28. Conduction and displacement currents are individually discontinuous, but their sum is continuous.

<p align="center">OR</p>

Name the parts of the electromagnetic spectrum which is

(i)   suitable for RADAR systems in aircraft navigations.

(ii) used to treat muscular strain.

(iii) used as a diagnostic tool in medicine.

Write in brief, how these waves can be produced.

SECTION-D

Case Study Based Questions.

Read the following paragraph and answer the questions that follow.

29. A compound microscope is an optical instrument used for observing highly magnified images of tiny objects. Magnifying power of a compound microscope is defined as the ratio of the angle subtended at the eye by the final image to the angle subtended at the eye by the object, when both the final image and the object are situated at the least distance of distinct vision from the eye. It can be given that : $m = m_e \times m_o$, where m_e is magnification produced by eye lens and m_o, is magnification produced by objective lens. Consider a compound microscope that consists of an objective lens of focal length 2.0 cm and an eyepiece of focal length 6.25 cm separated by a distance of 15 cm.

(i)   The object distance for eye-piece, so that final image is formed at the least distance of distinct vision, will be

(a) 3.45 cm   (b) 5 cm

(c) 1.29 cm   (d) 2.59 cm

(ii) How far from the objective should an object be placed in order to obtain the condition described in part(i)?

(a) 4.5 cm   (b) 2.5 cm

(c) 1.5 cm   (d) 3.0 cm

(iii) What is the magnifying power of the microscope in case of least distinct vision?

(a) 20   (b) 30

(c) 40   (d) 10

(iv) The intermediate image formed by the objective of a compound microscope is

(a) real, inverted and magnified

(b) real, erect, and magnified

(c) virtual, erect and magnified

(d) virtual, inverted and magnified

OR

(v) The magnifying power of a compound microscope increases with

(a) the focal length of objective lens is increased and that of eye lens is decreased

(b) the focal length of eye lens is increased and that of objective lens is decreased

(c) focal lengths of both objects and eye-piece are increased

(d) focal lengths of both objects and eye-piece are decreased.

30. A photodiode is an optoelectronic device in which current carriers are generated by photons through photo-excitation i.e., photo conduction by light. It is a p-n junction fabricated from a photosensitive semiconductor and provided with a transparent window so as allow light to fall on its function. A photodiode can turn its current ON and OFF in nanoseconds. So, it can be used as a fastest photo-detector.
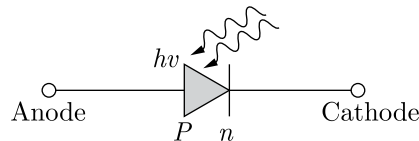
(i) A p-n photodiode is fabricated from a semiconductor with a band gap of 2.5 eV. It can detect a signal of wavelength

(a) 4000 nm   (b) 6000 nm

(c) 4000 Å   (d) 6000 Å

(ii) Three photo diodes D_1, D_2 and D_3 are made of semiconductors having band gap of 2.5 eV, 2 eV and 3 eV, respectively. Which one will be able to detect light of wavelength 6000 Å?

(a) D_1 (b) D_2

(c) D_3 (d) D_1 and D_2 both

(iii) Photodiode is a device

(a) which is always operated in reverse bias

(b) which of always operated in forward bias

(c) in which photo current is independent of intensity of incident radiation

(d) which may be operated in forward or reverse bias.

(iv) To detect light of wavelength 500 nm, the photodiode must be fabricated from a semiconductor of minimum bandwidth of

(a) 1.24 eV   (b) 0.62 eV

(c) 2.48 eV   (d) 3.2 eV

OR

(v) Photodiode can be used as a photodetector to detect

(a) optical signals   (b) electrical signals

(c) both (a) and (b)   (d) none of these

SECTION-E

31. What do you understand by the resistivity of a conductor? Discuss its temperature dependence for a

1. Metallic conductor

2. Semiconductor

3. Ionic conductor

4. Electrolyte.

OR

Determine the potentials at the points X_1 and X_2 in the circuit.
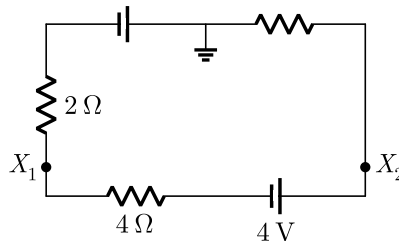
32. What is alternating current? How alternating e.m.f. and current is represented mathematically. What do you mean by time period, frequency and amplitude of alternating current?

OR

Show diagrammatically two different arrangements used for winding the primary and secondary coils in a transformer. Assuming the transformer to be an ideal one, write the expression for the ration of its:

1. Output voltage to input voltage.

2. Output current to input current.

Mention two reasons for energy losses in an actual transformer.

33. Define the term binding energy. The binding energy of a nucleus $_Z^A X$ is given by the formula:

$$\text{B.E.} = [Zm_H + (A - Z)\, m_n - m(_Z^A X)]\, c^2$$

where $m(_Z^A X)$ is the atomic mass of X. Derive this equation, state clearly the approximation involved and say it is very safe approximation.

OR

Give reason for :

(a) Lighter elements are better maderators for a nuclear reactor than heavier elements.

(b) In a natural uranium reactor, heavy water is preferred moderator as compared to ordinary water.

(c) Cadmium rods are provided in a reactor.

(d) Very high temperature as those obtained in the interior of the sun are required for fusion reaction.

Class XII 2023-24
Chemistry

Time: 3 Hours   **Max. Marks: 70**

General Instructions:
1. There are 33 questions in this question paper with internal choice.
2. SECTION A consists of 16 multiple-choice questions carrying 1 mark each.
3. SECTION B consists of 5 very short answer questions carrying 2 marks each.
4. SECTION C consists of 7 short answer questions carrying 3 marks each.
5. SECTION D consists of 2 case-based questions carrying 4 marks each.
6. SECTION E consists of 3 long answer questions carrying 5 marks each.
7. All questions are compulsory.
8. Use of log tables and calculators is not allowed.

SECTION-A

Directions (Q. Nos. 1-16) : The following questions are multiple-choice questions with one correct answer. Each question carries 1 mark. There is no internal choice in this section.

1. Oxidation number of Ni in $\left[Ni(C_2O_4)_3\right]^{4-}$ is

   (a) 3   (b) 4

   (c) 2   (d) 6

2. An ester is boiled with KOH. The product is cooled and acidified with concentrated HCl. A white crystalline acid separates. The ester is

   (a) Methyl acetate   (b) Ethyl acetate

   (c) Ethyl formate   (d) Ethyl benzoate

3. Several blocks of magnesium are fixed to the bottom of a ship to

   (a) make the ship lighter

   (b) prevent action of water and salt

   (c) prevent puncturing by under-sea rocks

   (d) keep away the sharks

4. In respect of the equation $k = Ae^{-E_a/RT}$ in chemical kinetics, which of the following statements is correct?

(a) A is adsorption factor

(b) E_a is energy of activation

(c) R is Rydberg's constant

(d) k is equilibrium constant

5. Diethyl ether on heating with conc. HI gives two moles of

(a) ethanol

(b) iodoform

(c) ethyl iodide

(d) methyl iodide

6. Which of the following forms colourless compound ?

(a) Sc^{3+}

(b) V^{3+}

(c) Ti^{3+}

(d) Cr^{3+}

7. Which one is a colligative property ?

(a) boiling point

(b) vapour pressure

(c) osmotic pressure

(d) freezing point

8. Consider the following sequence of reactions:

$$\text{Compound}\,[A] \xrightarrow{\text{Reduction}}$$

$$[B] \xrightarrow{HNO_2} CH_3CH_2OH$$

The compound [A] is:

(a) CH_3CH_2CN

(b) CH_3NO_2

(c) CH_3NC

(d) CH_3CN

9. When glucose reacts with bromine water, the main product is

(a) gluconic acid

(b) glyceraldehyde

(c) saccharic acid

(d) acetic acid

10. Which of the following is the use of electrolysis?

(a) Electro-refining

(b) Electroplating

(c) Both (a) and (b)

(d) None of these

11. Chloropicrin is

(a) $C_2H_5C(NO)_5SH$

(b) CCl_3CHO

(c) CCl_3NO_2

(d) CCl_3NO_3

12. The molecular weight of benzoic acid in benzene as determined by depression in freezing point method corresponds to:

(a) ionization of benzoic acid.

(b) dimerization of benzoic acid.

(c) trimerizatin of benzoic acid.

(d) solvationof benzoic acid.

Directions (Q. Nos. 13-16) : Each of the following questions consists of two statements, one is Assertion and the other is Reason. Give answer :

13. Assertion : KCl, NaCl and NH_4Cl cannot be used in the salt bridge of a cell containing silver.
Reason : A salt bridge contains concentrated solution of an inert electrolyte like KCl, KNO_3, K_2SO_4 or solidified solution of such an electrolyte in agar-agar and gelatine.

(a) Both Assertion and Reason are correct and Reason is a correct explanation of the Assertion.

(b) Both Assertion and Reason are correct but Reason is not the a correct explanation of the Assertion.

(c) Assertion is correct but Reason is incorrect.

(d) Both the Assertion and Reason are incorrect.

14. Assertion : Members of $4d$ and $5d$ series of transition elements have nearly same atomic radii.
Reason : Atomic and ionic radii for transition elements are smaller than their corresponding s-block elements.

(a) Both Assertion and Reason are correct and Reason is a correct explanation of the Assertion.

(b) Both Assertion and Reason are correct but Reason is not the a correct explanation of the Assertion.

(c) Assertion is correct but Reason is incorrect.

(d) Both the Assertion and Reason are incorrect.

15. Assertion : AgCl dissolves in NH_4OH solution.
Reason : Due to formation of a complex.

(a) Both Assertion and Reason are correct and Reason is a correct explanation of the Assertion.

(b) Both Assertion and Reason are correct but Reason is not the a correct explanation of the Assertion.

(c) Assertion is correct but Reason is incorrect.

(d) Both the Assertion and Reason are incorrect.

16. **Assertion :** Nitration of aniline can be conveniently done by protecting the amino group by acetylation.
    Reason : Acetylation increases the electron-density in the benzene ring.
    (a) Both Assertion and Reason are correct and Reason is a correct explanation of the Assertion.
    (b) Both Assertion and Reason are correct but Reason is not the a correct explanation of the Assertion.
    (c) Assertion is correct but Reason is incorrect.
    (d) Both the Assertion and Reason are incorrect.

SECTION-B

Directions (Q. No. 17-21) : This section contains 5 questions with internal choice in two questions. The following questions are very short answer type and carry 2 marks each.

17. Write down the half cell reaction and cell reaction for the Daniel cell.
    $\text{Zn}(s) \mid \text{Zn}^{+2}(aq.)(1M) \mid\mid \text{Cu}^{+2}(aq.)(1M) \mid \text{Cu}(s)$

18. What is denaturation of alcohol?

19. Write two main functions of carbohydrates in plants.

20. How will rate of a reaction change when $[A]_0$ is doubled and tripled for
    1. zero order reaction.
    2. second order reaction ?

    or

    State the order with respect to each reactant and overall order for the following reaction –
    $$2\text{NOBr}(g) \longrightarrow 2\text{NO}(g) + \text{Br}_2(g)$$
    $$\text{Rate} = k[\text{NOBr}]^2$$
    What are the units of rate constant ?
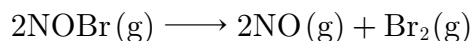
21. Why is it not possible to measure the single electrode potential ?

SECTION-C

Directions (Q. No. 22-28) : This section contains 5 questions with internal choice in two questions. The following questions are short answer type and carry 3 marks each.

22. Why aldehydes are more reactive than ketones ?

23. What are the fuel cells? How are they different from galvanic cells? Give the construction of H_2, O_2 fuel cell?

24. For M^{2+}/M and M^{3+}/M^{2+} systems, $E°$ values for some metals are as follows :

$$Cr^{2+}/Cr = -0.9 \text{ V}$$
$$Cr^{3+}/Cr^{2+} = -0.4 \text{ V}$$
$$Mn^{2+}/Mn = -1.2 \text{ V}$$
$$Mn^{3+}/Mn^{2+} = +1.5 \text{ V}$$
$$Fe^{2+}/Fe = -0.4 \text{ V}$$
$$Fe^{3+}/Fe^{2+} = +0.8 \text{ V}$$

Use this data to comment upon:
1. the stability of Fe^{3+} in acid solution as compared to that of Cr^{3+} and Mn^{3+}.
2. the ease with which iron can be oxidised as compared to a similar process for either chromium or manganese metal.

25. Explain why propanol has higher boiling point than that of the hydrocarbon, butane?

26. Describe method of nitration of benzene.

27. What are Carbohydrates ? Give the classification of carbohydrates.

or

(i) What are vitamins?

(ii) How are vitamins classified? Name the vitamin responsible for coagulation of blood?

28. Give the IUPAC names of the following:

(i) $Cl - CH_2C \equiv C - CH_2 - Br$

(ii) $CH_3CH_2CH(CH_3)CH(C_2H_5)Cl$

SECTION-D

Directions (Q. No. 29-30) : The following questions are case-based questions. Each question has an internal choice and carries 4 marks each. Read the passage carefully and answer the questions that follow.

29. The stability of complex in solution refers to degree of association between the two species involved in the state of equilibrium. The magnitude of the equilibrium constant (stability or formation) for the association, quantitatively expresses the stability. If complex is formed in steps then the stepwise and overall stability constant is related as follows—

$$\beta_n = k_1 \times k_2 \times k_3 \times k_4...k_n$$

The addition of four amine groups to copper shows a pattern found for most formation constants, in which the successive stability constant decreases. The instability constant or the dissociation constant of coordination compound is defined as reciprocal of formation constant β_4.

Table : Stability Constants of Some Complexes

	Complex	Stability Constant (β)
1.	$[Cu(NH_3)_4]^{2+}$	4.5×10^{11}
2.	$[Cu(CN)_4]^{2-}$	2.0×10^{27}
3.	$[Ag(NH_3)_2]^+$	1.6×10^7
4.	$[Co(NH_3)_6]^{3+}$	5.0×10^{33}
5.	$[Ag(CN_2)^-$	5.4×10^{18}
6.	$[Ni(NH_3)_6]^{2+}$	6.1×10^{18}
7.	$[Ni(en)_3]^{2+}$	4.6×10^{18}
8.	$[Fe(CN)_6]^{3-}$	1.2×10^{31}
9.	$[Fe (CN)_6]^{4-}$	1.8×10^6
10.	$[Cd(NH_3)_4]^{2+}$	1.0×10^7

According to the given paragraph, answer the following questions :

(a) Why is stability constants of cyanides are higher than complexes with NH_3 as a ligand?

(b) Which of the complexes given in table is least stable? Why?

(c) (i) Why is $[Fe(CN)_6]^{3-}$ is more stable than $[Fe(CN)_6]^{4-}$?

   (ii) Why is $[Ag(NH_3)_2]^+$ is less stable than $[Cu(NH_3)_4]^{2+}$?

or

(d) Calculate the overall complex dissociation equilibrium constant for the $[Cu(NH_3)_4]^{2+}$ ion, given that for this complex $\beta_4 = 2.0 \times 10^{13}$.

(d) $K(\text{Dissociation constant}) = \dfrac{1}{\beta_4} = \dfrac{1}{2.0 \times 10^{13}} = 5 \times 10^{-13}$

30. The vapour pressure of solvent is lowered by the presence of non-volatile solute and this lowering of vapour pressure is governed by Raoult's law, according to which 'the relative lowering of vapour pressure of the solvent over a solution is equal to mole fraction of solute present in the solution. However in a binary solution if both components are volatile then another form of Raoult's law is used. The partial vapour pressure of each component is directly proportional to their mole fractions and $p_{\text{total}} = p_1^0 x_1 + p_2^0 x_2$. Solutions which obey Raoult's law over the entire range of concentration are called ideal solutions. Two types of deviations from Raoult's law are observed, positive and negative by non-ideal solution depending upon interaction between the components. Azeotropes are formed due to very large deviations from Raoult's law.

Read the passage and answer the following questions:

(a) What type of solution is formed by ethanol and water?

(b) What type of solution is formed by benzene and toluene?

(c) The vapour pressure of pure 'A' and 'B' are 450 mm and 700 mm Hg respectively at 350 K. What are the mole fraction of 'A' and 'B' in vapour phase, if total pressure on mixing is 600 mm.

or

(d) Calculate the mass of solute (non-volatile) with molar mass 40 g/mol which must be dissolved in 114 g octane to reduce its vapour pressure to 80%.

SECTION-E

Directions (Q. No. 31-33) : The following questions are long answer type and carry 5 marks each. Two questions have an internal choice.
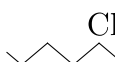
31. Write chemical reactions of following :
    1. Phenol with zinc dust.
    2. Electrophilic aromatic substitution of phenol.

32. State the Explain :
    1. Raoult's law for volatile solute.
    2. Raoult's law for non-volatile solute.

or

Give the difference between ideal and non-ideal solutions.

33. In the following pairs of halogen compounds which compound undergo faster S_N1 reaction ?

(i)   [structure: $(CH_3)_3C-Cl$] and [structure: $CH_3-CHCl-CH_2-CH_3$ with Cl]

(ii)   [structure: chain with Cl on secondary carbon] and [structure: $CH_3-CH_2-CH_2-CH_2-CH_2-CH_2-Cl$]
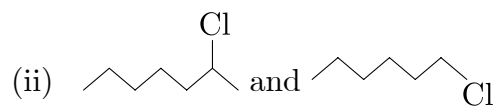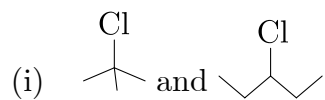
Since 2° carbocation are more stable than 1° carbocation therefore [structure with Cl] will react faster in S_N1 reaction.

or

Write the following reaction :

(i)   Friedel-Crafts acylation.

(ii)   Wurtz-Fitting reaction.

(iii) Dow's process.

(iv)   Ullmann biaryl synthesis.

Accountancy
Class XII Session 2023-24

Time: 3 Hours   **Max. Marks: 80**

General Instructions:

1.This question paper contains 34 questions. All questions are compulsory.

2.This question paper is divided into two parts, Part A and B.

3. Part - A is compulsory for all candidates.

4. Part - B has two options i.e. (i) Analysis of Financial Statements and (ii) Computerised Accounting. Students must attempt only one of the given options.

5.Question 1 to 16 and 27 to 30 carries 1 mark each.

6.Questions 17 to 20, 31and 32 carries 3 marks each.

7.Questions from 21 ,22 and 33 carries 4 marks each

8.Questions from 23 to 26 and 34 carries 6 marks each

9.There is no overall choice. However, an internal choice has been provided in 7 questions of one mark, 2 questions of three marks, 1 question of four marks and 2 questions of six marks.

PART—A
Accounting for Partnership Firms and Companies

1. Gopal, Tushar and Mohit are partners sharing profits and losses in the ratio of $\frac{4}{10}$, $\frac{4}{10}$ and $\frac{1}{5}$. Tushar retires from the firm, Gopal and Mohit decided to share future profits and losses in the ratio of 3 : 2. Calculate gaining ratio.
   (a) 3 : 2   (b) 2 : 1
   (c) 1 : 2   (d) 1 : 1

2. Golu and Sonu are partners sharing profits and losses in the ratio of 3 : 2. Chanu is admitted for 1/5th share in profits of the firm which he gets entirely from Golu. Find out the new profit sharing ratio.
   (a) 8 : 12 : 5
   (b) 2 : 2 : 1
   (c) 2 : 2 : 2
   (d) 12 : 8 : 5

3. Dalajit and Manjeet are partners sharing profits equally. Interest on Dalajit's drawings is ₹ 3,250 and Manjeet's drawings is ₹ 2,750. 10% of distributable profit is transferred to reserve fund. Profit for the year is ₹ 10,00,000. Amount transferred to reserve fund will be
   (a) ₹ 1,00,300   (b) ₹ 99,400
   (c) ₹ 1,00,000   (d) ₹ 1,00,600

4. With context to debit side of partners' current account, pick the odd one out.
   (a) Interest on Drawings
   (b) Salary
   (c) Drawings
   (d) None of these

<div align="center">or</div>

At the time of change in profit sharing ratio, workmen compensation reserve existing in the balance sheet against which no liabilities exist, is transferred to capital account of partners in their_ _ _ _ _ _.
   (a) sacrificing ratio
   (b) gaining ratio
   (c) old profit sharing ratio
   (d) new profit sharing ratio

5. Net profit is always taken after _ _ _ _ _ _ _ _in the profit and loss appropriation account.
   (a) manager's commission
   (b) interest on partner's loan
   (c) Both (a) and (b)
   (d) None of these

<center>or</center>

   When partners' capital accounts are fixed, which one of the following items will be written in the partner's capital account?
   (i) Partner's drawings
   (ii) Additional capital introduced by the partner in the firm
   (iii) Loan taken by partner from the firm
   (iv) Loan advanced by partner to the firm
   (a) Only (ii)
   (b) (i) and (iii)
   (c) (i) and (ii)
   (d) (iii) and (iv)

6. Diwakar, a director of the company proposed in a board meeting that to inculcate the habit of savings among people, he wanted to bring a special issue of shares. His proposal was accepted by the company. The company issued 35,000 shares of ₹ 100 each, payable ₹ 30 on application, ₹ 50 on allotment and ₹ 20 on call. Prabhakar, a shareholder holding 25 shares could not pay his call money and Sudhakar another shareholder holding 30 shares paid the call money with allotment. Prabhakar, paid the amount due to him after four months explaining the reason for this delay, the company did not charge any interest from him. Calculate the amount received by the company on allotment.
   (a) ₹ 17,50,600   (b) ₹ 24,50,000
   (c) ₹ 17,50,000   (d) ₹ 10,50,000

7. Sagar, Javed and Happy are partners sharing profits in the ratio of 3 : 2 : 1. They agree to admit Sahil into the firm. Sagar, Javed and. Happy agreed to give 1/3 rd, 1/6 th and 1/9 th share of their profit. The share of profit of Sahil will be
   (a) 1/10
   (b) 12/54
   (c) 11/54
   (d) 13/54

8. Assertion (A): Partnership agreement in writing is considered as desirable.
   Reason (R): Written partnership agreement serves as a evidence in the court of law.
   Alternatives
   (a) Assertion (A) is true, but Reason (R) is false
   (b) Assertion (A) is false, but Reason (R) is true
   (c) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
   (d) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)

9. Total capital specified in capital clause is ₹ 50,00,000 which is divided in 35,000 equity shares of ₹ 100 each and 15,000, 10% preference shares of ₹ 100 each. The company issued 10,000 equity shares and 5,000 preference shares. The public subscribed for 9,000 equity shares and 4,500 preference shares out of the issued shares. What will be the subscribed capital amount?
   (a) ₹ 9,00,000
   (b) ₹ 50,00,000
   (c) ₹ 13,50,000
   (d) ₹ 50,000

10. Issued 10,000 shares of ₹ 100 each to the Ghanshyam Food Limited @10% premium and paid ₹ 2,00,000 in cash for a consideration of running business purchased. Journalise this transaction.

