

QUESTION PAPER DESIGNS AND SAMPLE QUESTION PAPERS

2023

Higher Secondary Level

Nagaland Board of School Education
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**QUESTION PAPER
DESIGNS
AND
SAMPLE QUESTION
PAPERS**

Higher Secondary

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Published by : Chairman,
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FOREWORD

National Education Policy (NEP) 2020 laid emphasis on Reformation of Examination System in the country. In line with the NEP 2020, the Board is taking steps to reform the existing Board Examination system and plans to implement it gradually. To test the primarily core capacities/ competencies, the Board has redesigned the assessment pattern. Now, the examination would focus on competency based assessment and test achievement of basic learning outcomes through assessment of core concepts and knowledge along with relevant higher-order skills and application of knowledge in real-life situations, rather than rote memorization.

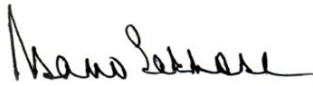
For the initial stage, at least 10% of the total external marks will be of Higher Order Thinking Skill (HOTS). The weightage of marks for the internal and external is not affected with the new design.

The new design shall be effective from Class IX Phase I & II Examinations 2023, HSLC Examination 2024, and Class XI promotion & HSSLC Examinations 2024 for all the subjects.

All schools registered with the Board are required to strictly follow the new design and align the classroom teaching and assessment accordingly. The new design should be implemented from the Mid-Term examinations 2023.

I express my sincere appreciation to the Teachers and Officers who have been involved in the exercise to bring out this booklet.

Dated: 15.03.2023


(Asano Sekhose)
Chairman.

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ENGLISH - XI

DESIGN OF QUESTION PAPER

Weightage to different forms of questions

Section	Details of Topics/Sections	Types of questions	No. of questions	Marks	Total Marks
Section I – Literature	Prose	MCQ	4	4x1=4	15
		SA- I	3	3x2=6	
		LA- I	1	1x5=5	
	Poetry	MCQ	3	3x1=3	10
SA- II	1	1x3=3			
SA- III	1	1x4=4			
	Drama	LA-I	1	1x5=5	5
	Long Reading Text	LA-I	2	2x5=10	10
Section II – Reading Class XI	Two (2) reading passage of 200-300 words. One (1) passage of 120-150 words.	MCQ	3	3x1=3	15
		SA-II	1	1x3=3	
		SA-III	1	1x4=4	
		LA-I	1	1x5=5	
Section III – Writing	Writing	SA- III	1	1x4=4	15
		LA- I	1	1x5=5	
		LA - II	1	1x6=6	
Section IV –Grammar	Grammar	VSA	10	10x1=10	10

Sl.no.	Forms of Questions	Marks for each question	No. of Questions	Total marks
1.	MCQ	1	10	10
2.	VSA	1	10	10
3.	SA - I	2	3	6
4.	SA - II	3	1	3
5.	SA - III	4	2	8
6.	LA- I	5	6	30
7.	LA-II	6	1	6
8.	LA-III	7	1	7
	Total		34	80

Weightage level of questions

Sl.no	Level	Percentage	Marks
1.	Easy	20	16
2.	Average	65	52
3.	Difficult	15	12

Scheme of options:

There will be 1 (one) general option for 5 marks.

Internal option shall be provided for:

- i. 1 (one) 3 marks question
- ii. 2(two) 4 marks question
- iii. 3(two)5 marks question

* Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

ENGLISH - XII

DESIGN OF QUESTION PAPER

Weightage to different forms of questions

Section	Details of Topics/Sections	Types of questions	No. of questions	Marks	Total Marks
Section I – Literature	Prose	MCQ	4	4x1=4	15
		SA- I	3	3x2=6	
		LA- I	1	1x5=5	
	Poetry	MCQ	3	3x1=3	10
SA- II	1	1x3=3			
SA- III	1	1x4=4			
Drama	LA-I	1	1x5=5	5	
Long Reading Text	LA-I	2	2x5=10	10	
Section II – Reading	One (1) reading passage of 600-700 words.	MCQ	3	3x1=3	15
		LA-I	1	1x5=5	
	Note making (400 words)	LA-III	1	1x7=7	
Section III – Writing	Writing	SA- III	1	1x4=4	15
		LA- I	1	1x5=5	
		LA - II	1	1x6=6	
Section IV –Grammar	Grammar	VSA	10	10x1=10	10

Sl.no.	Forms of Questions	Marks for each question	No. of Questions	Total marks
1.	MCQ	1	10	10
2.	VSA	1	10	10
3.	SA - I	2	3	6
4.	SA - II	3	1	3
5.	SA - III	4	2	8
6.	LA- I	5	6	30
7.	LA-II	6	1	6
8.	LA-III	7	1	7
	TOTAL		34	80

Weightage level of questions

Sl.no	Level	Percentage	Marks
1.	Easy	20	16
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3.	Difficult	15	12

Scheme of options:

There will be 1 (one) general option for 5 marks.