(a)	Ghanshyam Food Limited	Dr.	13,00,000	
	To Cash A/c			13,00,000
(b)	Share Capital A/c	Dr.	10,00,000	
	Securities Premium Reserve A/c	Dr.	1,00,000	
	Cash A/c	Dr.	2,00,000	
	To Ghanshyam Food Limited			13,00,000
(c)	Ghanshyam Food Limited	Dr.	13,00,000	
	To Share Capital A/c			10,00,000
	To Securities Premium Reserve A/c			1,00,000
	To Cash A/c			2,00,000
(d)	Ghanshyam Food Limited	Dr.	13,00,000	
	To Share Capital A/c			13,00,000

11. Vandana Cconsumer Products Limited has purchased an asset costing ₹ 22,00,000. Vendor issued 10% debentures of ₹ 100 each at 10% premium as consideration against asset purchased. Calculate number of debentures to be issued.
(a) 20,000 debentures   (b) 26,000 debentures
(c) 22,000 debentures   (d) 24,000 debentures

<center>or</center>

Shree Electronics Limited called first call money of ₹ 3 per share on its 50,000 shares. A shareholder holding 2,750 shares failed to pay the amount. How much amount will be due on first call?
(a) ₹ 1,50,000   (b) ₹ 1,47,750
(c) ₹ 1,41,750   (d) ₹ 1,57,000

12. Total capital employed in the firm is ₹ 4,00,000, reasonable rate of return is 15% and profit for the year is ₹ 6,00,000. The value of goodwill of the firm as per capitalisation method would be
(a) ₹ 36,00,000   (b) ₹ 41,00,000
(c) ₹ 21,00,000   (d) ₹ 6,00,000

13. During the year 2019-20, Vidhata Industries Limited issued 12% debentures of ₹ 100 each as per the details given. A machine was purchased for ₹ 2,18,500. The Vendor was paid by the issue of 1,900 debentures at a premium of 15%, to be redeemed at par. The entry for the payment will be

(a)	Vendor's A/c	Dr.	2,18,500	
	To 20% Debentures A/c			1,90,000
	To Securities Premium Reserve A/c			28,500
(b)	Vendor A/c	Dr.	2,18,500	
	To Machinery A/c			2,18,500
(c)	12% Debentures A/c	Dr.	1,90,000	
	Securities Premium Reserve A/c	Dr.	28,500	
	To Vendor's A/c			2,18,500
(d)	Machinery A/c	Dr.	2,18,500	
	To Vendor's A/c			2,18,500

<center>or</center>

On 28th February, 2020, the first call of ₹ 2 per share became due on 25,000 equity shares allotted by Zerox Enterprises Limited. Jack, a holder of 500 shares did not pay the first call money. Mack, a holder of 375 shares paid the second and final call of ₹ 4 per share along with the first call.
Journal entry for the amount received will be _ _ _ _ _ _ _

(a) Bank A/c   Dr.   50,500
     Calls-in-advance A/c   Dr.   1,000
        To Equity Share First Call A/c   50,000
        To Calls-in-arrear A/c   1,500

(b) Equity Share First Call A/c   Dr.   50,000
     Calls-in-arrear A/c   Dr.   1,000
        To Bank A/c   49,500
        To Calls-in-advance A/c   1,500

(c) Bank A/c   Dr.   50,500
     Calls-in-arrear A/c   Dr.   1,000
        To Equity Share First Call A/c   50,000
        To Calls-in-advance A/c   1,500

(d) None of the above

14. Peter and Daneal are partners in a firm sharing profits and losses in the ratio of 5 : 7 respectively. Their balance sheet shows creditors at ₹ 1,00,000. If creditors amounting to ₹ 12,000 are to be written-off as they are not likely to be claimed, what will be the new value of creditors to be shown in new balance sheet?
(a) ₹ 1,12,000   (b) ₹ 88,000
(c) ₹ 12,000   (d) None of these

or

Atif and Latif are partners sharing profits and losses as 2 : 1. Aabid is admitted and profit sharing ratio becomes 4 : 3 : 2. Goodwill is valued at ₹ 94,500. Aabid brings required goodwill in cash. Goodwill amount will be credited to
(a) Atif ₹ 21,000
(b) Atif ₹ 94,500
(c) Atif ₹ 14,000 and Latif ₹ 7,000
(d) Atif ₹ 12,000 and Latif ₹ 9,000

DIRECTION : Read the following hypothetical situation and answer Q. No. 15 and 16
Harry and Terry are partners in a firm. Harry gets commission of 10% on the net profits before charging any commission and Harry gets are commission of 10% on the net profits after charging all commission.

Profit and Loss Appropriation A/c

Dr.		for the year ended 31st March, 2020		Cr.
Particulars	Amount (₹)	Particulars		Amount (₹)
To Harry's Commission A/c	1,65,000	By Profit and Loss A/c (Net profits)		....
To Terry's Commission A/c	....			
To Profit Transferred to				
Harry's Capital A/c	....			
Terry's Capital A/c	....			
	....			....

15. What will be the net profit before charging commission?
  (a) ₹ 16,50,000   (b) ₹ 12,65,000
  (c) ₹ 18,00,000   (d) ₹ 13,50,000

16. What will be Terry's Commission ?
  (a) ₹ 1,48,500
  (b) ₹ 1,50,000
  (c) ₹ 1,65,000
  (d) ₹ 1,35,000

17. Jack, Rony and Danny are partners. Their capitals as on 1st April, 2021 were Jack ₹ 1,00,000, Rony ₹ 2,00,000 and Danny ₹ 3,00,000. Profits for the year 2020-2021 amounting to ₹ 1,20,000 were distributed in the ratio of capitals without providing for the following
  (i)   Interest on capitals Jack ₹ 10,000, Rony ₹ 20,000, Danny ₹ 30,000.
  (ii) Interest on drawings Jack ₹ 6,000, Rony ₹ 10,000, Danny ₹ 16,000.
  (iii) Jack's salary of ₹ 2,000 per month and Rony's commission of ₹ 8,000.
  The partnership deed was silent as to the sharing of profits and losses. Pass the necessary single adjusting entry.

18. Naresh Exports Limited issued 60,000, 15% debentures of ₹ 10 each credited as fully paid to the promoters for their services and issued 15,000, 15% debentures of ₹ 10 each credited as fully paid to the underwriters for the underwriting services. Journalise these transactions.

<center>or</center>

City Corporation Limited issued 40,000 equity shares of ₹ 10 each at a premium of ₹ 2 payable alongwith the application. All the shares were applied and duly allotted. Pass necessary journal entries.

19. The partnership agreement between Girraj and Neeraj provides that.
  (i)   Profits will be shared equally.
  (ii) Girraj will be allowed a salary of ₹ 400 per month.
  (iii) Neeraj who manages the sales department will be allowed a commission equal to 10% of the net profits, after allowing Girraj's salary.
  (iv) 7% interest will be allowed on partners' fixed capital.
  (v)   5% interest will be charged on partners' annual drawings.
  (vi) The fixed capitals of Girraj and Neeraj are ₹ 1,00,000 and ₹ 80,000 respectively. Their annual drawings were ₹ 16,000 and ₹ 14,000 respectively. The net profit for the year ending 31st March, 2006 amounted to ₹ 40,000.
  Prepare firm's profit and loss appropriation account.

20. Kavita, Sunita, Vinita and Nikita are partners in a firm sharing profits in 2:1:2:1 ratio. On the retirement of Vinita, the goodwill was valued at ₹ 2,16,000. Kavita, Sunita and Nikita decided to share future profits equally. Pass the necessary journal entry for the treatment of goodwill without opening goodwill account.

<center>or</center>

Tommy, Jerry and Harry are partners sharing profits in the ratio of 4 : 3 : 2. On 1st April, 2021, Jerry gave a notice to retire from the firm. Tommy and Harry decided to share future profits in the ratio of 1 : 1. The capital accounts of Tommy and Harry after all adjustments showed a balance of ₹ 21,500 and ₹ 40,250 respectively.
The total amount to be paid to Jerry was ₹ 47,750. This amount was to be paid by Tommy ₹ 33,250 and by Harry ₹ 14,500. Pass necessary journal entries in the books of the firm for the above transactions. Show your working clearly.

21. Sheetal Industries Limited purchased assets of ₹ 6,30,000 from Mahanagar Gas Limited. Sheetal Industries Limited issued equity shares of ₹ 100 each fully paid in consideration. What journal entries will be made, if the shares are issued (i) at par and (ii) at premium of 20%.

22. Pass the necessary journal entries for the following transactions on the dissolution of firm of Ruby, Lily and Robin (who were sharing profits in the ratio of 2 : 2 : 1) after the transfer of all assets (other than cash) and external liabilities to realisation account.

(i) Debtors were of ₹ 62,100. Ruby takes over debtors amounted to ₹ 60,000 at ₹ 58,600 and the remaining debtors were sold to a debt collecting agency at 50% of the value.

(ii) Sundry assets were of ₹ 58,500. Lily is to take over some sundry assets at ₹ 36,000 (being 10% less than the book value). Robin is to take over remaining sundry assets at 80% of the book value.

(iii) Robin assumes the responsibility of discharge of Mrs. Robin's loan of ₹ 5,750 together with accrued interest of ₹ 1,150.

23. Rekha and Surekha are partners sharing profits and losses in the ratio of 2 : 1. On 31st December, 2019, the partners decided to dissolve the firm. Their Balance Sheet is as follows

<div align="center">Balance Sheet</div>

<div align="center">as at 31st December, 2019</div>

Liabilities	Amount (₹)	Assets		Amount (₹)
Rekha's Capital A/c	50,000	Debtors	26,000	
Investment Fluctuation Fund	20,000	(–) Provision for D. Debts	(2,000)	24,000
Bank Overdraft	30,000	Investments		40,000
General Reserve	56,000	Inventory		10,000
Rekha's Loan A/c	34,000	Plant		10,000
		Buildings		60,000
		Surekha's Capital A/c		30,000
		Cash in Hand		6,000
		Cash at bank		10,000
	1,90,000			1,90,000

The assets were realised as follows

Debtors ₹ 26,000, Inventory ₹ 8,500, Plant ₹ 10,000, Buildings ₹ 1,00,000. Investment were taken over by Rekha at ₹ 35,000. Compensation was paid to employees ₹ 10,000.

Prepare realisation account, partners' capital account and bank account.

24. Sangam Limited invited applications for 1,00,000 equity shares of ₹ 10 each. The shares were issued at a premium of ₹ 5 per share. The amount was payable as follows

On application and allotment 8 per share (including premium 3).

The balance including premium on the first and final call.

Applications for 1,50,000 shares were received. Applications for 10,000 shares were rejected and pro-rata allotment was made to the remaining applicants on the following basis

(i) Applicants for 80,000 shares were allotted 60,000 shares.

(ii) Applicants for 60,000 shares were allotted 40,000 shares.

Raju, who belonged to the first category and was allotted 300 shares, failed to pay the first call money.

Anuj, who belonged to the second category and was allotted 200 shares, also failed to pay the first call money. Their shares were forfeited. The forfeited shares were re-issued @ ₹ 12 per share fully paid-up. Pass necessary journal entries and prepare cash book.

<div align="center">or</div>

On 1st June, 2019, Kisan Polypipe Limited offered for subscription 50,000 equity shares of ₹ 100 each at a premium of ₹ 20 per share payable as given below

On application ₹ 20 per share, on allotment (including premium) ₹ 50 per share and two months after allotment ₹ 50 per share.

Applications were received for 84,000 shares. On 1st July, 2019, the Directors proceeded to allot shares proportionately. Of these, application for 4,500 shares were accompanied with full amount and hence, were accepted in full and the balance allotment was made on pro-rata basis. Excess amount paid by applicants was utilised towards allotment and call money due from them. One of the applicants to whom 300 shares were allotted proportionately, failed to pay the call money. His shares were forfeited on 30th November,

2019 and subsequently issued @ ₹ 130 per share. Record entries relating to these transactions in the journal of the company.

25. The balance sheet of Tanish, Danish and Satish, who were sharing profits in the ratio of 5 : 3 : 2 as at 31st March, 2020 was as follows

Balance Sheet

as at 31st March, 2020

Liabilities		Amount (₹)	Assets	Amount (₹)
Creditors		1,10,000	Bank	88,000
Employees Provident Fund		22,000	Debtors	2,20,000
Profit and Loss A/c		1,87,000	Stock	1,76,000
Capital A/cs			Fixed Assets	1,32,000
Tanish	88,000			
Danish	1,36,400			
Satish	72,600	2,97,000		
		6,16,000		6,16,000

Tanish retired on 31st March, 2020. It was agreed that
(i) Goodwill of the firm was valued ₹ 1,76,000.
(ii) Fixed assets are to be depreciated by ₹ 5,500.
(iii) Make a provision for doubtful debts at 5% on debtors.
(iv) New profit sharing ratio of Danish and Satish will be 2 : 3.
(v) A liability for claim, included in creditors for ₹ 22,000 is settled at ₹ 17,600.
The amount to be paid to Tanish ₹ 2,63,450 and to Danish ₹ 4,510 and cash brought in by Satish ₹ 2,12,960 by leaving a balance of ₹ 33,000 in the bank.
Prepare revaluation account and partners' capital account.

or

Anant and Jayant were partners in a firm sharing profits in the ratio of 3 : 2. On 1st April, 2020, they admitted Hemant as a partner in the firm. The balance sheet of Anant and Jayant on that date was as under

Balance Sheet

as at 1st April, 2020

Liabilities		Amount (₹)	Assets	Amount (₹)
Creditors		1,05,000	Cash in Hand	70,000
Workmen's Compensation Fund		1,25,000	Debtors	80,000
General Reserve		80,000	Stock	60,000
Capital A/cs			Machinery	50,000
Anant	50,000		Building	1,40,000
Jayant	40,000	90,000		
		4,00,000		4,00,000

It was agreed that
(i) The value of building and stock be appreciated to ₹ 1,90,000 and ₹ 80,000 respectively.
(ii) The liabilities of workmen's compensation fund was determined at ₹ 1,15,000.
(iii) Hemant brought in her share of goodwill ₹ 50,000 in cash.
(iv) Hemant was to bring cash ₹ 60,000 as his capital.
(v) The future profit sharing ratio will be Anant 2/5th, Jayant 2/5th and Hemant 1/5th.
Prepare revaluation account, partners' capital accounts and balance sheet of the new firm.

26. Aahuja Private Limited issued 20,000, 9% debentures of ₹ 100 each to the public at 10% discount on 1st April, 2018. These debentures are redeemable after 6 years at a premium of 10%.
Pass the necessary journal entries for issue of debentures and writing-off 'loss on issue of debentures' in same year of issue, if company has a balance of ₹ 1,60,000 in its securities premium reserve account and also prepare loss on issue of debentures account.

Part B
(Financial Statement Analysis)

27. Suvidha Construction Private Limited is a financial company which provides loan and invest into shares. At the year end, company received ₹ 80,000 interest on loan. Where will be the amount of interest presented?
(a) Activity arising from interest will be shown in financing activity
(b) Activity arising from interest will be shown in operating activity
(c) Activity arising from interest will be shown in investing activity
(d) None of the above

28. Gross profit is 20% of the net sales. Calculate the value of net sales, if cost of goods sold is ₹ 50, 000.
(a) ₹ 62, 500
(b) ₹ 65, 000
(c) ₹ 60, 000
(d) ₹ 50,000

29. Liquid ratio is calculated as
(a) $\dfrac{\text{Current Assets} - \text{Liquid Assets}}{\text{Current Liabilities}}$

(b) $\dfrac{\text{Current Assets} - \text{Inventories} - \text{Prepaid Expenses}}{\text{Current Liabilities}}$

(c) $\dfrac{\text{Current Assets} - \text{Fictitious Assets}}{\text{Current Liabilities}}$

(d) $\dfrac{\text{Current Assets} - \text{Current Liabilities}}{\text{Current Assets}}$

or

Livestock is shown under which sub-head?
(a) Trade receivables
(b) Tangible fixed assets
(c) Intangible fixed assets
(d) Inventories

30. Which of the following is not an investing cash flow?
(a) Sale of 2,500 shares (held as investment) for ₹ 15 each
(b) Purchase of equipment for ₹ 500 cash
(c) Purchase of marketable securities for ₹ 25,000 cash
(d) Sale of land for ₹ 28,000 cash

or

Vivek Consultancy Private Limited purchased furniture for ₹ 20,00,000 paying 60% by issue of equity shares of ₹ 10 each and the balance by a cheque. This transaction will result in
(a) Increase in cash and cash equivalents ₹ 8,00,000.
(b) Cash used in investing activities ₹ 8,00,000.
(c) Cash used in investing activities ₹ 20,00,000.
(d) Cash generated from financing activities ₹ 12,00,000.

31. What is meant by analysis of financial statements? State any two advantages of analysis of financial statements.

32. Freedom Resourcing Private Limited is in the process of preparing its balance sheet as per Schedule III, Part I of the Companies Act, 2013 and provides its true and fair view of the financial position.
   (i)   Under what head and sub-head will the company show stores and spares and loose tools in its balance sheet?
   (ii)   What is the accounting treatment of stores and spares and loose tools, when the company will calculate its inventory turnover ratio?
   (iii) What is the objective of this analysis?

33. Calculate the amount of opening trade receivables and closing trade receivables from the following figures
Trade Receivables Turnover Ratio = 5 times; Gross Profit Ratio = 20%

Opening Trade Receivables were $\frac{1}{3}$ rd of Closing Trade Receivables.

Cash Revenue from Operations being $\frac{1}{4}$ th of Credit Revenue from Operations.
Cost of Revenue from Operations is ₹ 10,00,000.

<div align="center">or</div>

   (i)   From the following information, calculate Inventory Turnover Ratio : Net Sales ₹ 40,000; Average Inventory ₹ 5,500; Gross Loss on Sales is 10%.
   (ii)   From the following information, calculate Inventory Turnover Ratio : Total Sales ₹ 22,000; Sales Return ₹ 2,000; Gross Profit ₹ 5,000; Closing Inventory ₹ 6,000; Excess of Closing Inventory over Opening Inventory ₹ 2,000.

34. From the following balance sheet of Unique Projects Private Limited as on 31st March, 2022 and 2021, prepare a cash flow statement

<div align="center">Balance Sheet</div>

<div align="center">as at 31st March, 2021 and 2022</div>

Particulars	Note no.	31st March 2022 (₹)	31st March 2021 (₹)
I. EQUITY AND LIABILITIES			
1. Shareholder's Funds			
(i) Share Capital		1,30,000	90,000
(ii) Reserves and Surplus	1	84,000	48,000
2. Current Liabilities			
Trade Payables		22,000	17,400
Total		2,36,000	1,55,400
II. ASSETS			
1. Non-Current Assets :			
Fixed Assets		1,66,000	93,400
2. Current Assets			
(i) Inventories		26,000	22,000
(ii) Trade Receivables		39,000	36,000
(iii) Cash and Cash Equivalents		5,000	4,000
Total		2,36,000	1,55,400

Notes to Accounts

Particulars	2022 (₹)	2021 (₹)
1. Reserves and Surplus		
General Reserve	55,000	30,000
Balance of Statement of Profit and Loss	30,000	20,000
Preliminary Expenses	(1,000)	(2,000)
	84,000	48,000

Additional Information

(i)   Depreciation charged on fixed assets for the year 2021-22 was ₹ 20,000.

(ii) Income tax ₹ 5,000 has been paid during the year.