Internal option shall be provided for:

- i. 1 (one) 3 marks question*
- ii. 2(two) 4 marks question*
- iii. 3(two)5 marks question*

*Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

**SAMPLE QUESTION PAPER
ENGLISH – XII**

Full marks : 80

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 16 questions divided into 4 sections A, B, C & D.*
- iii) *Attempt questions based on specific instructions for each part. Write the correct number in your answer sheet to indicate the option/s being attempted.*
- iv) *General and Internal choice has been provided in some questions.*

N.B: Check that all pages of the question paper is complete as indicated on the top left side.

SECTION-A (Literature)

1. Choose the correct option for the following questions: 4x1=4
- (a) Read the given extract to attempt question that follows:
“ The sheets were white on our little beds in the dormitory; we played in a garden...” Select the option that corresponds the speaker’s feeling.
- (i) Hungry and complaining
 - (ii) Missing the kind sister at the asylum
 - (iii) Grateful of his fond childhood memories
 - (iv) Ungrateful for the bad memories
- (b) When was Ellen Johnson Sirleaf’s life ‘forever transformed’ ?
- (i) When she became the President of Liberia
 - (ii) When she received the Nobel Peace Prize
 - (iii) When her life was safeguarded
 - (iv) When her teachers and mentors supported her
- (c) What was the one chore that Susan disliked doing?
- (i) Beekeeping
 - (ii) Cooking
 - (iii) Cleaning the meat
 - (iv) Digging out the potatoes
- (d) Select the option that lists the qualities of the Red Chief
- (i) Mischievous
 - (ii) Troublesome
 - (iii) Cruel
 - (iv) Talkative
 - (v) Spiteful
 - (vi) Impish
- A. (i) and (vi)
B. (iii), (vi) and (v)
C. (ii) and (v)
D. (i), (iv) and (vi)

2. Answer the following questions: 3x2=6
- (a) Why did Count de Saulnes laugh at the duke?
 - (b) According to Sirleaf what are the goals in harmony?
 - (c) One of the stories Susan often liked to hear was the story of 'the frog that raced up a castle'. How did this story impact Susan?

3. Answer the following questions in about 150 words:
- a. Imagine the Red Chief had refused to go home and ran back to Bill and Sam. What according to you would happen thereafter? Discuss.
- Or** 5
- b. Elaborate the outcome when the Principal in Harvinder's school shifted his behaviour away from 'command and control' method.

4. Choose the correct answer from the alternative given: 3x1=3
- I. *O no, it is an ever-fixed mark,
That looks on tempests and is never shaken;
It is the star to every wandering bark,...*
- a. In the given lines what is being compared to as 'ever-fixed'?
- | | |
|------------|---------------|
| (i) Star | (ii) Time |
| (iii) Love | (iv) Marriage |

- b. What do you understand by the phrase 'wandering bark'?
- | | |
|-------------|------------|
| (i) Ship | (ii) Raft |
| (iii) Ferry | (iv) Yacht |
- II. In 'Prayer Before Birth' the unborn child does not want the world to _____ his humanity.
- | | |
|--------------|-------------|
| (i) Warm | (ii) Benumb |
| (iii) Freeze | (iv) Spill |

5. Read the lines from the poem and answer the following questions:
- I. *...mountains frown at me, lovers laugh at me, the white waves call me to folly
and the desert calls me to doom and the beggar refuses my gift and my
children curse me.*
- (a) Why will the mountains frown at the speaker? 1
 - (b) What is the reaction of the beggar and the children to the speaker? 1
 - (c) Why do you think the speaker has decided that all and everything will respond negatively to him? 1

OR

- II. *Forward, the Light Brigade!
Was there a man dismay'd?
Not tho' the soldier knew
Someone had blunder'd:
Theirs not to make reply,
Theirs not to reason why,
Theirs but to do and die.*
- (a) What was the blunder that the commander made? 1
 - (b) Who is 'theirs' referred to in these lines? 1
 - (c) What are they not to do? 1

- 6 Answer the following question in about 80 – 120 words:
- (a) Margaret experiences an emotional downturn when she saw the leaves unleafing in the Goldengrove. Do you think she is too young to understand the concept of one's own mortality as expressed by the poet? Express your views.