Business Studies
Class XII Session 2023-24

Time: 3 Hours   **Max. Marks: 80**

General Instructions:

i. Question paper comprises four sections – A, B, C and D. There are 34 questions in the question paper. All questions are compulsory.

ii. Section A – From question 1 to 20 are MCQs of 1 mark each.

iii. Section B – Question no. 21 to 24 carry 3 marks each. Answer to each question may be from 50 to 75 words.

iv. Section C contains Q.25 to Q.30 carry 4 marks each. Answers to the questions may be about 150 words.

v. Section D – Question no. 31 to 34 carry 6 marks each. Answers to the questions may be about 200

vi. Attempt all parts of the questions together.

Section : A

1. A new packaging machine is to be installed in a fast food factory. Which type of decision is taken while deciding about its installation?
   - (a) Working capital decision
   - (b) Capital budgeting decision
   - (c) Financing decision
   - (d) All of these

2. 'The human resource manager assessed the number and type of human resources necessary for the performance of various jobs under an electronic division, and found it to be understaffed.'
   Which type of analysis has been done by human resource manager?
   - (a) Workload analysis
   - (b) Workforce analysis
   - (c) Human resource analysis
   - (d) None of these

3. RK Verma who was unwell, called his son Suresh and gave him a gift packet. Suresh opened the packet and saw many crumpled share certificates inside. His grandfather told him that they had been left behind by his late father. As no trading is now done in physical form, Suresh wants to know the process by adopting which he is in a position to deal with these certificates.
   Identify the process.
   - (a) Dematerialisation
   - (b) Demutualisation
   - (c) Neither (a) nor (b)
   - (d) Both (a) and (b)

4. Manahis Sharma works readymade garments factory. in an production manager. He was shifted sales department without any substantial change in the responsibility and status.
Which type of recruitment is done in this case?
(a) Horizontal recruitment
(b) External recruitment
(c) Internal recruitment
(d) None of these

5. SolarTop Power Private Limited set up a factory for manufacturing solar lanterns in a remote village as there was no reliable supply of electricity in rural areas. The revenue earned by the company was sufficient to cover the costs and the risks. The demand of lanterns was increasing day-by-day, so the company decided to increase production to generate higher sales. For this, they decided to employ people from the nearby villages as very few job opportunities were available in that area. The company also decided to open schools and crèches for the children of its employees.
Identify the objectives of management discussed above.
(a) Social objective
(b) Organisational objective
(c) Neither (a) nor (b)
(d) Both (a) and (b)

6. Identify the right of consumers being promoted in the given picture.

(a) Right to be heard
(b) Right to seek redressal
(c) Right to be informed
(d) Right to consumer education

7. Match the work performed by specialist foremen under functional foremanship in Column I with job assigned to them in Column II.

	Column I		Column II
A.	Ensures discipline	(i)	Inspector
B.	Check quality of work	(ii)	Instruction card clerk
C.	Draft instructions to workers	(iii)	Disciplinary

(a) (iii), (ii), (i)

(b) (i), (iii), (ii)

(c) (iii), (i), (ii)

(d) (ii), (iii), (i)

8. PS Fabric Company is planning to measure potential of each employee for learning new skills to know their capacity to develop.
   Which type of test will cater company's aim?
   (a) Aptitude test
   (b) Intelligence test
   (c) Trade test
   (d) Interest test

9. Which of the following is the first and largest depository presently operational in India.
   (a) Central Depository Services Limited (CDSL)
   (b) National Securities Depository Limited (NSDL)
   (c) Neither (a) nor (b)
   (d) Both (a) and (b)

10. Assertion (A) Planning is futuristic.
    Reason (R) Panning is concerned with the future which is certain and does not require forecast.
    Alternatives
    (a) Both Assertion (A) and Reason (R) are correct
    (b) Assertion (A) is correct, but Reason (R) is incorrect
    (c) Both Assertion (A) and Reason (R) are correct and Reason (R) is the correct explanation of Assertion (A)
    (d) Both Assertion (A) and Reason (R) are correct, but Reason (R) is not the correct explanation of Assertion (A)

11. **Statement I:** Divisional head is responsible for profits and losses for his/her division.
    Statement II: Functional structure is economical than divisional structure.
    Choose the correct option from the options given below:
    (a) Statement I is true and Statement II is false
    (b) Statement II is true and Statement I is false
    (c) Both the statements are true
    (d) Both the statements are false

12. **Statement I:** Working capital requirements of a company is affected by inflation.
    Statement II: 'Choice of technique' affects the requirement of fixed capital of a company.
    Choose the correct option from the options given below:
    (a) Statement I is true and Statement II is false
    (b) Statement II is true and Statement I is false
    (c) Both the statements are true
    (d) Both the statements are false

13. Familiarising the selected employees with the rules and policies of the organisation and introducing the selected employees to other employees is the process of:
    (a) Induction training
    (b) Performance appraisal
    (c) Employment interview
    (d) None of these

14. A company earned a profit @12% last year. Debts are available in the market @15%. If the company issue debt for its financial needs, it will be_____.
    (a) Unlevered
    (b) Unfavourable levered
    (c) Favourable levered
    (d) Cannot decide

15. A manager should replace 'I' with 'We' in all his conversations with workers to foster team spirit. Which principle of management is being highlighted here?
    (a) Order
    (b) Equity
    (c) Discipline
    (d) Espirit de Corps

16. Arrange the following steps involved in the staffing process in correct sequence:
    (i)   Estimating the Manpower Requirements
    (ii)   Selection
    (iii) Recruitment
    (iv)   Performance Appraisal
    (v)   Training and Development
    (vi)   Placement and Orientation
    (vii) Compensation
    (viii) Promotion and career planning
    (a) (i), (iii), (ii), (iv), (vi), (v), (vii), (viii)
    (b) (i), (ii), (iii), (v), (vi), (vii), (viii), (iv)
    (c) (i), (ii), (iii), (vii), (v), (viii), (iv), (vi)
    (d) (i), (iii), (ii), (vi), (v), (iv), (viii), (vii)

17. A element/dimension of business environment involves improvements and innovations which provide new ways of producing goods and services and new methods and techniques of operating a business? Select the above element :
    (a) Technological
    (b) Political
    (c) Economic
    (d) Social

18. Which of the following principle of equity does not imply ?
    (a) Equal pay to everyone
    (b) Fair treatment to all employees
    (c) Stern action against the lazy personnel
    (d) No discrimination against anyone on the basis of gender, religion, language, caste, belief, etc.

19. SteelTech Pvt Ltd is a steel manufacturing company located in India. It is enjoying buoyant demand for its products as economic growth is about 9 to 10 percent and demand for steel is growing. The company has decided to set up a new plant to cash on the increase demand. It is estimated that it will require about ₹ 5,000 crores to set up and about ₹ 1,000 crores of working capital to start the new plant.
    Identify the decision taken by the financial manager in the above case?
    (a) Financial decision
    (b) Investment decision
    (c) Dividend decision
    (d) Capital structure decision

20. Which of the following is not an advantage of functional structure?
    (a) Minimum duplication of work
    (b) Coordination across departments
    (c) Ease in training of employees
    (d) Control and coordination within departments

Section : B

21. Dominos offered 'Vrat Special Menu' during Navratras to attract the Indian customers with vegetarian pizza made of water-chestnut flour (singhada atta), and white millet flour (Samak ke chawal ka atta). It was topped with fresh mozzarella cheese with rock salt, tomatoes, paneer and crunchy sabudana. The tomato sauce was made without onions and garlic and used rock salt rather than common salt.
    State and explain the feature of management which is highlighted in the above case.

22. What is meant by 'Financial Management'? State its objective.

OR

It is that component of Financial market, in the absence of which the primary market will become unattractive as there will be no liquidity. Identify the type of Financial market and list its two functions.

23. Somani Chemical Pvt Ltd is engaged in the production and distribution of chemicals. Lately, due to stiff competition in the market, the profits of the company steeply dropped. On analysing deviations and finding corrective measures, the managers decided to motivate employees through incentives. Consequently, Somani Chemical Pvt Ltd offered to its employees, shares at a price which is less than the market price.
   (i) Name and explain the type of incentive offered to employees.
   (ii) Explain one more incentive of the same category.

24. "If we delegate the authority, we multiply it by two; if we decentralise it, we multiply it by many". How?

Section : C

25. Rajesh was working as a First Line Manager. At which level of management was he working? State any two functions performed at that level.

OR

Nowadays the market offers a lot of opportunities to the marketers as the customer income is rising. People have developed a taste for better quality products even though they may have to pay more. Their aspiration levels have increased.
   (a) Which dimension of business environment is being referred to?
   (b) Explain one more dimension of business environment with example.

26. Explain the concept of Democratic style of leadership and state its any two features.

OR

'An ideal controlling technique is the one that checks each and every stage in the process of production.' Comment.

27. Fastrack Sports Pvt Ltd is in the business of manufacturing treadmills. In this company the morale of the employees is very low in-spite of the different financial incentives offered to them. The company does not provide any developmental opportunities to them. Neither they are involved in the decision making nor their work appreciated by the top level management.
   (a) Why is the morale of employees low?
   (b) State the different incentives that the company should offer by giving reference to the relevant lines.

28. What is informal communication ? How is it different from formal communication on the basis of natural relationship among the members and speed of communication ?

29. Identify the source of recruitment used in following cases.
   (i) For recruitment of casual worker, an advertisement for the Diwali season is posted in a factory that makes cracker.
   (ii) ITC Hotel goes to Institute of Hotel Management for recruitment of freshers.
   (iii) Rubi System Pvt Ltd has a bond program where an employee can refer his friend or relative who is qualified for a post.

(iv) Sweety Food Pvt Ltd is searching for eligible candidate for the post of marketing executive using www. naukari.com.

30. In an organisation different workers completed the same task by adopting different methods, involving different movements and took different amount of time. This led to a lot of variation in the type of work performed and the output produced. To do away with this, Rakesh, the manager decided to eliminate unnecessary diversity of products and find out the best way of doing the job. Various studies were undertaken to determine standard way and time of doing a work.
Explain any two techniques of Taylor used by Rakesh.

Section : D

31. After laying down the plans, a function is initiated to lay down the organisational structure. Explain the importance of this function in management.

OR

Planning is deciding in advance the future course of action. Explain briefly what all needs to be done to make effective and efficient plans.

32. A company wants to replace its old machinery with new hi tech machines available in the market. For this, it will have additional funds requirement of at least ₹ 50 Crores. As a Finance Manager, help the company in deciding the right source for raising the money by explaining the different factors that impact such a decision.

OR

Market 'A' involves the sale of securities by the new companies or further issue of securities by the existing companies to the investors, whereas Market 'B' involves the purchase and sale of existing securities.
Identify the Market 'A' and Market 'B' highlighted here and differentiate between the two on any five basis.

33. Read the statements given in point (i) and (ii) answer the questions that follows
(i)   Softer Electrical Pvt Ltd has hired 80 salesmen who will be assigned the task of contacting prospective buyers and creating awareness about the new range of products introduced by the company.
(a)   Identify the element of promotion described in the given lines.
(b)   Explain two features of that element identified above.
(ii) Maruti sells its cars and vans through company approved retailers and covers a wide area of market.
(a)   Identify channel of distribution adopted by Honda.
(b)   Discuss in brief the other two channels also.

34. A company was marketing 'water purifiers' which were very popular due to their quality and after sales services provided to the customers. The company was a leading company in the market and earning huge profits. Because of huge profits, the company ignored the after sales services. As a result, its relations with the customers got spoiled and the image of the company was damaged in the public. Top

management became concerned when the profits for the current quarter fell steeply. On analysis, it was revealed that ignoring the after sales services was its reason. Therefore, the company took all possible measures to protect and promote its favourable image in the eyes of the public. As a result, the goodwill of the company improved in the society.

(a) Name and state the communication tool used by the marketer in the above case to improve its image.

(b) Also explain role of the tool as identified in part (a).

ECONOMICS (030)

Class XII Session 2023-24

Time: 3 Hours   **Max. Marks: 80**

General Instructions:

1. This question paper contains two sections:
   - Section A – Macro Economics
   - Section B – Indian Economic Development
2. This paper contains 20 Multiple Choice Questions type questions of 1 mark each.
3. This paper contains 4 Short Answer Questions type questions of 3 marks each to be answered in 60 to 80 words.
4. This paper contains 6 Short Answer Questions type questions of 4 marks each to be answered in 80 to 100 words.
5. This paper contains 4 Long Answer Questions type questions of 6 marks each to be answered in 100 to 150 words.

Section A -Macro Economics

Multiple Choice Questions (Q1 to Q10)   **1 × 10=10**

1. "Exchange rate between US dollar and Indian rupees have changed several times in last couple of years. As per a given data, Rupee-Dollar exchange rate was 71.49 in November 2020 and changed to 72.82 in January 2021." This leads to which of the following situations?
   (a) Decrease in exports from India
   (b) Increase in exports from India
   (c) Increase in exports from USA
   (d) Both (a) and (c)

2. Assertion : The value of marginal propensity to consume can be greater than one.
   Reason : The value of marginal propensity to save can be negative as well.
   In the light of the given statements, choose the correct alternative from the following
   (a) Assertion is true, but Reason is false
   (b) Assertion is false, but Reason is true
   (c) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
   (d) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.

3. As a custodian of nation's reserves, RBI keeps
   (a) reserves of foreign treasury bills   (b) reserves of foreign currencies
   (c) reserves of gold   (d) All of the above

4. The image given below is indicating which type of exchange rate regime?

(a) Fixed exchange rate

(b) Floating exchange rate

(c) Managed floating exchange rate

(d) None of the above

5. "Household and firms are planning to purchase less than what producers are planning to supply". The possible reason for this situation could be_____.

(a) Aggregate demand = Aggregate supply

(b) Aggregate demand > Aggregate supply

(c) Aggregate demand < Aggregate supply

(d) None of the above

6. "During the outbreak of the second wave of Covid-19 in the country, India received medical equipments from many countries." On which account and which side it will be recorded?

(a) Capital account, debit side

(b) Current account, debit side

(c) Capital account, credit side

(d) Current account, credit side

7. Statement I : SLR is increased to correct the situation of deflationary gap.

Statement II : Higher SLR increases credit creation capacity of commercial banks which in turn increases liquidity in the capital market.

In the light of the given statements, choose the correct alternative from the following

(a) Both statements are false

(b) Both statements are true

(c) Statement I is true and Statement II is false

(d) Statement I is false and Statement II is true

8. If gross domestic capital formation is ₹ 3,000, net domestic fixed capital formation is ₹ 2,000 and inventory investment is ₹ 150, what will be the value of consumption of fixed capital?

(a) ₹ 550

(b) ₹ 850

(c) ₹ 900

(d) Can't be determined

9. If the value of Average Propensity to Consume (APC) is 0.8 and National Income is ₹ 4,000 crores, the value of savings will be_____.

(a) ₹ 800 crores

(b) ₹ 600 crores

(c) ₹ 200 crores

(d) ₹ 700 crores

10. Find net value added at market price.

S.No.	Items	₹ (in crores)
(i)	Output sold (units)	800
(ii)	Price per unit of output	20
(iii)	Excise	1,600
(iv)	Import duty	400
(v)	Net change in stock	(–)500
(vi)	Depreciation	1,000
(vii)	Intermediate cost	8,000

(a) ₹5,500 crore

(b) ₹6,500 crore

(c) ₹7,500 crore

(d) ₹8,500 crore

Short Answer Questions (Q11 to Q12)   **3 × 2 = 6**

11. Suppose the GDP at market price of a country in a particular year was ₹ 2,200 crore. Net Factor Income from Abroad was ₹ 200 crore. The value of Indirect taxes – Subsidies was ₹ 300 crore and National Income was ₹ 1700 crore. Calculate the aggregate value of depreciation.

12. Name the broad categories of transactions recorded in the capital account of the balance of payments account.

or

Give the difference between devaluation and depreciation of domestic currency.

Short Answer Questions (Q13 to Q15)   **4 × 3 = 12**

13. As per the following news published in The Economic Times on 13th April, 2020
"Monetary policy by itself may not be effective in mitigating the economic crisis created by the Covid pandemic in a demand deficient economy like India, according to MPC member Chetan Ghate who voted for only a 50 bps points cut in repo rate against a 75 bps reduction vote by the majority. Instead he called for wider structural reforms along with tax stimulus for the revival of the economy from the Covid induced slowdown."
In the light of the above statement, give the meaning of deficient demand. What fiscal measures would you recommend to the Gol to correct the situation of deficient demand?

14. If the ratio of marginal propensity to consume and marginal propensity to save is 3 : 1, the value of investment multiplier will be 5. True or false? Justify your answer.

15. "Managing the government's banking transactions is a key RBI role. Like individuals, businesses and banks, governments need a banker to carry out their financial transactions in an efficient and effective manner, including the raising of resources from the public."
In the light of the above statement, explain the function performed by the Central Bank.

or

Currency is issued by the Central Bank, yet we say that commercial banks create money. Explain. How is this money creation by commercial banks likely to affect the national income? Explain.

Long Answer Questions (Q16 to Q17)   **6 × 2 = 12**

16. (i) Social welfare may not increase even when real GDP increases. Explain.
    (ii) Define the problem of double counting in the estimation of national income. Discuss two approaches to correct the problem of double counting.

17. (i) In light of the given figure, explain how fiscal deficit has a bearing on inflationary woes?
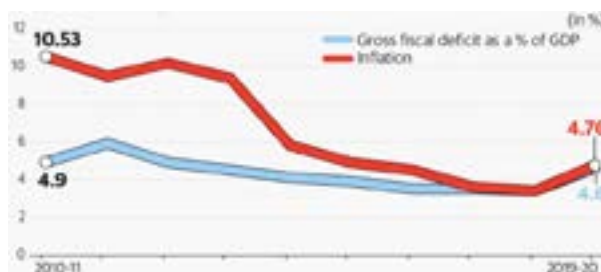
Source Economic survey and CGA; RBI
(ii)   State any three objectives of government budget.

<center>**or**</center>

(i)   Is the following, a revenue receipt or a capital receipt in the context of government budget and why?
   (a) Tax receipt
   (b) Disinvestment
(ii)   Can a fiscal deficit occur without a revenue deficit?

Section B -Indian Economic Development

Multiple Choice Questions (Q18 to Q27)   **1 × 10=10**

18.   "Colonial government systematically industrialised Indian handicraft". What were the outcome of the same?
   (i)   Increase in unemployment
   (ii)   Increase in demand for British goods
   (iii)   Increase in demand for imports
   Codes
   (a) (i) and (ii)   (b)   (ii) and (iii)
   (c) (i) and (iii)   (d)   (i), (ii) and (iii)

19.   Statement I Pakistan is ahead of India in providing improved sanitation facilities.
   Statement II China ranks ahead in terms of development experience with respect to India and Pakistan.
   In the light of the given statements, choose the correct alternative from the following
   (a) Both statements are true   (b)   Both statements are false
   (c) Statement I is false and Statement II is true   (d)   Statement I is true and Statement II is false

20.   Assertion (A) China has done better than India and Pakistan, as it is a socialist economy.
   Reason (R) In socialism, government can implement policies which are in interest of the people.
   In the light of the given statements, choose the correct alternative from the following
   (a) Assertion is true, but Reason is false
   (b) Assertion is false, but Reason is true
   (c) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
   (d) Both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.

21.   Co-operative marketing societies have faced a downfall in the recent years. Identify which of the following was not a reason behind its downfall?
   (a) Lack of co-ordination between processing and marketing societies.
   (b) Inefficient financial management
   (c) Inadequate coverage of all the members
   (d) Intervention of the government is most essential

22. Match the following :

	Column I		Column II
A.	Economic Development in China	(i)	Mao
B.	India's new Development Policy	(ii)	China
C.	The Great Leap Forward	(iii)	1978
D.	Commune	(iv)	1991

Codes

   A B C D

(a) (i) (ii) (iii) (iv)   (b) (ii) (i) (iv) (iii)

(c) (iii) (iv) (i) (ii)   (d) (iv) (ii) (i) (iii)

23. What was the treatment given by the indigo planters to the peasants?
(a) Advancement of loans at a lower rate of Interest
(b) Peasants voluntarily agreed with the indigo planters to produce indigo
(c) They were paid low prices for growing indigo
(d) They were given support measures on how to grow indigo along with a piece of land

24. Match 'labour force' with the appropriate item from amongst the following.
(a) Employed + Unemployed   (b) Work force
(c) All educated   (d) All rural workers

25. Environment has many resources for us. A resource that can be totally replaced or is always available naturally, or that is practically inexhaustible is known as_____.
(a) non-renewable resource   (b) conventional resource
(c) non-conventional resource   (d) renewable resource

26. Marketed surplus refers to_____.
(a) portion of industrial produce sold in the market
(b) sale of consumer goods in the domestic market
(c) a certain proportion of both industrial and domestic produce sold in the market
(d) portion of agricultural produce sold in the market by farmers

27. The correct sequence explaining the commencement of five year plans in chronological order is_____.
(a) China, India and Pakistan   (b) India, China and Pakistan
(c) India, Pakistan and China   (d) Pakistan, China and India

Short Answer Questions (Q28 to Q29)   **3 × 2 = 6**

28. Explain how health and expenditure on information are a source of human capital formation?

<center>**or**</center>

Compared to women, more men are found working in India. It has been observed that for every 100 urban

females, only about 15 work.

In rural areas, for every 100 rural women, only about 25 work. Why are women not working? Give any three reasons.

or

Explain how health and expenditure on information are a source of human capital formation?

29. In light of the given figure, give the meaning of sustainable development and list any four strategies towards sustainable development in India.

Short Answer Questions (Q30 to Q32)   **4 × 3 = 12**

30. State whether the following statements are true or false, with valid argument
   (i)   Private moneylenders are being replaced by institutional source of credit.
   (ii) 'Economic growth' and 'Economic Development' means on end the same.

31. Compare and analyse the given data of India and China with valid arguments.

Annual Growth of Gross Domestic
Product (%) , 1980-2017

Country	1980-90	2015-2017
India	5.7	7.3
China	10.3	6.8

Source Key Indicators for Asia and Pacific 2016, Asian Development Bank, Philippines; World Development Indicators, 2018.

32. Agricultural sector appears to be adversely affected by the reform process. Why?

or

   (i)   What were the objectives behind demonetisation?
   (ii) Import restrictions were imposed in India with the dual objective to save foreign exchange reserves and to be self-sufficient. Justify the given statement with valid arguments.

Long Answer Questions (Q33 to Q34) $6 \times 2 = 12$

33. (i) The Education Commission in 1966, had recommended that at least 6% of GDP should be spent on education in India. However, even after 50 years of such a recommendation, the government continues to spend 3-4% of GDP on education.

How has this affected'the education sector in India? What value stands violated by the Central Government?

(ii) "Unemployment is related to poverty."Comment.

or

(i) What do you mean by agricultural marketing?

(ii) State the meaning of subsidy.

(iii) Agricultural marketing refers to the farmers' act of bringing their produce to the market for sale'. Is the statement correct?

34. Read the following text carefully and answer the given questions on the basis of the same and common understanding

In the late 1980s, government expenditure began to exceed its revenue by such large margins that meeting the expenditure through borrowings became unsustainable. Prices of many essential goods rose sharply. Imports grew at a very high rate without matching growth of exports. Foreign exchange reserves declined to a level that was not adequate to finance imports for more than two weeks. There was also not sufficient foreign exchange to pay the interest that needs to be paid to international lenders. Also, no country or international funder was willing to lend to India.

India approached to World Bank and the International Monetary Fund (IMF), and received $7 billion a loan to manage the crisis. India agreed to the conditionalities of World Bank and IMF and announced to New Economic Policy (NEP).

This new set of policy measures changed the direction of our development strategies.

(i) What does the New Economic Policy of 1991 means in context of the Indian economy? Enlist some reasons for its introduction?

(ii) "IMF and World Bank granted $7 billion loan to India with a major restriction to follow a closed economy model." Do you agree with the given statement? Justify

HISTORY (027)

Class XII Session 2023-24

Time: 3 Hours   **Max. Marks: 80**

General Instructions:

General Instructions:

(i) Question paper comprises five Sections – A, B, C, D and E. There are 34 questions in the question paper. All questions are compulsory.

(ii) Section A – Question 1 to 21 are MCQs of 1 mark each.

(iii) Section B – Question no. 22 to 27 are Short Answer Type Questions, carrying 3 marks each. Answer to each question should not exceed 60-80 words.

(iv) Section C - Question no 28 to 30 are Long Answer Type Questions, carrying 8 marks each. Answer to each question should not exceed 300-350 words

(v) Section D – Question no.31 to 33 are Source based questions with three sub questions and are of 4 marks each

(vi) Section-E - Question no. 34 is Map based, carrying 5 marks that includes the identification and location of significant test items. Attach the map with the answer book.

(vi) There is no overall choice in the question paper. However, an internal choice has been provided in few questions. Only one of the choices in such questions have to be attempted.

(viii) In addition to this, separate instructions are given with each section and question, wherever necessary.

SECTION - A

Multiple Choice Questions   **1 × 21=21**

1. See the following image.

Lord Jagannatha with his sister Subhadra and Brother Balarama are worshipped in the famous temple at

(a) Dakshineswar, West Bengal   (b) Deogarh, Jharkhand

(c) Puri, Orissa   (d) Mysore, Karnataka

2. Which of the following statements are correct regarding Rama Raya?
   I. He was successor of Krishnadeva Raya.
   II. He was chief minister of Vijayanagara.
   III. He had tremendous military skills.
   IV. He was never defeated in any battle.
   Codes
   (a) I and II
   (b) I, II and III
   (c) II and III
   (d) All of these

3. Who joined the Union Cabinet as Law Minister after Independence and also served as Chairman of the Drafting Committee?
   (a) Jawaharlal Nehru
   (b) B R Ambedkar
   (c) Alladi Krishnaswamy Iyer
   (d) Rajendra Prashad

4. Which among the following is not one of the eight paths/principles followed by Buddhists?
   (a) Right Thought
   (b) Right Intention
   (c) Right Efforts
   (d) Right Inspiration

5. Study the following statements regarding Buddhism carefully.
   I. Buddhism grew rapidly, both during the lifetime and after the death of Buddha.
   II. Buddhism did not give much importance to conduct and values.
   III. Buddhism appealed to many people who were dissatisfied with the existing religious practices.
   Which of the above statements are correct?
   (a) I and III
   (b) III and IV
   (c) I and II
   (d) II and IV

6. Complete the statement with the correct answer.
   Tripitaka: 500 - 100 BCE :: Dharmasutras :_____
   (a) 500 - 200 BCE
   (b) 500 - 300 BCE
   (c) 200 - 100 BCE
   (d) 500 - 400 BCE

7. What was the main demand of Khilafat Movement?
   (a) Restoration of Caliphate of Turkey
   (b) Dominion Status for India
   (c) Revival of Orthodox Culture of Islam
   (d) Self rule of India

8. Why was the task of defining rights was difficult in the Constituent Assembly?
   (a) British do not want to include it in constitutional framework.
   (b) Gandhiji opposed the idea of special rights for some sections.
   (c) Right of people in princely state was ambiguous.
   (d) Different groups have different demands regarding rights.

9. Who among the following is referred to as the king Devanampiya Piyadassi?
   (a) Chandragupta Maurya
   (b) Bindusara
   (c) Ashoka
   (d) Bimbisar

10. Arrange the following in sequence.
    (i) Reign of Shah Jahan
    (ii) Reign of Akbar
    (iii) Reign of Humayun
    (iv) Reign of Aurangazeb
    Codes
    (a) (iv), (ii), (iii), (i)
    (b) (i), (ii), (iii), (iv)
    (c) (iii), (iv), (ii), (i)
    (d) (iii), (ii), (i), (iv)

11. Who among the following proposed the 'policy of pacification', under which paharia chiefs were given annual allowance and made responsible for the proper conduct of men?
    (a) William Hodges
    (b) Augustus Cleveland
    (c) Francis Buchanan
    (d) Robert Starchery

12. In Sufi tradition, the word Pir means.
    (a) The Guru of the Sufis
    (b) The Supreme God
    (c) The greatest of all the Sufi saints
    (d) The orthodox teacher who contests the Sufi beliefs.

13. Consider the following statement regarding Subsidiary Alliance.
    I.   This system was devised by William Bentinck in 1798.
    II. A British force was stationed in the territory of the ally.
    III. Ally could enter into agreements with other rulers without any interference.
    IV. A British Resident was attached to the court of ally.
    Which of the above statements is/are correct?
    (a) II and IV
    (b) I and II
    (c) I, II, III and IV
    (d) II and III

14. Assertion : Paharias followed Jhoom cultivation.
    Reason : They lived in huts within tamarind graves.
    (a) Both assertion and reason are true, but reason is not the correct explanation of assertion.
    (b) Both assertion and reason are true and reason is the correct explanation of assertion.
    (c) Assertion is false, but reason is true
    (d) Assertion is true, but reason is false

15. Which one of the following pairs is incorrectly matched?

	List I	List II
(a)	Exogamy	Marriage within one's own group
(b)	Best known ruler of Satavahana	Gotami-putra sami-Siri-Yana-Satakani
(c)	Critical edition of Mahabharata	V S Sukthankar
(d)	Vamsha is used to designate	Family

16. Mahatma Gandhi used to publish the letters written to him in his journal
    (a) New India
    (b) Indian Opinion
    (c) Harijan
    (d) Young India

17. Identify the nature of the writing from the information given below.
    I.   It is a biography of a saint
    II. It praises the achievements of a saint.
    III. It may not always be literally accurate.
    (a) Autobiography
    (b) Biography
    (c) Hagiography
    (d) None of these

18. Match the following.

	List I		List II
A.	The world is transient	1.	Self-punishmen
B.	The world is soulless	2.	Anatta
C.	The world is full of sorrows	3.	Anicca
D.	The path of moderation	4.	Dukkha

    Codes
    (a) A-3, B-2, C-4, D-1
    (b) A-1, B-4, C-3, D-2
    (c) A-1, B-2, C-3, D-4
    (d) A-2, B-3, C-4, D-1

19. Choose the incorrect one about Lingayats Community from the following.
    (a) They questioned the theory of rebirth.
    (b) They encouraged the practices approved in Dharmashastras.
    (c) They challenged the idea of Caste.
    (d) They did not practice funerary rites.

20. Abdur Razzaq was an ambassador sent by the ruler of
    (a) Portugal
    (b) Persia
    (c) Germany
    (d) Russia

21. Assertion : There was lack of private property in land in India.
    Reason : The emperor owned all the land distributed among its nobles.
    (a) Both assertion and reason are true, but reason is not the correct explanation of assertion.
    (b) Both assertion and reason are true and reason is the correct explanation of assertion.
    (c) Assertion is false, but reason is true
    (d) Assertion is true, but reason is false

SECTION - B

Short Answer Type Questions   **3 × 6 = 18**

22. How did the auction in Burdwan take place?

23. Give a brief description of Megasthenes. What does Megasthenes tell about the administration of Mauryan Empire?

24. Who were Lingayats? Explain their contribution in the social and religious fields.

25. Discuss the views of Ibn Battuta's on the Indian economy.

OR

How did Ibn Battuta explain the system of communication in India?

26. What are the most important contributions of Mahatma Gandhi in the political sphere of India?

OR

British government convened a series of Round Table Conferences in London. Write about these Round Table Conferences and their outcome.

27. List the raw materials required for craft production in Harappan Civilisation and discuss how these might have been obtained.

SECTION - C

Long Answer Type Questions   **8 × 3 = 24**

28. Describe the contributions of John Marshall, Director General of the ASI (Archaeological Survey of India) to Indian archaeology.

OR

How does the architectural features of Mohenjodaro indicate town planning?

29. Briefly explain the different types of buildings situated in the royal centre. What do you think was the significance of the rituals associated with the mahanavami dibba?

OR

The writing of Portuguese travellers has greatly helped in reconstruction of history of Vijayanagara city. In this regard highlight the aspects observed by the Duarte Barbosa and Domingo Paes on urban core and mahanavami dibba of the Vijayanagara empire respectively.

30. Examine the repressive measures adopted by British to subdue the rebels of 1857.

OR

Elucidate how Hindu-Muslim Unity was watershed event in 1857 Revolt?

SECTION - D

Source Based Questions $4 \times 3 = 12$

31. Read the following source carefully and answer the questions that follow.

Church in Ithambat

This is an excerpt from a farman (imperial order) issued by Akbar in 1598. Whereas, it reached our eminent and holy notice that the padris (fathers) of the Holy Society of Jesus wish to build a house of prayer (Church) in the city of Kamayat (Khambat, in Gujarat); therefore an exalted mandate... is being issued... that the dignitaries of the city of Kambaat should in no case stand in their way but should allow them to build a Church so that they may engage th.emselves in their own worship. It is necessary that the order of the Emperor should be obeyed in every way.

Questions :

(i)   What did the padris want to do?

(ii)   ExPlain briefly how the approach followed by Akbar was different from other Muslim. ruler?

(iii) In regard to the situation where vast majority of their subjects being non-Muslim, how the Muslim rulers of the sub-continents adopted to the situation?

32. Read the following source carefully and answer the questions that follow.

Referring to the condition of zamindars and the auction of lands, the Fifth Report stated;

The revenue was not realised with punctuality and lands to a considerable extent were periodically exposed to sale by auction. In the native year 1203, corresponding with 1796-97, the land adventrised for sale comprehended a jumma or assessment of sicca rupees 28,70,061, the extent of land actually sold bore a jumma or assessment of 14,18,756 and the amount of purchase money sicca rupees 17,90,416. In 1204, corresponding with 1797-98, the land advertised was for sicca rupees 26,66,191, the quantity sold was for sicca rupees 22,74,076, and the purchase money sicca rupees 21,47,580. Among the defaulters were some of the oldest families of the country. Such were the rajahs of Nuddea, Rajeshaye, Bishenpore (all districts of Bengal), ... and others, the dismemberment of whose estates at the end of each succeeding year, threatened them with poverty and ruin, and in some instances presented difficulties to the revenue officers, in their efforts to preserve undiminished the amount of public assessment.

Questions :

(i)   What was the Fifth Report about?

(ii)   What was the condition of the zamindar according to the report?

(iii) Write any two points of criticism regarding this report.

33. Read the following source carefully and answer the questions that follow.

The Importance of Boundaries

The Manusmriti is one of the best-known 'legal texts of early India, written in .Sanskrit and complied between 2nd century BCE and 2nd century CE. This is what the text advises the king to do. Seeing that in the world controversies constantly arise due to the ignorance of boundaries, he should have conceived boUndary markers buried-stones, bones, cow's hair, chaff, ashes, potsherds, dried cow dung, bricks, coal, pebbles and with sand. He should also have other similar substances that would not decay in the soil buried as hidden markers at the intersection of boundaries.

Questions :
(i)   Why did the controversies of boundaries arise?
(ii)   Suggest the Ways to solve the boundary problems.
(iii) Explain with example any such problem being faced by India today.

SECTION - E

Map Based Questions   **1 × 5 = 5**

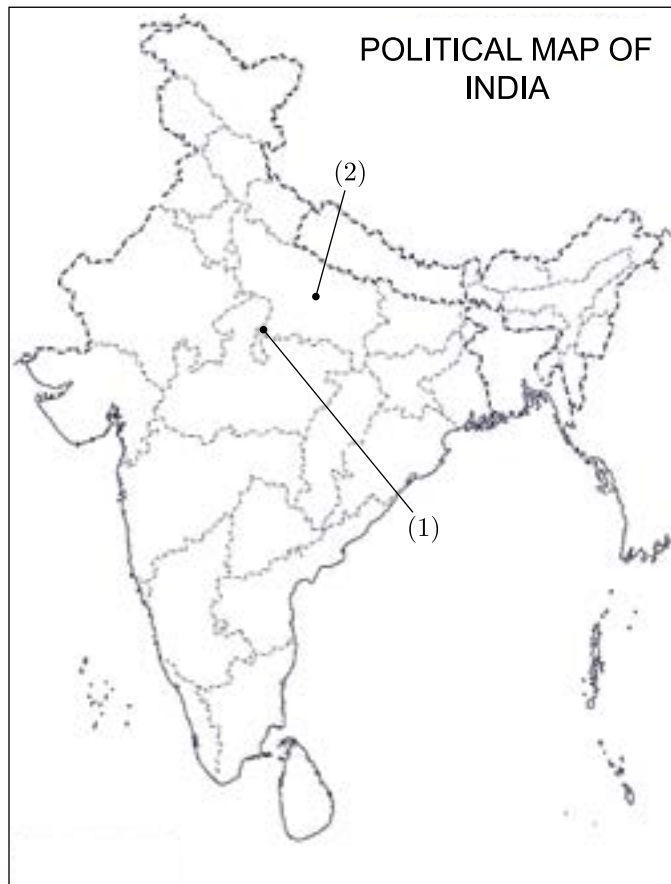**34.** A.   Locate and label the following places.
         (i)   Thanjavur
         (ii)   Bijapur
         (iii) Place where Salt March was held.

<div align="center">**OR**</div>

Place from where Quit India Movement started.

B.   On given political map of India, two main centres of the 1857 Revolt have been marked 1 & 2.
      Write their names.

POLITICAL SCIENCE (028)

Class XII Session 2023-24

Time: 3 Hours   **Max. Marks: 80**

General Instructions:

(i) All questions are compulsory.

(ii) Question numbers 1-12 are multiple choice questions of one mark each.

(iii) Question numbers 13-18 are of 2 marks each. Answers to these questions should not exceed 50 words each.

(iv) Question numbers 19-23 are of 4 marks each. Answers to these questions should not exceed 100 words each.

(v) Question numbers 24-26 are passage, cartoon and map-based questions. Answer accordingly.

(vi) Question numbers 27-30 are of 6 marks each. Answers to these questions should not exceed 170 words.

(vii) There is an internal choice in 6 marks questions.

Section -A

1. Who is the Chairman of National Development Council?
   - (a) Chief Ministers
   - (b) Vice-President of India
   - (c) Prime Minister of India
   - (d) President of India

2. Israel is an important centre of power due to its principle of_____.
   - (a) trade relations
   - (b) economic relations
   - (c) sustaining against diversity
   - (d) cultural complexity

3. The party of socialism according to Lohia should have three symbols in which spade signifies_____.
   - (a) willingness to make sacrifices
   - (b) prepared to make efforts
   - (c) power of voting
   - (d) None of the above

4. Which of the following statement about Sardar Vallabhbhai Patel is incorrect?
   (a) He was not a part of Bardoli Satyagraha.
   (b) He is known as an 'Iron Man' of India.
   (c) Sardar Vallabhbhai Patel, emerged as a major leader of the freedom movement.
   (d) He was not in favour of any compromise with the territorial integrity of India.

5. India has signed FTA's with two ASEAN members including_____.
   (a) Sri Lanka and Russia   (b) China and Sri Lanka
   (c) Singapore and Thailand   (d) Philippines and Thailand

6. The circle with golden stars on the European Union's flag signifies_____.
   (a) liberty and Equality
   (b) solidarity and harmony between the people of Europe
   (c) security and protection
   (d) fraternity and Sovereignty

7. When did the 'BJP System' according to social scientists have started?
   (a) 2019   (b) 2018
   (c) 2014   (d) 2015

8. This country emerged as the strong successor of USSR. It is_____.
   (a) Ukraine   (b) Georgia
   (c) Russia   (d) None of these

9. Which of the statements are TRUE about the causes of globalisation?
   1. Technology is an important cause of globalisation.
   2. Globalisation is caused by a particular community of people.
   3. Globalisation originated in the US.
   4. Economic interdependence alone causes globalisation.

Codes
   (a) 2 and 3
   (b) 3 and 4
   (c) 1 and 3
   (d) 1 and 2

10. Arrange the following in a chronological order.
   1. India Joins the UN.
   2. Yalta Conference of the Big three i.e. Rooserelt, Churchill and Stalin.
   3. Tehran Conference Declaration of three powers i.e. US, Britain and Soviet Union.
   4. Signing of the Atlantic Charter by US President Roosevelt and British Prime Minister Churchill.

Codes

    (a) 2, 4, 3, 1
    (b) 3, 4, 2, 1
    (c) 1, 4, 2, 3
    (d) 4, 3, 2, 1

11. Assertion (A) India, China and other developing countries were exempted from the requirements of the Kyoto Protocol.
Reason (R) Their contribution to the emissions of greenhouse gases during the industrialisation period was not significant.
    (a) Both A and R are true and R is the correct explanation of A.
    (b) Both A and R are true, but R is not the correct explanation of A.
    (c) A is true, but R is false.
    (d) A is false, but R is true.

12. Assertion (A) In the traditional view of security, more threat to a country's security comes from outside its borders.
Reason (R) The international system is rather a brutal arena in which there is no central authority capable of controlling behaviour.
    (a) Both A and R are true and R is the correct explanation of A.
    (b) Both A and R are true, but R is not the correct explanation of A.
    (c) A is true, but R is false.
    (d) A is false, but R is true.

Section -B

13. What is Anandpur Sahib Resolution?

14. Name any two functions of the General Assembly of the UN.

15. Who was Potti Sriramulu? What was the outcome of his indefinite fast?

16. How were the economic concerns of free India different from the economic concerns of colonial government?

17. Explain the major difference of ideology between that of the Congress and the Bhartiya Jana Sangh.

18. State any two objectives of the UN.

Section - C

19. Discuss the relations between India and Israel.

20. Which steps must be adopted to conserve the natural resources?

21. Explain any four features of the Communist Party of India.

22. Explain any four effects of globalisation on the economy of a country.

23. What are the non-traditional notions to security?

Section -D

24. Read the passage given below and answer the questions that follow.
The Assam movement from 1979 to 1985 is the best example of such movement against 'outsiders'. The Assamese suspected that there were huge numbers of illegal Bengali Muslim setters from Bangladesh. They felt that unless these foreign nationals are detected and deported, they would reduce the indigenous Assamese into a minority. There were other economic issues too. There was widespread poverty and unemployment in Assam despite the existence of natural resources like oil, tea and coal. It was felt that these were drained out of the state without any commensurate benefit to the people.

(i) The Assam Movement was led by the group named_____.
  (a) All Assam Sabha Unit
  (b) All Assam Sabha Union
  (c) All India Students Union
  (d) All Assam Students Union

(ii) Why did the Assamese seek the detection and deportation of the outsiders?
  (a) They felt that these foreign nationals would reduce the indigenous Assamese to minority.
  (b) As huge number of Bengali Muslims was a cause of concern for Assamese.
  (c) Both (a) and (b)
  (d) None of the above

(iii) What were the economic issues taken up as a part of the movement?
  (a) Inflation
  (b) Widespread poverty
  (c) Unemployment
  (d) Both (b) and (c)

(iv) Assam movement expresses_____.
  (a) regional problems
  (b) violent acts

(c) regional aspirations

(d) migration issues

25. In the give outline political map of India four states have been marked as A, B, C and D. Identify these states on the basis of the information given below. Mark the following with respect to alphabets.

S.No. of the Information Used	Alphabet Concerned	Name of States
(i)		
(ii)		
(iii)		
(iv)		

(i)   Mark the state where Mahatma Gandhi was born.

(ii)   Sarojini Naidu become the first Governor of the state.

(iii)   State from which Jayaprakash Narayan belongs?

(iv)   State where first non-Congress Government was formed.

POLITICAL MAP OF INDIA

26. Study the picture and answer the following questions given below.

(i) In which year and where the Earth Summit was held?
(ii) What is being shown in the above picture?
(iii) Discuss the environmental concerns in global politics.

Section -E

27. Why is Emergency one of the most controversial phase in Indian politics?

OR

Mention any three major political developments which happened in India after the Emergency in 1977.

28. Examine the basis of projection of China to overtake the US as the largest economy of world by 2040.

OR

What the basis of projection of China to overtake the US as the world's largest economy by 2040?

29. Examine the common issues of South Asian countries.

OR

Elucidate the ethnic conflict in Sri Lanka and mention any two consequences of it.

30. Mention any three pros and three cons of Soviet system in the Soviet Union.

OR

Why did Soviet Union disintegrate. Give any six reasons behind it.

GEOGRAPHY (029)

Class XII Session 2023-24

Time: 3 Hours   **Max. Marks: 70**

General Instructions:

(i) Question paper is divided into 4 sections A ,B,C and D

(ii) In section A question number 1 to 17 are MCQ type questions.

(iii)In section B question number 18-23 are SA type questions(80-100 words). Question 18 and 19 are Source based questions.

(iv)In section C question number 24 to 28 are Long Answer based questions (120-150 words).

(v) In section D question number 29 and 30 are Map based questions having 5 sub parts.

Section A

1. Which of the following rivers has the highest replenishable groundwater resource in India ?
    - (a) Indus
    - (b) Brahmaputra
    - (c) Ganga
    - (d) Godavari

2. Which of the following parts of a river have the best quality water?
    - (a) The delta part
    - (b) The part in the mountains
    - (c) The plains part
    - (d) The part in the valleys

3. Which of the following is incorrectly matched?

	Rivers	Polluted Place
(a)	Yamuna	Lucknow
(b)	Kali	Muzaffarnagar
(c)	Ganga	Kanpur
(d)	Sabarmati	Gandhinagar

4. Identify the correct order of location from West to East, for the given headquarters of railway zones.
    - (a) Mumbai, New Delhi, Allahabad, Kolkata
    - (b) New Delhi, Mumbai, Kolkata, Allahabad
    - (c) New Delhi, Mumbai, Allahabad, Kolkata
    - (d) Mumbai, Allahabad, New Delhi, Kolkata

5. Gathering is practiced in the_____basin.
    - (a) Amazon
    - (b) Ganga
    - (c) Hwang Ho
    - (d) Nile

6. Which of the following mineral is used in smelting of iron-ore?
    - (a) Mica
    - (b) Manganese
    - (c) Copper
    - (d) Bauxite

7. Arrange the following regions given below, in order of deceasing density of their population.
   (i) North Amrica
   (ii) Asia
   (iii) Europe
   (iv) Africa
   (a) (i), (ii), (iii), (iv)
   (b) (iv), (iii), (ii), (i)
   (c) (ii), (iv), (iii), (i)
   (d) (i), (iii), (iv), (ii)

8. Assertion : Barter system promoted trade and was easy to manage.
   Reason : In primitive societies, it was easy to found someone who need same commodities as one needed to exchange.
   (a) Only assertion is correct
   (b) Only reason is correct
   (c) Both assertion and reason are correct. Reason is correct explanation of assertion
   (d) Both assertion and reason are incorrect

9. Which of the following schools of thought attributed the current social problems to development of capitalism?
   (a) Radical School
   (b) Behavioural School
   (c) Welfare School
   (d) Humanistic School

10. Which of the following is not a sub-field of social geography?
    (a) Military geography
    (b) Behavioural geography
    (c) Gender geography
    (d) Geography of leisure

11. Which of the following pairs is correctly matched?

	Category of Density of Population	States/UTs
(a)	State with highest density	West Bengal
(b)	State with low density	Uttar Pradesh
(c)	State with moderate density	Assam
(d)	UT with highest density	Daman and Diu

12. Who gave the term 'conurbation'?
    (a) Jean Gottman
    (b) Patrick Geddes
    (c) Walter Griffin
    (d) Lewis Mumford

13. Assertion : Railways are most suited for large volume bulky materials over short distance.
Reason : Railway networks are well developed and can reach hinterlands.
(a) Only assertion is correct
(b) Only reason is correct
(c) Both assertion and reason are correct. Reason is correct explanation of assertion
(d) Both are correct but not related to each other

14. Consider the following statements and choose the correct answer.
I.   Rearing is today practiced at the subsistence or commercial levels.
II.   Animal rearing depends upon the geographical factors and levels of technological development.
(a) Only statement I is correct
(b) Only statement II is correct
(c) Both the statements are correct and statement II correctly explains statement I
(d) Both the statements are incorrect

Direction : Read the following data and answer the question no. 15 to 17.

Direction of India's Import trade		
Region	**Imports**	
	2010-11	**2016-17**
Europe	3323857	403972
Africa	118612	193327
North America	100602	195332
Latin America	64576	115762
Asia and ASEAN	1029881	1544520

15. Which region contributes to largest share in India's imports?
(a) Europe
(b) Africa
(c) Asia and ASEAN
(d) North America

16. The largest proportion of India's exports and imports are carried out by
(a) land routes
(b) sea routes
(c) air routes
(d) Both (b) and (c)

17. Which among the following measures can help in increasing India's international trade?
(a) Import liberalisation   (b) Licencing
(c) Increasing import duties   (d) Strict patent laws

Section B

18. Read the given passage carefully and answer the questions that follow.

Density of population, is expressed as number of persons per unit area. It helps in getting a better understanding of the spatial distribution of population in relation to land. The density of population in India (2011) is 382 persons per sq km. There has been a steady increase of more than 200 persons per sq km over the last 50 years as the density of population increased from 117 persons/sq km in 1951 to 382 persons/sq km in 2011. The data of census 2011 give an idea of spatial variation of population densities in the country which ranges from as low as 17 persons per sq km in Arunachal Pradesh to 11,297 persons in the National Capital Territory of Delhi. Among the Northern Indian States, Bihar (1102), West Bengal (1029) and Uttar Pradesh (828) have higher densities, while Kerala (859) and Tamil Nadu (555) have higher densities among the peninsular Indian states. States like Assam, Gujarat, Andhra Pradesh, Haryana, Jharkhand, Odisha have moderate densities. The hill states of the Himalayan region and North-Eastern states of India (excluding Assam) have relatively low densities while the Union Territories (excluding Andaman and Nicobar islands) have very high densities of a population.

Question :
(i) What is the defining feature of density of population of a region?)
(ii) Which North-Eastern state does not comes under category of low population density?
(iii) Which state among the Southern states is the most densely populated?

19. Observe the given map and answer the following questions.

(i) What is the source of origin of this canal?
(ii) What is the economic significance of this canal for the command area?
(iii) Why is the Eastern area of canal under lift irrigation?

20. How stage of economic development and foreign investment are the basis of International Trade?

What does direction of foreign trade mean?

21. Define mining and its various types.

22. Define the nature of human geography.

23. What are reasons behind rise of service sector in the world?

OR

Describe tourism and its place in tertiary sector.

Section C

24. What are major characteristics of National Highways in India?

25. What are some of the measure that can be used to reduce air pollution?

26. What is mixed farming? Where is it practiced in the world? Give four characteristics of mixed farming.

27. What are the major steps taken by Government of India to solve the problem of adolescence?

OR

Discuss the population distribution of India.

28. What are limitations and advantages of air transport?

OR

What is GPS and what are its various uses?

Section D

29. On the political map of India, locate and label any five of the following with appropriate symbols.
    (i)   The state with the lowest level of urbanisation
    (ii)   A seaport in West Bengal
    (iii) A city in South India having 10 million population
    (iv)   The leading state for wheat production
    (v)   Khetri copper mine
    (vi)   An oil refinery in Gujarat
    (vii) A coal mine in Tamil Nadu

POLITICAL MAP OF INDIA

30. On the given political map of the world, the following seven features are shown. Identify any five of these features and write their correct names on the lines marked near each feature.
(i)   Areas of commercial extensive grain farming   (ii) An area of livestock rearing
(iii) Largest country in Oceania   (iv) An area of subsistence agriculture
(v)   A major airport   (vi) A major seaport
(vii) A major airport
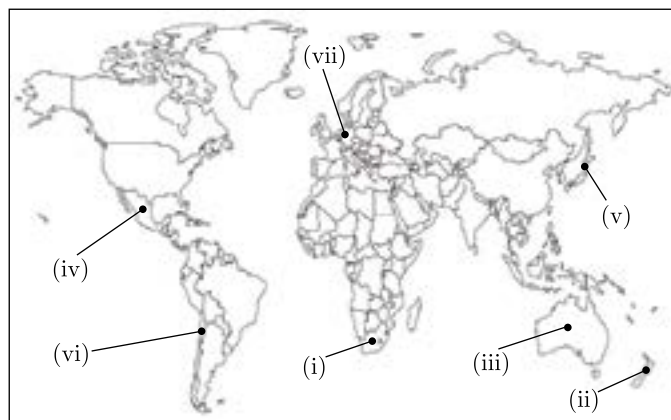
PSYCHOLOGY (037)

Class XII Session 2023-24

Time: 3 Hours   **Max. Marks: 70**

General Instructions:

(i) All questions are compulsory except where internal choice has been given.

(ii) Question No. 1 -15 in Section A carry 1 mark each. You are expected to answer them as directed.

(iii)Question No. 16-21 in Section B are very short answer type-I questions carrying 2 marks each. Answer to each question should not exceed 30 words.

(iv)Question No. 22-24 in Section C are short answer type-II questions carrying 3 marks each. Answer to each question should not exceed 60 words.

(v) Question No. 25 - 28 in Section D are long answer type - I questions carrying 4 marks each. Answer to each question should not exceed 120 words.

(vi)Question No. 29-30 in Section E are long answer type - II questions carrying 6 marks each. Answer to each question should not exceed 200 words.

(vii)Question No. 31 – 34 in Section F are based on two cases given. Answer to each 1 mark question should not exceed 20 words. Answer to each 2 marks question should not exceed 30 words.

Section A

1. This therapy focuses on the actions and thoughts of the client in the present. The past is relevant only to the extent of understanding the origins of the faulty behaviour and thought patterns. Name the therapy used by therapist in psychological studies.
    I.   Behaviour Therapy
    II.   Active Therapy
    III.   Integrative Therapy
    IV.   Clinical Therapy
    Choose the correct option.
    (a) Only I   (b) II and III
    (c) I, II and III   (d) I, II and IV

2. Which among the following provides us necessary information that may be used to change, modify, or strengthen certain aspects of self?
    (a) Self-instruction   (b) Self-reinforcement
    (c) Observation of others' behaviour   (d) Observation of own behaviour

3. Which movement is given credit for the growth of a scientific attitude towards psychological disorders in the eighteenth century?
    (a) Psychological Movement   (b) Reform Movement
    (c) Infrastructural Development   (d) Industrial Development

4. Sumitra Devi, a 79 year old retired school teacher was facing several mental problems, such as she was not able to recognise her own relatives and at times longer silences. However she was reluctant to visit any psychiatrist out of shame, though after repeatedly insistence, she agreed to visit. Which among the following is a component of Therapeutic relationship?

I.   Conditional positive regard
II. Unconditional positive regard
III. Permanent in nature
IV. None of the above

Choose the correct option.

(a) I and II
(b) II and III
(c) I, II and III
(d) II and IV

5. Nishikanthas done his Masters Computer Science from IIT Kharagpur. Most of the time when people asks for any help he proudly describes about himself how intelligent and hard-working he is and also gives career guidance. What are the characteristics of personal identity?

I.   Multiple similarity
II. Similar with others
III. Performance attributes
IV. Personal attributes

Choose the correct option.

(a) I and II
(b) II and IV
(c) I, II and III
(d) I, II and IV

6. In the following question, a statement of Assertion (A) is followed by a statement of the Reason (R). Mark the correct choice.

Assertion (A) When you say, "I know who I am", the self is being described as a knower as well as something that can be known.

Reason (R) As a subject (actor) the self actively engages in the process of knowing itself. As an object (consequence) the self gets observed and comes to be known.

Codes

(a) Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A)

(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)

(c) Assertion (A) is true, but Reason (R) is false

(d) Assertion (A) is false, but Reason (R) is true

7. Rubeena is considered poor in studies and her sports activities are also low. However her parents has been told by the teachers that her success in life is not associated with_____.

(a) Personality
(b) High Test Score
(c) Intelligence Test Score
(d) Cognitive Performance Test

8. In the following question, a statement of Assertion (A) is followed by a statement of the Reason (R). Mark the correct choice.

Assertion (A) Social behaviour is a necessary part of human life, and being social means much more than merely being in the company of others.

Reason (R) Because of social influences, people form views, or attitudes about people, and about different issues in life, that exist in the form of behavioural tendencies.

Codes

(a) Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A)

(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)

(c) Assertion (A) is true, but Reason (R) is false

(d) Assertion (A) is false, but Reason (R) is true

9. The most popular therapy across the world is the Cognitive Behaviour Therapy (CBT). The outcome and effectiveness of CBT, is a short and efficacious treatment for a wide range of psychological disorders. Name the approach that is adopted in the Cognitive Behaviour Therapy (CBT).

(a) Psychological   (b) Bio-psychosocial

(c) Existential   (d) Client-focussed

10. Vinita has 9-5 job in a multi-national company and two children to take care of. She passionately does her job and also helps her kids in doing homework and practical. Now she feels and getting tired and planning to do work from home. Name the stimulus event that disturbs and exceeds a person's ability to cope.

(a) Strength   (b) Stress

(c) Strain   (d) Disorder

11. Among the given options, the signs of stress includes_____and_____, which if left unresolved, might have serious implications.

I. frequent and long sleep

II. lack of concentration

III. emotional stubbornness

IV. memory loss

Choose the correct option.

(a) I and II   (b) II and III

(c) I, II and III   (d) II and IV

12. Priyanka is considered as a gifted child who shown early signs of intellectual superiority since childhood, she show larger attention span, good recognition memory, sensitivity to environmental changes, and early appearance of language skills.

What type of traits a gifted child adhered with?

I. Advanced logical thinking

II. High level of intrinsic motivation

III. Solitary academic activities

IV. Passive generalisation

Choose the correct option.

(a) I and II   (b) II and III

(c) I, II and III   (d) II and IV

13. Which among the following is one of the end resultant effect through the addictive meal behaviour?

(a) Hallucination   (b) Obesity

(c) Phobia   (d) Low BMI

14. The feature which refers to the number of attributes within a broader attitude is

(a) Valence   (b) Multiplexity

(c) Centrality   (d) Extremeness

15. The person may complain that an arm or a leg has become paralysed is sign of

(a) Dissociative disorder   (b) Panic disorder

(c) Mood disorder   (d) Conversion disorder

Section B

16. Explain the term 'frustration'.

17. Explain the Binet-Simon Intelligence Scale, developed by Binet and Simon.

18. Karthik belongs to a merchant class family, who are basically into the export-import business. Karthik has decided to become a content creator and convinced his family that he is going to earn handsoine money out of it. Identify the method through which his personality trait can be understood.

or

Sheetal doesn't like to eat healthy and nutritious food in her early age. Though she forcibly eaten due to parental pressure but she also developed taste about many vegetables and milk product. Identify the behaviour of her.

19. Explain the Bandura's social learning theory.

20. What is attitude change?

21. Write about 'Discrimination'.

Section C

22. Damini has visited to a psychiatrist for mental health checkup. She was quite satisfied with service and assistance given by the therapist. Name and explain the therapy Damini is receiving.

23. What is meant by word abnormal? Explain approached that have been used in distinguishing between normal and abnormal behaviours.

or

What is autistic disorder? Also explain the difficulties faced by the children suffer with autistic disorder.

24. Parents of Natasha nowadays are insisting her daughter to visit a psychotherapist, though Natasha not interested. Her parents ultimately convinced her by giving the detailed benefits of psychotherapy. Explain the goal of psychotherapies in psychology.

Section D

25. Discuss cognitive dissonance component in attitude change process.

26. Explain the self-regulation theory. How it helps in mental health?

or

What type of person traits possessed by Type-A person in psychology?

27. Simranjeet a professional kick boxer has represented various clubs across the world. However she has met with serious sports injuries during the match. Surprisingly she not only recovered but also started preparing for next boxing match. Her doctors, coach and parents were surprised by her resilience. What do you understand by resilience? Discuss.

28. Farhan's parents has enrolled him into the pre-board exams counselling and meditation course into the nearby locality, as they believed it will increase his emotional intelligence to cope up with exams. How emotional intelligence is useful?

Section E

29. What is personality? Explain about cultural approach to personality.

or

John often feel anxious, moody, touchy and restless. He quickly loses control. He went to Psychology clinic in order to diagnose his condition, psychologist performed a test. The result further showed that John has scored high on psychoticism dimension that tends to be hostile, egocentric, and antisocial. What does it mean? Which test did the psychologist performed to determine the psychoticism dimension?

30. What is the focus of group behaviour in psychology? Describe various conditions for the formation of group.

or

Analyse in-group and out-group in social psychology.

Section F

Read the case and answer the questions that follow.

A general feature of most of the creativity tests is that they are open-ended. They permit the person to think of different answers to the questions or problems in terms of her/his experiences, whatever these may have been. These help the individual to go in different directions.

There are no specified answers to questions or problems in creativity tests. Therefore, there is freedom

to use one's imagination and express it in original ways.

Creativity tests involve divergent thinking and assess such abilities as ability to produce a variety of ideas, i.e. ideas which are off-the-beaten track, ability to see new relationships between seemingly unrelated things, ability to guess causes and consequences, ability to put things in a new context, etc.

31. Why creative tests were introduced in psychological studies?

32. Does creativity tests measure Intelligence Quotient (IQ)?

Read the case and answer the questions that follow.

Personality disorders are mental illnesses that share several unique qualities. They contain symptoms that are enduring and play a major role in most, sometimes all, aspects of the person's life. While many disorders vary in terms of symptom presence and intensity, personality disorders usually remain constant. The psychodynamic theory regards human behaviour to be determined by underlying psychological influences that usually are unconscious.

These influences (also called forces) are dynamic the relationship between them gives rise to behaviour. Abnormal symptoms are created when conflicts arise in this relationship. This theory states that all behaviour is determined by childhood events and past experience. Treatment then consists of psychoanalysis, which involves bringing into conscious awareness the traumatic childhood conflicts that have been repressed, and resulting in resolution.

33. Name the traits of behavioural model of Psychopathology has suggested about Phobias.

34. Explain maladaptive thoughts or behaviour.

Computer Science (083)
CLASS XII 2023-24

Time: 3 Hours   **Max. Marks: 70**

General Instructions:
1. Please check this question paper contains 35 questions.
2. The paper is divided into 4 Sections- A, B, C, D and E.
3. Section A, consists of 18 questions (1 to 18). Each question carries 1 Mark
4. Section B, consists of 7 questions (19 to 25). Each question carries 2 Marks.
5. Section C, consists of 5 questions (26 to 30). Each question carries 3 Marks.
6. Section D, consists of 2 questions (31 to 32). Each question carries 4 Marks.
7. Section E, consists of 3 questions (33 to 35). Each question carries 5 Marks.
8. All programming questions are to be answered using Python Language only.

Section A

1. The output of the code will be :
    ```
    L=[6,7,8,9,10]
    print(L[2:20])
    ```
    (a) [8, 9, 10]   (b) [ ]
    (c) Error   (d) [6,7,8,9,10]

2. The random function returns a random value between
    (a) 1 and 10   (b) 0 and 10
    (c) 0 and 1   (d) 1 and 100

3. To read three characters from a file object f, we use..........
    (a) f.read(3)   (b) f.read()
    (c) f.readline()   (d) f.readlines()

4. State True or False
    "The pop() method removes and displays the last element of a list."

5. ....are drawn using certain special purpose symbols.
    (a) Algorithm   (b) Pseudocode
    (c) Flowchart   (d) Decision table

6. To arrange a table in descending order of field Salary the clause to be used is
    (a) Order by Salary   (b) Order by Salary Desc
    (c) Arrange by SalaryDesc   (d) Arrange by Salary

7. The BETWEEN clause can not be used for
    (a) Integer Fields   (b) Varchar Fields
    (c) Date Fields   (d) None of these

8. The constraint that ensures that the field does not get any NULL values is
(a) NULL
(b) PRIMARY KEY
(c) CHECK
(d) NOT NULL

9. is and is not are_____Operators.
(a) Membership
(b) Identity
(c) Logical
(d) Comparison

10. What will the following code display?
```
name = "Neha"
type (name)
```
(a) `Invalid function <type>`
(b) `<class 'str'>`
(c) `<class 'int'>`
(d) `<class 'float'>`

11. Which of the following is not required while specifying the connection string in database connection?
(a) Host
(b) Table name
(c) Username
(d) Password

12. The ALTER TABLE command belongs to.............category
(a) DML
(b) TCL
(c) DDL
(d) DCL

13. Which of the following are possible relational operations?
(a) Join
(b) Selection
(c) Cartesian product
(d) All of these

14. Given a tuple tup = (20,50,10,60,30). The statement append(90) returns
(a) (20,50,10,60,30,90)
(b) (90)
(c) Error
(d) (30,90)

15. To open a text file for adding records keeping the existing records the mode should be
(a) ab
(b) xb
(c) rb
(d) w+

16. A device that connects two dissimilar networks is
(a) Modem
(b) Repeater
(c) Bridge
(d) Gateway

Directions : (Q.Nos. 17-18) are Assertion and Reason based questions.

17. Assertion (A) Binary files are processed faster than text files.
Reasoning (R) They are written in Binary format and are more close to the computer.
(a) Both A and R are true and R is the correct explanation for A.
(b) Both A and R are true and R is not the correct explanation for A.
(c) A is true but R is false.
(d) A is false but R is true.

18. **Assertion** (A) A function that is neither built in nor modular must be defined.
    Reason (R) The code of built in and modular functions are available for the Python compiler , but if the function is not defined anywhere the compiler cannot get the code.
    (a) Both A and R are true and R is the correct explanation for A.
    (b) Both A and R are true and R is not the correct explanation for A.
    (c) A is true but R is false.
    (d) A is false but R is true.

Section B

19. Observe the code given below and find the output.
    ```
    s="OceanView"
    print(s[8] +s[2:] +str(len(s)))
    ```

20. What is the purpose of switch in a network?

    or

    Write names of few network devices.

21. (a) What is the output of below questions?
    l1 = [23, 45, 19, 77, 10, 22]
    (i) l1.sort()
    (ii) max(l1)
    (b) Find error in defination of the function given.
    ```
    def finderrors(x=20,y)
        print(x+y*2)
    ```

22. List some commonly used DBMS software packages.

23. (a) Write the full forms of
    (i) HTML
    (ii) HTTPs
    (b) Write any two advantages of tree topology.

24. What output will the following code produce?
    ```
    empdict={'Eno':[1,2,3,4],  'Ename'  :  ['Raj',  'Seema',  'John',  'Smith'],
    'Sal':[10000, 20000, 30000, 40000]}
    print(empdict['Ename'][0], empdict['Sal'][0])
    ```
    or
    Write any two differences between Dictionary and Tuple.

25. Mention atleast three limitations of DBMS.

    or

    What are primary and alternate key in a database? Give suitable example to explain each.

SECTION C

26. Consider the tables Hotel and Room given below :

Table : Hotel				
TId	**CName**	**RoomId**	**DtofArrival**	**Charges**
T1	Ritesh	R1	2016-09-09	1800
T2	Sumana	R2	2020-08-01	2000
T3	Abhi	R3	1995-04-05	3000
T4	Ram	R1	1994-02-02	2500
T5	Nitin	R2	NULL	7000

Table : Room		
RoomID	**RoomType**	**FLoor**
R1	AC	First
R2	Deluxe	Second
R3	General	Second

(a) Write a command to display the customer names and the types of rooms in which they are staying.

(b) With respect to the tables given above, write SQL commands for the following.

    (i) Create the table hotel and insert the 1st record

    (ii) Display the details of customers who have arrived after 01-05-2005

    (iii) Display names and room types of customers whose charges are between 2000 and 3000.

    (iv) Display Names of customers who are staying in "AC" rooms"

27. A binary file "data.dat" contains records of students as per following structure :

Ano	Sname	Marks
1	Raj	850
⋮		
⋮		

Write a Program in Python to search for a student whose number/id is input by the user. If not found appropriate message should be displayed.

or

Write a program with method countand ( ) to count the word 'and' or And' as an independent word in a text file "status.txt". e.g. if the content of the file "status. txt" is as follows:

Welcome to your one-step solutions for all your study, practice and assessment needs for various competitive & recruitment examinations and school segment. We have been working tirelessly for over a decade to make sure that you have best in class study resources because you deserve SUCCESS AND NOTHING LESS...

Then the output of the program should be: Count of _and_ in file is/are: 3

28. (a) Write the SQL commands for (i) to (iv) on the basis of the table HOSPITAL

<table>
<tr><th colspan="7">TABLE: HOSPITAL</th></tr>
<tr><th>No</th><th>Name</th><th>Age</th><th>Department</th><th>Date-ofadm</th><th>Cha-rges</th><th>Sex</th></tr>
<tr><td>1</td><td>Sandeep</td><td>65</td><td>Surgery</td><td>23/02/98</td><td>300</td><td>M</td></tr>
<tr><td>2</td><td>Ravine</td><td>24</td><td>Orthopaedic</td><td>20/01/98</td><td>200</td><td>F</td></tr>
<tr><td>3</td><td>Karan</td><td>45</td><td>Orthopaedic</td><td>19/02/98</td><td>200</td><td>M</td></tr>
<tr><td>4</td><td>Tarun</td><td>12</td><td>Surgery</td><td>01/01/98</td><td>300</td><td>M</td></tr>
<tr><td>5</td><td>Zubin</td><td>36</td><td>ENT</td><td>12/01/98</td><td>250</td><td>M</td></tr>
<tr><td>6</td><td>Ketaki</td><td>16</td><td>ENT</td><td>24/02/98</td><td>300</td><td>F</td></tr>
<tr><td>7</td><td>Ankita</td><td>29</td><td>Cardiology</td><td>20/02/98</td><td>800</td><td>F</td></tr>
<tr><td>8</td><td>Zareen</td><td>45</td><td>Gynaecology</td><td>22/02/98</td><td>300</td><td>F</td></tr>
<tr><td>9</td><td>Kush</td><td>19</td><td>Cardiology</td><td>13/01/98</td><td>800</td><td>M</td></tr>
<tr><td>10</td><td>Shailya</td><td>31</td><td>Nuclear Medicine</td><td>19/02/98</td><td>400</td><td>M</td></tr>
</table>

   (i) To show all information about the patients of Cardiology Department.
   (ii) To list the name of female patients, who are in Orthopaedic Department.
   (iii) To list names of all patients with their date of admission in ascending order.
   (iv) To display Patient's Name, Charges, Age for male patients only.
   (b) Write the command to view all the tables in database.

29. Write user defined functions factors(num) and factorial(num) to find the factors and factorial of a number accepted from the user and passed to the functions from main function.

30. Write the Push operation of stack containing person names. Notice that the name should only accept characters, spaces and period(.) except digits. Assume that Pname is a class instance attribute.

<p align="center">or</p>

Find the final contents of a stack that encounters the following tokens.
Assume that an operand is pushed to stack and a binary operator pops two operands from stack and pushes the result to the stack.
45, 30, + , 50, 80, +, +

Section D

31. Quick Learn University is setting up its academic blocks at Prayag Nagar and planning to set up a network. The university has three academic blocks and one human resource Centre as shown in the diagram below:
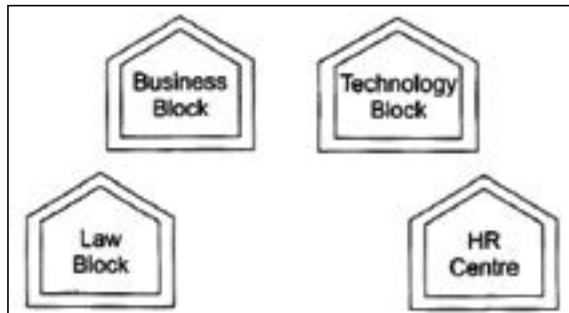
Centre to Centre distance between various blocks/Centre is as follows:

Law Block to Business Block	40 m
Law Block to Technology Block	80 m
Law Block to HR Centre	105 m
Business Block to Technology Block	30 m
Business Block to HR Centre	35 m
Technology Block to HR Centre	15 m

Number of computers in each of the blocks/centre are as follows:

Law Block	15
Technology Block	40
HR Centre	115
Business Block	25

(i) Suggest the most suitable place (i.e. block/Centre) to install the server of this university with a suitable reason.

(ii) Suggest an ideal layout for connecting these block/Centre for a wired connectivity.

(iii) Which device you will suggest to be placed/installed in each of these blocks/Centre to efficiently connect all the computers with in these blocks/Centre ?

(iv) The university is planning to connect its admission office in the closest big city, which is more than 250 km from university, which type of network out of LAN, MAN or WAN will be formed? Justify your answer.

(v) Expand the following
    LAN
    WAN

32. (a) Underline the errors in the following code and write the correct code :

```
while s>0
  if a%2=0
     print(a%2)
  elseif a%3=0 then
     print(a%3)
```

(b) What is database connectivity? How to create a connection object?

or

(a) Differentiate between identifier and keyword.

(b) What conditions or terms are included by BD-API?

33. What does csv writer() function do?

Write a python program for operating on a csv file "people.csv" using following functions :

(a) addPeople() :To input details of people and add them to a csv file "people.csv" without removing the previous records. The record structure is as follows :

AdhrNo   Name City   Age

The file should store only those people whose age is greater than and equal to 18.

(b) getPeople() : To open the file "people.csv" and display records whose name starts with "P"

or

What is the use of writerow() function?

A file "Toys.csv" exists storing details of toys as per following structure :

ToyID   Toyname   Category   Cost

Write a program in python with functions as follows

(a) addToy() : To append data of toys and store them to the file "Toys.csv" only if the Toy category is "Boys". Also display the number of toys added.

(b) showToys() : To open the file "Toys.csv" and display records of toys whose cost is above 1000.

Section E

34. Consider the following table Cab :

Table : Cab			
CabID	**CabType**	**Nop**	**Rate**
Cb1	Sedan	4	40
Cb2	Yellow Taxi	5	25
Cb3	Mini	3	30
Cb4	Micro	2	20

(i) Which column qualifies to be the primary key?

(ii) Write a command to display the fields of the table along with their types and sizes.

(iii) Write statements to :

    (a) Add a new column Driver varchar(30)

    (b) Change data type of Rate column to float(6,1).

    (Option for part (iii) only)

    (a) To display the cab type whose rate is more than 25.

    (b) To display cab id and Number of passengers for cab sedan.

35. Riya wrote a program to search any string in text file "school". Help her to execute the program successfully.

```
def check () :
  datafile = open (.....)
  found = input ("Enter any string to
              be searched : ")
  f = False
  for line in ....... :
    if found in line :
        f = .......
      break
  return f
f = check ()
if (f = =.......) :
    print ("True")
else :
    print (......)
```

(i) Riya should open which file to search any string?

(ii) Which value will assign to f in Line 7?

(iii) Fill the blank in Line 5.

SAMPLE PAPER
FOR BOARD EXAMINATION
(Session 2023-24)

Class : XII	**Time Allowed** : 03:00 Hours
Subject : (065) Informatics Practices	**Maximum Marks** : 70

General instructions:

- *This question paper contains five sections, Section A to E.*
- *All questions are compulsory.*
- *Section A has 18 questions carrying 01 mark each.*
- *Section B has 07 Very Short Answer type questions carrying 02 marks each.*
- *Section C has 05 Short Answer type questions carrying 03 marks each.*
- *Section D has 03 Long Answer type questions carrying 05 marks each.*
- *Section E has 02 questions carrying 04 marks each. One internal choice is given in Q35 against part C only.*
- *All programming questions are to be answered using Python Language only.*

Section – A

Q01.   URLs are of two types: (1)

   (A) Absolute & Relative   (B) Static & Dynamic

   (C) Absolute and Dynamic   (D) None of the above

Q02.   Which of the following is not done by cyber criminals? (1)

   (A) Unauthorized account access   (B) Mass attack using Trojans as botnets

   (C) Email spoofing and spamming   (D) Report vulnerability in any system

Q03.   An organization purchase new computers every year and dumps the old one into the local dumping (1)
   yard. Write the name of the most appropriate category of waste that the organization is creating
   every year, out of the following options:

   (A) Business waste   (B) Commercial waste

   (C) E-waste   (D) Green waste

Q04.   Which type of values will be returned by SQL while executing the following statement? (1)
   Select length("LENGTH") ;

   (A) Numeric value   (B) Text value

   (C) Null value   (D) Float value

5. If column "salary" contains the data set (45000, 5000, 55000, 45000, 55000), what will be the   (1)
    output after the execution of the given query?
    SELECT AVG (DISTINCT salary) FROM employee;
    (A) 38500   (B) 40000
    (C) 41000   (D) 35000

Q06. 'V' in 'VISA' stands for: (1)
    (A) Virtual   (B) VISA
    (C) Vital   (D) None of these

Q07. The correct SQL from below to find the temperature in increasing order of all cities.   (1)
    (A) SELECT city FROM weather order by temperature ;
    (B) SELECT city, temperature FROM weather ;
    (C) SELECT city, temperature FROM weather ORDER BY temperature ;
    (D) SELECT city, temperature FROM weather ORDER BY city ;

Q08. Which one of the following is not an aggregate function?   (1)
    (A) Min   (B) Sum
    (C) With   (D) Avg

Q09. Where and Having clauses can be used interchangeably in SELECT queries?   (1)
    (A) True   (B) False
    (C) Only in views   (D) With order by

Q10. Given a Pandas series called HEAD, the command which will display the first 3 rows is _____.   (1)
    (A) print(HEAD.head(3))   (B) print(HEAD.Heads(3))
    (C) print(HEAD.heads(3))   (D) print(head.HEAD(3))

Q11. In order to draw charts in Python, which of the following statement will be used: (1)
    (A) import pyplot.matplotlib as pl   (B) import matplotlib.pyplot as plt
    (C) Import matplotlib.pyplot as plt   (D) import pyplot from matplotlib as plt

Q12. We can create dataframe from:
    (A) Series   (B) Numpy arrays
    (C) List of Dictionaries   (D) All of the above

Q13. Which amongst the following is an example of a browser?   (1)
    (A) Mandriva   (B) GIMP
    (C) Epic   (D) Azure

Q14. In SQL, this function returns the time at which the function executes: (1)

(A) SYSDATE (B) NOW

(C) CURRENT (D) TIME

Q15. _____ are the attempts by individuals to obtain confidential information from you through an original looking site and URL. (1)

(A) Pharming attack (B) Plagiarism

(C) Spamming (D) Phishing scams

Q16. Chaaya sets up her own company to sell her own range of clothes on Instagram. What type of intellectual property can she use to show that the clothes are made by his company. (1)

(A) Patents (B) Copyright

(C) Trademark (D) Design

Q17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as

(A) Both A and R are true and R is the correct explanation for A

(B) Both A and R are true and R is not the correct explanation for A

(C) A is True but R is False

(D) A is false but R is True

Q17. **Assertion (A)**: Each website has a unique address called URL. (1)

Reasoning (R): It is Unified Resource Locator and a correct example is

http://mypage.htm/google.com

Q18. **Assertion (A)**: DataFrame has both a row and column index. (1)

Reasoning (R): .loc() is a label based data selecting method to select a specific row(s) or column(s) which we want to select.

Section – B

Q19. Explain the terms Web Page and Web Site. (2)

OR

Compare and contrast – STAR and BUS topologies

Q20. Neelam, a database administrator needs to display Class wise total number of students of 'XI' and 'XII' house. She is encountering an error while executing the following query: (2)

SELECT CLASS, COUNT (*) FROM STUDENT

ORDER BY CLASS HAVING CLASS='XI' OR CLASS= 'XII';

Help her in identifying the reason of the error and write the correct query by suggesting the possible correction (s).

Q21. What is the purpose of GROUP BY clause in SQL? Explain with the help of suitable example. (2)

Q22. Write a program to create a series object using a dictionary that stores the number of Kendriya (2)
Vidyalayas in each city of cities of your state.

Note: Assume some cities like AGRA, JHANSI, MATHURA, NOIDA having 4, 3, 5, 4 KVs
respectively and pandas library has been imported as mypandas.

Q23. Mention any four net etiquettes. (2)

OR

List any four benefits of e-waste management.

Q24. What will be the output of the following code: (2)

>>> import pandas as pd

>>> mydata=pd.Series(['rajesh', 'amit', 'tarun', 'Radhika'])

>>> print(mydata < 'rajesh')

Q25. Carefully observe the following code: (2)

>>> import pandas as pd

>>> xiic = {'amit':34, 'kajal':27, 'ramesh':37}

>>> xiid = {'kajal':34, 'lalta':33, 'prakash':38}

>>> result = {'PT1':xiic, 'PT2':xiid}

>>> df = pd.DataFrame(result)

>>> print(df)

Answer the following:

i) List the index of the dataframe df

ii) Find the output of the following code : print(df.loc['kajal':'ramesh'])

Q26. Write outputs for SQL queries (i) to (iii) which are based on the given table GAME   (3)

GID	NAME	DATEOFGAME	UNDER	WINNER
1	JUDO	2022-10-17	17	RAMESH
2	BADMINTON	2022-5-18	14	KIRTI
3	JUDO	2022-8-18	19	KAMAL
4	TAEKWONDO	2021-7-20	14	SADIQ
5	CHESS	2021-5-6	17	ALANKAR

    i)   Select name, under, winner from GAME where month(dateofgame)>7;

    ii)   Select lcase(mid(winner,2,3)) from GAME where NAME like "%O";

    iii)   Select mod(under, month(dateofgame)) from GAME where NAME="JUDO";

Q27. Write a Python code to create a DataFrame with appropriate column headings from the list given   (3)
below:

[[1001,'IND-AUS','2022-10-17'], [1002,'IND-PAK','2022-10-23'], [1003,'IND-SA' , '2022-10-30],
[1004,'IND-NZ','2022-11-18']]

Q28. Consider the given DataFrame 'Items':   (3)

	Name	Price	Quantity
0	CPU	7750	15
1	Watch	475	50
2	Key Board	225	25
3	Mouse	150	20

Write suitable Python statements for the following:

    i)   Add a column called Sale_Price which is 10% decreased value of Price

    ii)   Add a new item named "Printer" having price 8000 and Quantity as 10.

    iii)   Remove the column Quantity

Q29. What do you mean by "Digital Footprints"? Explain the different types of digital footprints with   (3)
example?

                    OR

What do you mean by Intellectual Property Right? Give some names of common type of IP with
example.

Q30. Based on table STOCK given here, write suitable SQL queries for the following: (3)

STOCKID	NAME	COMPANY	TYPE	DOPURCHASE	Quantity
1	Photoshop	Adobe	SW	5-Oct-2022	1
2	Windows 10	Microsoft	SW	15-Apr-2021	5
3	Mother Board	ASUS	HW	8-Sep-2022	5
4	Office 2007	Microsoft	SW	8-Jul-2022	2
5	Hard Disk	Seagate	HW	6-Feb-2021	10
6	Azure	Microsoft	SW	17-Jul-2022	6
7	CD ROM	Seagate	HW	31-Jul-2021	5
8	Reader	Adobe	SW	28-Aug-2022	2

    i)   Display company wise highest Quantity available

    ii)   Display year wise lowest Quantity available

    iii)   Display total number of Software and Hardware type stock

<p align="center">OR</p>

Explain the difference between **WHERE CLAUSE** and **HAVING CLAUSE** in detail with the help of suitable example.

<p align="center">Section – D</p>

Q31. Write suitable SQL query for the following: (5)

    i)   Display 4 characters extracted from 3rd character onwards from string 'IMPOSSIBLE'.

    ii)   Display the position of occurrence of string 'GO' in the string "LET's GO to GOA".

    iii)   Round off the value 257.75 to nearest ten rupees.

    iv)   Display the remainder of 18 divided by 5.

    v)   Remove all the leading and trailing spaces from a column passwd of the table 'USER'.

<p align="center">**OR**</p>

Explain the following SQL functions using suitable examples.

    i)   MONTHNAME()

    ii)   SUBSTRING()

    iii)   LTRIM()

    iv)   ROUND()

    v)   RIGHT()

Q32. Agra Shoes Pvt. Limited is an international shoe maker organization. It is planning to set up its India Office at Agra with its head office in Delhi. The Agra office campus has four main buildings - ADMIN, PRODUCTION, WAREHOUSE and SHIPPING. (5)

You as a network expert have to suggest the best network related solutions for their problems raised in (i) to (v), keeping in mind the distances between the buildings and other given parameters.

AGRA Office	
PRODUCTION	WAREHOUSE
ADMIN	SHIPPING
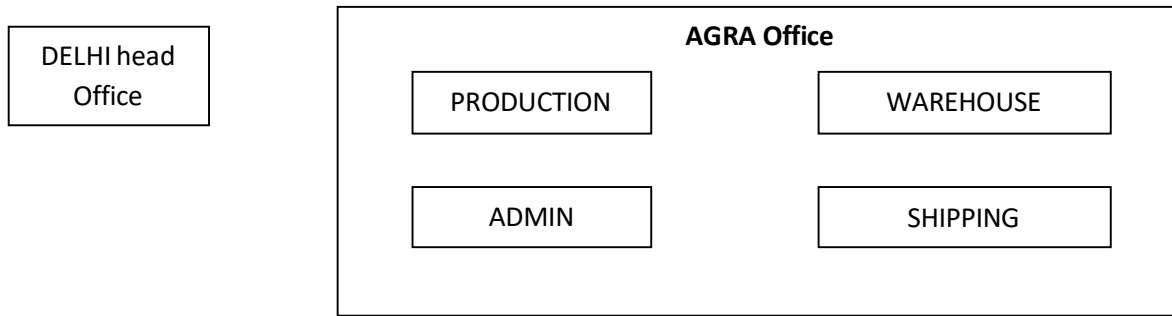
DELHI head Office

Shortest distances between various buildings:

ADMIN to WAREHOUSE	50 Mtr
ADMIN to PRODUCTION	85 Mtr
ADMIN to SHIPPING	45 Mtr
WAREHOUSE to PRODUCTION	50 Mtr
WAREHOUSE to SHIPPING	45 Mtr
PRODUCTION to SHIPPING	40 Mtr
DELHI head office to AGRA Office	240 Km

Number of computers installed at various buildings are as follows:

| ADMIN	120
WAREHOUSE	60
PRODUCTION	35
SHIPPING	18
Delhi Head Office	12

i) Suggest the most appropriate location of the server inside the AGRA Office (out of the four buildings) to get the best connectivity for maximum number of computers. Justify your answer.

ii) Suggest and draw cable layout to efficiently connect various buildings within the AGRA Office for a wired connectivity.

iii) Which networking device will you suggest to be procured by the company to interconnect all the computers of various buildings of AGRA Office?

iv) Company is planning to get its website designed which will allow shopkeepers to see their products, shipping details themselves on its server. Out of the static or dynamic,

which type of website will you suggest?

v) Which of the following will you suggest to establish the online face to face communication between the people in the ADMIN office of AGRA and Delhi head office?

A) Cable TV   B) Email   (C) Video conferencing   (D) Text chat

Q33. Write Python code to plot a bar chart for No of Games Tally in State Level Sports shown below: (5)
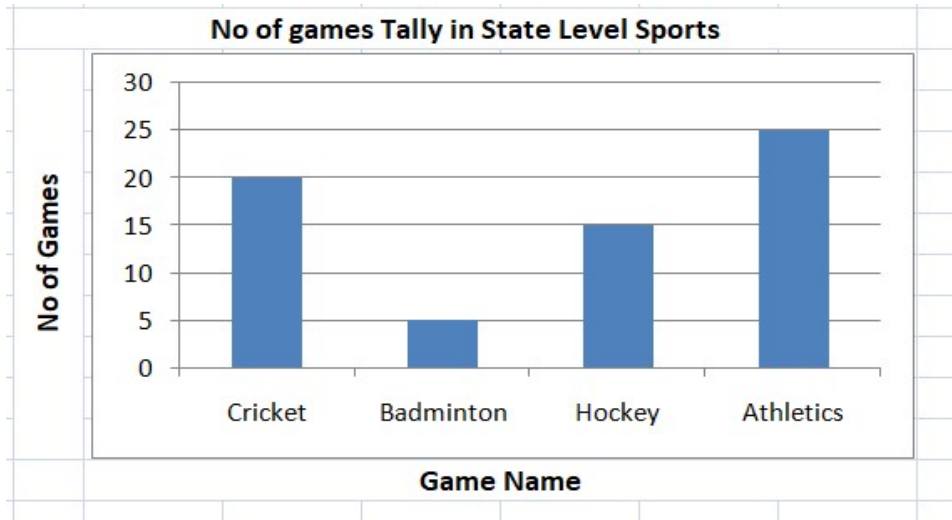
Also give suitable python statement to save this chart.

OR

Write a python program to plot a line chart based on the given data to depict the changing weekly average temperature in Jhansi for four weeks.

Week=[1, 2, 3, 4]

Avg_week_temp=[30, 26, 28,24]

Section – E

Q34. Harsh, a movie information collector has designed a database for Indian movies. Help him by writing answers of the following questions based on the given table **MOVIE**: (1+ 1+ 2)

movieID	Name	Rating	Production	Collection	DORelease
201	Nadiya Ke Par	A+	Rajshree	400	15-Aug-1989
202	Hum Aapke Hain Kaun	A+	Dharma	1500	4-May-1992
203	Veer Zara	A	Yashraj	1100	25-Oct-2004
204	Chandni	A+	Yashraj	2000	8-Nov-1989
205	Om Shanti Om	A	Red Chillies	2007	14-Nov-2007

i) Write a query to display movie name and production – both in upper case

ii) Write a query to display all details of movies released in year 1989

iii) Write a query to count production wise total number of movies

OR (Option for part iii only)

Write a query to count rating wise total number of movies

Q35. Mr. Summit, a data analyst has designed the DataFrame df that contains data about Computer   (2+
infrastructure with 'S01', 'S02', 'S03', 'S04', 'S05, 'S06' as indexes shown below. Answer the   2)
following questions:

	school	computers	non-working	working
S01	MPS	80	10	70
S02	SFC	88	12	76
S03	JPS	25	4	21
S04	APS	45	6	39
S05	RLPS	90	15	75
S06	DPS	60	6	54

    i)   Predict the output of the following python statement:

           A) df.shape

           B) df[2:4]

    ii)   Write Python statement to display the data of working column of indexes S03 to S05.

OR (Option for part ii only)

        Write Python statement to compute and display the difference of data of computers
column and working column of the above given DataFrame.

PHYSICAL EDUCATION (048)
Class XII Session 2023-24

Time: 3 Hours   **Max. Marks: 70**

General Instructions:
1. The question paper consists of 5 sections and 37 Questions.
2. Section A consists of question 1-18 carrying 1 mark each and is multiple choice questions. All questions are compulsory.
3. Sections B consist of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.
4. Sections C consist of Question 25-30 carrying 3 marks each and are short answer types and should not exceed 100-150 words. Attempt any 5.
5. Sections D consist of Question 31-33 carrying 4 marks each and are case studies. There is internal choice available.
6. Section E consists of Question 34-37 carrying 5 marks each and are short answer types and should not exceed 200-300 words. Attempt any 3.

Section A

1. Identify the yoga asana below.

    (a) Tadasana   (b) Halasana
    (c) Katichakrasana   (d) Pavanamuktasana

2. Which of the following Laws of Motion given by Sir Issac Newton is also known as 'Law of Inertia'?
    (a) Third Law   (b) Second Law
    (c) First Law   (d) None of these

3. A person who is characterised by sociability, assertiveness and high amount of emotional expressiveness is said to have _____ personality traits.
  (a) Agreeableness   (b) Conscientiousness
  (c) Openness   (d) Extroversion

4. BMR can be calculated by using the _____ formula.
  (a) Harris Benedict   (b) Fullerton Function
  (c) Both (a) and (b)   (d) None of the above

5. Which of the following is defined as the ability of a muscle or muscle group to rests fatigue?
  (a) Muscular endurance   (b) Muscular strength
  (c) Agility   (d) Flexibility

6. Which of the following equipments is not required for six-minute walk test?
  (a) Chair   (b) Ruler
  (c) Measuring tape   (d) Stopwatch

7. Match the following :

A.	Vitamin A	1.	Weakness in muscles
B.	Vitamin D	2.	Anemia
C.	Vitamin E	3.	Night blindness
D.	Vitamin K	4.	Rickets

  (a) A-4, B-2, C-1, D-3   (b) A-1, B-3, C-2, D-4
  (c) A-3, B-4, C-1, D-2   (d) A-2, B-1, C-4, D-3

8. What is the movement of blood pumped into one ventricle beat?
  (a) 70 to 90 ml/beat   (b) 50 to 60 ml/beat
  (c) 60 to 90 ml/beat   (d) 80 to 90 ml/beat

9. In all carbohydrates, the ratio of hydrogen atoms to oxygen atoms is _____.
  (a) 3:2   (b) 1:1
  (c) 2:1   (d) 3:1

10. Match the following:

A.	explosive strength	1.	Cycling
B.	Strength endurance	2.	Weightlifting
C.	maximum strength	3.	Long jump
D.	static strength	4.	Cymnastics

  (a) A-4, B-2, C-1, D-3   (b) A-2, B-4, C-3, D-1
  (c) A-1, B-3, C-2, D-4   (d) A-3, B-1, C-4, D-2

11. What is coupling ability in relation to coordinative abilities?
    (a) Sports movement
    (b) Different sports
    (c) Movement of body parts
    (d) Aggression response

12. _____ is the ability of the body to release maximum muscle contraction in the shortest possible time.
    (a) Agility   (b) Flexibility
    (c) Speed   (d) Power

13. Which of the following is not the reason for obesity?
    (a) Extra exercise
    (b) Familiar tendency
    (c) Poor eating habits
    (d) Psychological factors

14. A large lateral curve is known as _____.
    (a) Polishing   (b) Scoliosis
    (c) Hydroline   (d) Friction

15. 50 M run/walk aims to measure an athlete's _____.
    (a) Power   (b) Endurance
    (c) Speed   (d) Abdominal strength

16. The United Nations declared _____ as the year of special Olympics.
    (a) 1984   (b) 1987
    (c) 1986   (d) 1988

17. The Continouous training method was developed by whom?
    (a) Gosta Holmer   (b) Dr. Van Aaken
    (c) Woldemar   (d) Greshler

18. Given below are the statements labelled
    Assertion (A) and Reason (R).
    Assertion (A) Explosive strength refers to the ability to apply strength along with high speed.
    Reason (R) This is why it is used in swimming and pole vault.
    In context of above statements, which one of the following is correct?
    (a) A is false, but R is true
    (b) A is true, but R is false
    (c) Both A and R are true and R is the correct explanation of A
   (d) Both A and R are true, but R is not the correct explanation of A

Section B

19. How can mental imagery be useful for athletes?

20. Aarav is a student of class 4 and is suffering from knock knee. He was advised to practice yoga and participate in sports activities as cure. Suggest two yoga asanas he can perform? Which lifestyle habits can cause development of knock knee?

21. List any two advantages and disadvantages of interval training.

22. Write briefly about proteins as an essential component of the diet.

23. Differentiate between pre-meet and post-meet responsibilities of committees.

24. Create a mind map of any four strategies to make physical activities accessible for children with special needs.

Section C

25. Name three different groups of fats. Also, mention the different sources of fats.

26. Create a flow chart for the procedure of Tadasana.

27. Define the term strength. Discuss any two types of strength.

28. State any three ways which help to prevent sports injuries during training and competition.

29. What are the different causes of diabetes? Enlist the symptoms.

30. What is the purpose of conducting the Standing Broad Jump Test? Write the procedure for conducting this test.

Section D

31. On the basis of the picture given below, answer the following questions.
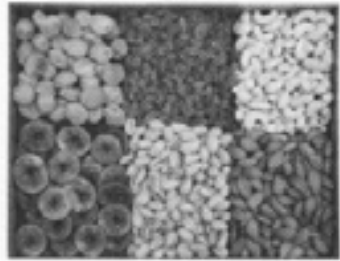
    (a) Is this a water-soluble nutrient?
    (b) Deficiency of_____causes Pellagra.
    (c) The given sources are rich in_____
    (d) Vitamin B5 is also known as_____

OR

Deficiency of_____causes Beri-Beri.

32. On the basis of the picture given below, answer the following questions.

    (a) When does this type of fracture occur?
    (b) Identify the fracture in the above figure.
    (c) This fracture occurs mostly is children younger than_____of age.
    (d) _____is a break or splinter of the bone into more than two fragments.

OR

Mention the causes of this fracture.

33. On the basis of the picture given below, answer the following questions.

    (a) Define pace run.
    (b) Identify the method to improve flexibility.
    (c) Active flexibility can be further divided into two types,_____and_____.
    (d) It uses the_____of a moving body or a limb in an attempt to force it beyond its normal range of motion.

Section E

34. Amit noticed that his grandfather is facing difficulty in putting on overhead garments.
He decided to conduct a Back Scratch Test for senior citizens. What is the purpose of this test? Explain its procedure.

35. Aerobic capacity is influenced by Oxygen O_2 – its intake, transport, uptake, and energy reserves' Justify.

36. Explain the method of deciding the winner in a league tournament.

37. Briefly explain the Newton's First and Second Law of Motion

<div align="center">

प्रतिदर्श प्रश्न पत्र 2023-24

विषय - हिंदी (आधार) - 302

कक्षा - बारहवीं

</div>

निर्धारित समयः 03 घंटे   अधिकतम अंक : 80 अंक

सामान्य निर्देश :-

- निम्नलिखित निर्देशों को बहुत सावधानी से पढ़िए और उनका पालन कीजिए :-
- इस प्रश्न पत्र में खंड 'अ' में वस्तुपरक तथा खंड 'ब' में वर्णनात्मक प्रश्न पूछे गए हैं।
- खंड 'अ' में 40 वस्तुपरक प्रश्न पूछे गए हैं, सभी 40 प्रश्नों के उत्तर देने हैं।
- खंड 'ब' में वर्णनात्मक प्रश्न पूछे गए हैं। प्रश्नों के उचित आंतरिक विकल्प दिए गए हैं ।
- दोनों खंडों के प्रश्नों के उत्तर देना अनिवार्य है ।
- यथासंभव दोनों खंडों के प्रश्नों के उत्तर क्रमशः लिखिए।

<div align="center">

खंड – अ (वस्तुपरक प्रश्न)

</div>

प्रश्न
संख्या   अपठित बोध   अंक (15)

प्रश्न 1. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर दिए गए प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प को   10x01
चुनकर लिखिए :-   =10

पश्चिमी सभ्यता मुख मोड़ रही है। वह एक नया आदर्श देख रही है। अब उसकी चाल बदलने लगी है। वह कलों की पूजा को छोड़कर मनुष्यों की पूजा को अपना आदर्श बना रही है। इस आदर्श के दर्शने वाले देवता रस्किन और टालस्टॉय आदि हैं। पाश्चात्य देशों में नया प्रभात होने वाला है। वहाँ के गंभीर विचार वाले लोग इस प्रभात का स्वागत करने के लिए उठ खड़े हुए हैं। प्रभात होने के पूर्व ही उसका अनुभव कर लेने वाले पक्षियों की तरह इन महात्माओं को इस नए प्रभात का पूर्व ज्ञान हुआ है और हो क्यों न ? इंजनों के पहिए के नीचे दबकर वहाँ वालों के भाई - बहन - नहीं नहीं उनकी सारी जाति पिस गई, उनके जीवन के धुरे टूट गए, उनका समस्त धन घरों से निकलकर एक ही दो स्थानों में एकत्र हो गया।

साधारण लोग मर रहे हैं, मज़दूरों के हाथ - पाँव फट रहे हैं, लहू बह रहा है! सर्दी से ठिठुर रहे हैं। एक तरफ दरिद्रता का अखंड राज्य है, दूसरी तरफ अमीरी का चरम दृश्य। परंतु अमीरी भी मानसिक दुखों से विमर्दित है। मशीनें बनाई तो गई थीं मनुष्यों का पेट भरने के लिए - मज़दूरों को सुख देने के लिए - परंतु वे काली - काली मशीनें ही काली बनकर उन्हीं मनुष्यों का भक्षण कर जाने के लिए मुख खोल रही हैं। प्रभात होने पर ये काली - काली बलाएँ दूर होंगी। मनुष्य के सौभाग्य का सूर्योदय होगा।

शोक का विषय यह है कि हमारे और अन्य पूर्वी देशों में लोगों को मज़दूरी से तो लेशमात्र भी प्रेम नहीं है, पर वे तैयारी कर रहे हैं पूर्वोक्त काली मशीनों का आलिंगन करने की। पश्चिम वालों के तो ये गले पड़ी हुई बहती नदी की काली कमली हो रही हैं। वे छोड़ना चाहते हैं, परंतु काली कमली उन्हें नहीं छोड़ती। देखेंगे पूर्व वाले इस कमली को छाती से लगाकर कितना आनंद अनुभव करते हैं। यदि हममें से हर आदमी अपनी दस उँगलियों की सहायता से साहसपूर्वक अच्छी तरह काम करे तो हम मशीनों की कृपा से बढ़े हुए परिश्रम वालों को वाणिज्य के जातीय संग्राम में सहज ही पछाड़ सकते हैं। सूर्य तो सदा पूर्व ही से पश्चिम की ओर जाता है। पर आओ पश्चिम से आने वाली सभ्यता के नए प्रभात को हम पूर्व से भेजें।

इंजनों की वह मज़दूरी किस काम की जो बच्चों, स्त्रियों और कारीगरों को ही भूखा नंगा रखती है और केवल सोने, चाँदी, लोहे आदि धातुओं का ही पालन करती है। पश्चिम को विदित हो चुका है कि इनसे मनुष्य का दुख दिन पर दिन बढ़ता है।

1. "पाश्चात्य देशों में **नया प्रभात** होने वाला है।"- पंक्ति में रेखांकित पद का आशय हो सकता है ?   1

    a. नया प्रकाश
    b. नया विचार
    c. नया सवेरा
    d. नया प्रभास

2. संदर्भ के अनुसार गद्यांश में 'विमर्दित' शब्द का सटीक अर्थ क्या हो सकता है ?   1

    a. ठगी हुई
    b. ग्लानि पूर्ण
    c. ईर्ष्या पूर्ण
    d. पीड़ा पूर्ण

3. निम्नलिखित कथनों पर विचार कीजिए –   1

    कथन (I) : मानवीय दक्षता को महत्त्व देना चाहिए।
    कथन (II) : मनुष्य तथा मानवीयता से प्रेम करना चाहिए।
    कथन (III) : अपनी चाल को बदल लेना चाहिए।
    कथन (IV) : मानव जीवन को आदर्श मानना चाहिए।

    गद्यांश के अनुसार कौन - सा/ से कथन सही हैं ?
    a. केवल कथन I सही है।
    b. केवल कथन II सही है।
    c. केवल कथन II और III सही हैं।
    d. केवल कथन I और IV सही हैं।

4. गद्यांश के अनुसार पूर्वी देशों की समस्या क्या है ?   1

    a. मज़दूरों के लिए अधिकारों की कमी
    b. मज़दूरों का पूंजी पतियों द्वारा शोषण
    c. मज़दूरी को कम महत्त्व का आंकना
    d. मज़दूरी पर अमीरी का प्रभाव

5. गद्यांश के अनुसार साधारण लोग क्यों मर रहे हैं ?   1

    a. मानव श्रम से ज्यादा मशीनों को महत्त्व मिलने के कारण
    b. हाथ - पाँव फटने, खून रिसने और सर्दी के कारण
    c. कम मजदूरी मिलने कारण हुई बीमारियों से
    d. कार्य क्षेत्रों के विषैले पर्यावरण व खाने की कमी से

6. गद्यांश में मशीनों को 'काली मशीनें' कहना किस बात की ओर संकेत करता है ?   1

    a. काला रंग शोक का प्रतीक होता है।

    b. मशीनों द्वारा जन साधारण में बेरोज़गारी बढ़ाने के कारण

    c. माँ दुर्गा के अवतार काली के जैसे भक्षण करने के कारण

    d. मशीनों से अमीरों द्वारा काले धन अर्जन करने के कारण

7. "इंजनों के पहिए के नीचे दबकर वहाँ वालों के....." इस प्रक्रिया के क्या परिणाम हुए?   1

    a. आर्थिक संपदा का अनुचित वितरण

    b. भाई बहनों व अन्य रिश्तेदारों में दुराव

    c. समस्त जाति द्वारा कठिन परिश्रम

    d. मशीनों द्वारा मनुष्यों का संरक्षण

8. रस्किन और टालस्टॉय का महत्त्व है क्योंकि इन्होनें   1

    a. पूर्वी देशों में साम्राज्यवाद के विरुद्ध आवाज़ उठाई थी

    b. मानवीय संवेदनाओं एवं गुणों को महत्त्व दिया था

    c. धार्मिक कट्टरता के प्रति चेतना जगाई थी

    d. गाँधी जी इन दोनों के विचारों से अत्यधिक प्रभावित थे।

9. मनुष्य के सौभाग्य का सूर्योदय कब होगा ?   1

    a. मजदूरों द्वारा क्रांति करने से

    b. मशीनों के हट जाने से

    c. सभी लोगों को काम मिलने से

    d. मानवीय दक्षताओं को महत्त्व मिलने से

10. मनुष्य के दुख में निरंतर वृद्धि का क्या कारण बताया गया है ?   1

    a. मशीनों पर अत्यधिक आश्रित हो जाना

    b. मानवीय दक्षता की आलोचना

    c. पूँजी पतियों द्वारा गरीबों का शोषण

    d. काली मशीनों द्वारा मनुष्यों का भक्षण

प्रश्न 2. दिए गए पद्यांश पर आधारित प्रश्नों को ध्यानपूर्वक पढ़कर दिए गए प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प को चुनकर लिखिए :-   05x01 =05

कुश्ती कोई भी लड़े
ढोल बजाता है सिमरू ही
जिसके सधे हाथ
भर देते हैं जोश पूरे दंगल में
उछलने लगती है मिट्टी पूरे अखाड़े की

ताक धिना-धिन... ताक धिना-धिन
झाँकने लगते हैं लोग
एक-दूसरे के कन्धों के ऊपर से
उचक-उचक कर

बहुत गहरा है रिश्ता
सिमरू और ढोल का—
जैसे साँस और धड़कन का

ढोल ख़ामोश है
तो ख़ामोश है
अखाड़े की माटी

ख़ामोश ढोल को
जगाएँगे हाथ सिमरू के
ढोल बजेगा
जागेगा अखाड़ा
जागेगी माटी अखाड़े की
माटी ही तो है
जो स्वीकारती है सभी को
अच्छे हों या बुरे
हर रूप में!!

1. ढोल बजाता है सिमरू ही - पंक्ति में **'ही'** क्या इंगित करता है ?   1
   a. आदत
   b. महत्त्व
   c. आडंबर
   d. प्रेम

2. कुश्ती में जोश कब भर आता है ?   1
   a. जब हारता हुआ पहलवान जीतने लगता है
   b. जब दोनों पहलवान बराबर की टक्कर वाले होते है
   c. जब फ़ाइनल कुश्ती द्वारा राष्ट्रीय विजेता तय होता है
   d. जब सिमरू द्वारा ढ़ोल बजाया जाता है

3. माटी द्वारा अच्छे - बुरे को स्वीकारने का क्या तात्पर्य है ?   1
   a. माटी सबको जीतने का समान अवसर देती है
   b. माटी का न्याय सबको स्वीकार्य होता है
   c. अंत में अच्छे बुरे सभी माटी में मिल जाते हैं
   d. माटी की गोद में अच्छे-बुरे सभी पलते हैं

4. ढोल तथा अखाड़े की माटी में क्या समानता बताई गई है ?   1

निम्नलिखित कथनों पर विचार कीजिए -

कथन (I) : दोनों को उपयोग करने से पहले तैयार करना होता है

कथन (II) : दोनों में श्रम की आवश्यकता होती है

कथन (III) : दोनों का प्रयोग कर लोग अपनी कला सिद्ध करते है

कथन (IV) : दोनों की परिवर्तन में भूमिका होती है

निम्नलिखित विकल्पों पर विचार कीजिए तथा सही विकल्प चुनकर लिखिए।

विकल्प:-

    a. केवल कथन (III) सही है।

    b. केवल कथन (IV) सही है।

    c. केवल कथन (II) और (III) सही हैं।

    d. केवल कथन (I) और (IV) सही हैं।

5. कॉलम 1 को कॉलम 2 से सुमेलित कीजिए और सही विकल्प चुनकर लिखिए।   1

	कॉलम 1		कॉलम 2
1	सिमरू	(i)	श्रमजीवी वर्ग
2	ढोल	(ii)	सामाजिक भूमि
3	अखाड़ा	(iii)	परिश्रम

    a. 1-(iii), 2-(i), 3-(ii)

    b. 1-(i), 2-(iii), 3-(ii)

    c. 1-(i), 2-(ii), 3-(iii)

    d. 1-(ii), 2-(i), 3-(iii)

प्रश्न संख्या	अभिव्यक्ति और माध्यम	अंक (05)

प्रश्न 3. निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर सर्वाधिक उपयुक्त उत्तर वाले विकल्प को चुनकर लिखिए :-   05×01 =05

1. आलेख कुछ - कुछ फ़ीचर जैसा होता है। फिर भी दोनों में पर्याप्त अंतर है। अतः आलेख का निम्नलिखित में से   1
विषय नहीं हो सकता है ?

    a. ब्रेकिंग न्यूज़

    b. राजनीति

    c. खेलकूद

    d. समसामयिकी

2. ऐसा सुव्यवस्थित, सृजनात्मक और आत्मनिष्ठ लेखन, जिसके माध्यम से सूचनाओं के साथ-साथ मनोरंजन पर भी   1
ध्यान दिया जाता है, उसे _____ कहते हैं।

    a. समीक्षा करना

    b. फीचर लेखन

    c. आलेख लेखन

    d. रिपोर्ट बनाना

3. बीट कवर करने वाले रिपोर्टर को कहा जाता है :-   1

    a. लेखक
    b. एंकर
    c. संपादक
    d. संवाददाता

4. रजत एक पत्रकार हैं। वे सामान्य समाचारों से आगे बढ़कर खेल से जुड़ी या इस विषय से जुड़ी घटनाओं, मुद्दों   1
    और समस्याओं का बारीकी से विश्लेषण करते हैं। उनकी रिपोर्टिंग को क्या कहा जा सकता है ?

    a. बीट रिपोर्टिंग
    b. फ्रीलांसिंग
    c. विशेषीकृत रिपोर्टिंग
    d. एंकरिंग

5. भास्कर पत्रकार हैं। वे आर्थिक जगत की खबरें बड़ी दिलचस्पी और सक्रियता से कवर करते हैं। उनकी रुची और   1
    रुझान के अनुसार वे क्या बन सकते हैं ?

    a. लेखक
    b. पाठक
    c. स्तंभ लेखक
    d. विषय विशेषज्ञ

प्रश्न संख्या	पाठ्यपुस्तक आरोह भाग 2	अंक (10)

प्रश्न 4. निम्नलिखित काव्यांश के प्रश्नों को ध्यानपूर्वक पढ़कर सर्वाधिक उपयुक्त उत्तर वाले विकल्प को चुनकर लिखिए -   05x01 =05

मैं निज उर के उद्गार लिए फिरता हूँ
मैं निज उर के उपहार लिए फिरता हूँ
है यह अपूर्ण संसार न मुझको भाता
मैं स्वप्नों का संसार लिए फिरता हूँ।

मैं जला हृदय में अग्नि, दहा करता हूँ
सुख-दुख दोनों में मग्न रहा करता हूँ,
जग भव-सागर तरने की नाव बनाए,
मैं भव-मौजों पर मस्त बहा करता हूँ।

1. कवि के स्वप्नों का संसार है ?   1

    a. यथार्थ
    b. आदर्श
    c. स्वप्निल
    d. सुखी

2. निम्नलिखित कथनों पर विचार करते हुए पद्यांश के अनुसार **सही कथन** को चयनित कर लिखिए।   1
     a. स्मृतियों की नाव में कवि एक यात्री है।
     b. कविता में अग्नि परिवर्तन की इच्छा का प्रतीक है।
     c. यथार्थ संसार से कवि को कोई सरोकार नहीं है।
     d. सुख - दुख का असर कवि पर होता है।

3. काव्यांश में 'उर' से तात्पर्य है ?   1
     a. हृदय
     b. इच्छा
     c. स्मृति
     d. आवेश

4. निम्नलिखित कथन और कारण को ध्यानपूर्वक पढ़िए और सही विकल्प चुनकर लिखिए।   1
कथन (A) : यथार्थ यथार्थ को स्वीकार नहीं करने से कवि के स्वप्न अधूरे रह गए हैं।
कारण (R) : कल्पना और वास्तविकता में सामंजस्य की कमी होने से कवि को संसार अधूरा महसूस होता है।
     a. कथन (A) सही है, कारण (R) गलत है।
     b. कथन (A) सही नहीं है, कारण (R) सही है।
     c. कथन (A) तथा कारण (R) दोनों सही हैं, किंतु कारण (R) उसकी सही व्याख्या नहीं करता।
     d. कथन (A) सही है तथा कारण (R) दोनों सही हैं, कारण (R) कथन (A) की सही व्याख्या करता है।

5. भव - मौजों में मस्त बहने से तात्पर्य क्या है ?   1
     a. सांसारिक सुख रूपी लहरें
     b. मौज - मस्ती करना
     c. स्वप्न में उपजी सुख - दुख की लहरें
     d. नाव जैसी बहने वाली भावुकता

प्रश्न 5. **निम्नलिखित गद्यांश के प्रश्नों को ध्यानपूर्वक पढ़कर उपयुक्त उत्तर वाले विकल्प को चुनकर लिखिए :-**   05x01 =05

मैंने मन में कहा, ठीक। बाज़ार आमंत्रित करता है कि आओ मुझे लूटो और लूटो । सब भूल जाओ, मुझे देखो। मेरा रूप और किसके लिए है? मैं तुम्हारे लिए हूँ। नहीं कुछ चाहते हो, तो भी देखने में क्या हरज है। अजी आओ भी। इस आमंत्रण में यह खूबी है कि आग्रह नहीं है आग्रह तिरस्कार जगाता है। लेकिन ऊँचे बाज़ार का आमंत्रण मूक होता है और उससे चाह जगती है। चाह मतलब अभाव। चौक बाज़ार में खड़े होकर आदमी को लगने लगता है कि उसके अपने पास काफ़ी नहीं है और चाहिए, और चाहिए। मेरे यहाँ कितना परिमित है और यहाँ कितना अतुलित है, ओह! कोई अपने को न जाने तो बाज़ार का यह चौक उसे कामना से विकल बना छोड़े। विकल क्यों, पागल। असंतोष, तृष्णा और ईर्ष्या से घायल करके मनुष्य को सदा के लिए यह बेकार बना डाल सकता है।

1. गद्यांश में प्रयुक्त 'अतुलित' शब्द का समानार्थी शब्द हो सकता है ?   1
     a. अरिहंत
     b. अथाह
     c. अभाव
     d. अक्षय

2. गद्यांश का केंद्रीय भाव है ?   1
   a. बाज़ार के प्रकार बताना
   b. बाज़ार न जाने की सलाह
   c. मनुष्य की तृष्णा को इंगित करना
   d. मनुष्य पर बाज़ार के जादू का असर

3. निम्नलिखित कथनों पर विचार करते हुए गद्यांश के अनुसार **सही कथन** को चयनित कर लिखिए।   1
   a. जब मनुष्य बैचैन हो जाता है तब वह बाज़ार की ओर उन्मुख हो जाता है।
   b. जब मनुष्य तुलना करने लगता है तब असंतोष, तृष्णा और ईर्ष्या के भाव मनुष्य में उभरते हैं।
   c. जब मनुष्य को बाज़ार आमंत्रित करता है तब मनुष्य की व्याकुलता इसका कारण होती है।
   d. जब मनुष्य बाज़ार का तिरस्कार करता है तब वह इसका सही लाभ ले पाता है।

4. कॉलम 1 को कॉलम 2 से सुमेलित कीजिए और सही विकल्प चुनकर लिखिए।   1

कॉलम 1		कॉलम 2	
1	आग्रह का तिरस्कार जागता	(i)	मौन रहकर कार्य करना
2	बड़े बाज़ार का जादू	(ii)	अपनी तृष्णा को रोकना
3	बाज़ार के जादू से बचने का उपाय	(iii)	इच्छा पूर्ण ना होना

   a. 1-(iii), 2-(i), 3-(ii)
   b. 1-(i), 2-(iii), 3-(ii)
   c. 1-(i), 2-(ii), 3-(iii)
   d. 1-(ii), 2-(i), 3-(iii)

5. बाज़ार का आमंत्रण कि, 'आओ मुझे लूटो' से क्या आशय है ?   1
   a. बाज़ार लुट जाना चाहता है
   b. बाज़ार के पास वस्तुएँ बहुत ज्यादा हैं
   c. बाज़ार केवल खुद का रूप दिखाना चाहता है
   d. बाज़ार आकर्षित करना चाह रहा है

प्रश्न संख्या	पूरक पाठ्यपुस्तक वितान भाग 2	अंक (10)

प्रश्न 6. निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर सर्वाधिक उपयुक्त उत्तर वाले विकल्प को चुनकर लिखिए :-   **10x01=10**

1. यशोधर बाबू दफ़्तर से घर जल्दी क्यों नहीं जाते थे ?   1
   a. पत्नी और बच्चों से हर छोटी - बड़ी बात पर मतभेद होने के कारण
   b. पीढ़ियों के अंतराल के कारण
   c. ईश्वर में मन लग जाने के कारण
   d. आधुनिकता के प्रति नकार की भावना के कारण

2. संसार के प्राचीनतम दो नियोजित शहर किसे माना गया है ?   1
   a. मेसोपोटामिया तथा सिंधु घाटी
   b. मेसोपोटामिया तथा हड़प्पा
   c. हड़प्पा तथा मुअनजो-दड़ो
   d. मुअनजो-दड़ो तथा मेसोपोटामिया

3. मुअनजो - दड़ो की अनूठी मिसाल क्या है ?   1
   a. नगर नियोजन
   b. प्राचीन शहर
   c. अन्न भंडार
   d. मृतकों का टीला

4. निम्नलिखित कथन और कारण को ध्यानपूर्वक पढ़िए और सही विकल्प चुनकर लिखिए।   1

   कथन (A) : यशोधर बाबू के बच्चे धर्म, रिश्तेदार तथा समाज को पिछड़ा मानते हैं।
   कारण (R) : वे महत्त्वाकांक्षी और प्रगतिशील हैं। उनमें समय के साथ बदलाव आ गया है।

   a. कथन (A) सही है, कारण (R) गलत है।
   b. कथन (A) सही नहीं है, कारण (R) सही है।
   c. कथन (A) तथा कारण (R) दोनों सही हैं, किंतु कारण (R) कथन (A) की सही व्याख्या नहीं करता है।
   d. कथन (A) तथा कारण (R) दोनों सही हैं, कारण (R) कथन (A) की सही व्याख्या करता है।

5. निम्नलिखित कथनों पर विचार कीजिए :-   1

   कथन (I) : सिंधु सभ्यता में नगर - नियोजन उन्नत नहीं था।
   कथन (II) : सिंधु घाटी सभ्यता की खूबी सौंदर्य बोध है।
   कथन (III) : मुअनजो-दड़ो छोटे - मोटे टीलों पर बसा था।
   कथन (IV) : सिंधु घाटी सभ्यता टीलों पर आबाद थी।

   सही कथन/ कथनों वाले विकल्प को चयनित कर लिखिए।

   a. कथन (I) तथा (II) सही हैं।
   b. कथन (I), (II) तथा (III) सही हैं।
   c. कथन (II), (III) तथा (IV) सही हैं।
   d. कथन (II) तथा (III) सही हैं।

6. कहानी सिल्वर वैडिंग में यह वाक्य 'वह खुशहाली भी कैसी जो अपनों में परायापन पैदा करे'-किसने कहा होगा ?   1
   a. किशन दा
   b. यशोधर बाबू
   c. भूषण
   d. चड्ढा

7. 'जूझ' - कहानी का लेखक पढ़ना क्यों चाहता था ?   1

   a. ज्ञान के लिए
   b. रोज़गार के लिए
   c. कवि बनने के लिए
   d. आत्मविश्वास के लिए

8. जूझ कहानी में लेखक का मन पाठशाला जाने के लिए तड़पता था। लेखक के पाठशाला ना जाने पाने का कारण था ?   1
   - a) दादा का कामचोर स्वभाव
   - b) कवि बनने का स्वप्न
   - c) खेती की मेहनत से बचना
   - d) घर का कर्ज़

9. कहानी सिल्वर वैडिंग में यशोधर बाबू के बच्चों के लिए कहा गया है कि, 'बच्चे आधुनिक युवा हो चले हैं'। इस पंक्ति से लेखक का क्या आशय हो सकता है ?   1

   - a. जीवन के सभी सुख प्रिय हैं
   - b. पिता की दिनचर्या से नाराज़गी
   - c. अच्छी पगार मिलना
   - d. आधुनिक जीवन शैली की ओर रुझान

10. 'जूझ' - कहानी के शीर्षक का अर्थ क्या है ?   1
    - a. मेहनत
    - b. कठिनाई
    - c. संघर्ष
    - d. चालाकी

खंड – ब (वर्णनात्मक प्रश्न)

प्रश्न संख्या	जनसंचार और सृजनात्मक लेखन	अंक (16)

प्रश्न 7. निम्नलिखित दिए गए **03** विषयों में से किसी **01** विषय पर लगभग **120** शब्दों में रचनात्मक लेख लिखिए :-   **06x01 =06**

  क. डिजिटल युग और मैं

  ख. परीक्षा तनाव के कारण व इसे रोकने के उपाये

  ग. उच्च शिक्षा हेतु छात्रों का विदेशों को पलायन

प्रश्न 8. निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर लगभग **40** शब्दों में निर्देशानुसार उत्तर दीजिए :-   **02x02 =04**

(i) कहानी के नाट्य रूपांतरण में संवादों के महत्त्व पर टिप्पणी कीजिए।   02x01=02

अथवा

नए और अप्रत्याशित विषयों पर लेखन के संदर्भ में 'मैं' शैली के प्रयोग के बारे में क्या मान्यता है ?

(ii) नए और अप्रत्याशित विषयों के लेखन के संदर्भ में इस पंक्ति का आशय स्पष्ट करें - "इस तरह का लेखन खुले मैदान की तरह होता है, जिसमें बेलाग दौड़ने, कूदने और कुलाँचे भरने की छूट होती है।"   02x01=02

अथवा

टी.वी. की तुलना में रेडियो माध्यम की कोई दो सीमाएँ बताएँ।

प्रश्न 9.	निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर दिए गए **03** प्रश्नों में से किन्हीं **02** प्रश्नों के लगभग 60 शब्दों में उत्तर दीजिए :-	03x02 =06
(i)	आपको श्रोताओं, दर्शकों या पाठकों को बाँधकर रखने की दृष्टि से प्रिंट माध्यम, टी.वी. और रेडियो में से सबसे सशक्त माध्यम कौन - सा लगता है ? अपने उत्तर के पक्ष में तर्क दें।	3
(ii)	डिजिटल मीडिया के उदय ने समाचार लेखन की उल्टी पिरामिड शैली के उपयोग को कैसे प्रभावित किया है ?	3
(iii)	समाचार पत्रों में विशेष लेखन से आप क्या समझते हैं ? उदाहरण सहित उत्तर दें।	3

प्रश्न संख्या	**पाठ्यपुस्तक आरोह भाग 2**	अंक (20)
प्रश्न 10.	निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर दिए गए **03** प्रश्नों में से किन्हीं **02** प्रश्नों के लगभग 60 शब्दों में उत्तर दीजिए :-	03x02 =06
(i)	बारिशों के बाद, भादों के पश्चात प्रकृति में परिवर्तन का कवि ने किस प्रकार वर्णन किया है ? पतंग कविता के आधार पर अपने शब्दों में वर्णन करें ।	3
(ii)	'छोटा मेरा खेत' कविता में अंधड़ और बीज से कवि का क्या तात्पर्य है ?	3
(iii)	व्यक्ति पर प्रशंसा का क्या प्रभाव पड़ता है ? 'बात सीधी थी पर' कविता के आधार पर बताइए|	3
प्रश्न 11.	निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर दिए गए **03** प्रश्नों में से किन्हीं **02** प्रश्नों के लगभग 40 शब्दों में उत्तर दीजिए :-	02x02 =04
(i)	कैमरे में बंद अपाहिज कविता के आधार पर स्पष्ट करें कि दूरदर्शन वाले कैमरे के सामने कमज़ोर को ही क्यों लाते हैं ?	2
(ii)	'बादल राग' कविता के आधार पर भाव स्पष्ट कीजिए – "विप्लव-रव से छोटे ही हैं शोभा पाते |"	2
(iii)	'उषा' कविता में भोर के नभ की तुलना किससे और क्यों की गई है ?	2
प्रश्न 12.	निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर दिए गए **03** प्रश्नों में से किन्हीं **02** प्रश्नों के लगभग 60 शब्दों में उत्तर दीजिए :-	03x02 =06
(i)	"भक्तिन अच्छी है, यह कहना कठिन होगा क्योंकि उसमें दुर्गुणों का अभाव नहीं" - लेखिका ने ऐसा क्यों कहा होगा ?	3
(ii)	'काले मेघा पानी दे' पाठ के आधार पर पानी और बारिश के अभाव में गाँव की दशा का अपने शब्दों में वर्णन कीजिए ।	3
(iii)	शिरीष के फूल निबंध में अवधूत रूप के रूप में लेखक ने किस महात्मा को याद किया है और क्यों ?	3

प्रश्न 13.	निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर दिए गए **03** प्रश्नों में से किन्हीं **02** प्रश्नों के लगभग 40 शब्दों में उत्तर दीजिए :-	02x02 =04
(i)	डॉ. आंबेडकर 'समता' को कल्पना की वस्तु क्यों मानते हैं ?	2
(ii)	कहानी 'पहलवान की ढोलक' व्यवस्था के बदलने के साथ लोक कला और इसके कलाकार के अप्रासंगिक हो जाने की कहानी है। पंक्ति को विस्तार दीजिए ।	2
(iii)	जिन्हें अपनी ज़रूरत का पता नहीं होता, वे लोग बाज़ार का बाज़ारूपन कैसे बढ़ाते हैं ?	2

प्रश्न संख्या	**पूरक पाठ्यपुस्तक वितान भाग 2**	अंक (04)
प्रश्न 14.	निम्नलिखित प्रश्नों को ध्यानपूर्वक पढ़कर दिए गए **02** प्रश्नों में से किसी **01** प्रश्न का लगभग 60 शब्दों में उत्तर दीजिए :-	04x01 =04
(i)	'सिल्वर वैडिंग' कहानी में यशोधर बाबू को अपने बच्चों की आकर्षक आय 'समहाउ इंप्रापर' क्यों लगती है ? आप यशोधर बाबू के स्थान पर होते तो 'समहाउ इंप्रापर' से कैसे सांमजस्य स्थापित करते ?	04

<center>अथवा</center>

उस घटना का वर्णन अपने शब्दों में कीजिए जिससे पता चलता है कि लेखक की माँ उसके मन की पीड़ा समझ रही थी? 'जूझ' कहानी के आधार पर बताइए।

<center>-x-----x-----x-----x-</center>