OR 4

- (b) How does William Shakespeare define true love in 'Let Me Not to the Marriage of True Minds'.

7. *Now let it work: mischief, thou art afoot,
Take thou what course thou wilt!*

- (a) Who is the speaker in the above lines? 1
- (b) What does the above lines suggest to you? 2
- (c) Was the speaker successful in instigating the people of Rome against the conspirators? 2

OR

'This was the most unkindest cut of all; For when the noble Caesar saw him stab,.....' Discuss how according to you, Mark Antony tactfully used Caesar's death body in his speech to turn the citizens against the conspirators. 5

8. Answer any two(2) of the following questions in about 150 words: 5x2=10
- (a) The ghost remarked, 'Death must be so beautiful'. Elucidate the remark made by the ghost
- (b) Give a pen –portrait of Virginia.
- (c) In the story 'The Canterville Ghost' how is the tension between modernity and tradition represented?

SECTION –B (Reading)

9. 1. A baby learns its mother tongue by the age of five. Does it 'learn' this language or does it 'acquire' it by some natural means? Many immigrants to such countries as Britain and America learn English without studying it in any formal sense. Do such learners 'learn' the second language or, like the infant child with its mother tongue, do they 'acquire' it by some natural means? Many people, like those immigrants, 'pick up a language' without studying it.
2. This hypothesis claims that adults have two distinct ways of developing competence in second languages. The first way is via language ACQUISITION, that is, by using language for real communication. Language acquisition is the 'natural' way to develop linguistic ability, and is a subconscious process; children for example are not necessarily aware that they are acquiring language, they are only aware that they are communicating.
3. The result of language acquisition, acquired linguistic competence, is also subconscious. We are not generally 'aware' of the rules of languages we have acquired. Instead, we have a 'feel' for correctness; when we hear an error we may not know exactly what rule was violated, but somehow 'know' that an error was committed.

4. The second way to develop competence in a second language is by language LEARNING. Language learning is ‘knowing about’ language, or ‘formal knowledge’ of a language. While acquisition is subconscious, learning is conscious. Learning refers to having an ‘explicit knowledge’ of rules, which is quite different from language acquisition, which could be termed ‘implicit’.

5. The acquisition- learning hypothesis claims that adults can still acquire second languages, that the ability to ‘pick-up’ languages does not disappear at puberty, as some have claimed, but is still with us as adults. The acquisition learning hypothesis does not imply a native level of performance in second languages. It also does not specify what aspects of languages are acquired and what are learned, or how adult performer uses acquisition and learning in performance. It only states that the processes are different and that both exist in the adult.

6. Language teaching has quite different effects on acquisition and on learning. If we examine language teaching in grammar-based approaches, which emphasize explanation of rules and corrections of errors; it appears that teaching is directed totally at learning and not acquisition. In fact, conscious language learning is thought to be helped a great deal by teaching; its goal is that the learner arrives at the ‘right’ form of the rules. For example, a student of English says ‘I goes to school every day’ and is corrected and forced to repeat the utterance correctly, the student is supposed to alter his mental vision of the third person singular rule and realize that the –s ending only goes with third person and not the first person.

7. Teaching, as defined above, does not facilitate acquisition. Error correction in particular does not seem to help. Researchers have found that parents actually correct only a small portion of the child’s language. They conclude from their research that parents attend more to the truth value of what the child is saying rather than to the form. For example, a sentence such as ‘Her curl my hair’ was not corrected by a parent since its meaning was clear in the context. While ‘Walt Disney comes on television on Tuesdays’ was corrected since Walt Disney actually was on television on Wednesdays.

Based on your reading of the passage, answer the following questions given below:

- (i) Complete the sentence by choosing an appropriate option.
The method of developing competence in second language with our subconscious mind is through_____ 1
- | | |
|-------------|----------------|
| A. learning | B. acquisition |
| C. knowing | D. teaching |
- (ii) Select the option that conveys the opposite of ‘inability’, from words used in paragraph 2. 1
- | | |
|---------------|--------------|
| A. Ignorance | B. Acquiring |
| C. Competence | D. Develop |
- (iii) Which of the following would not be considered as learning a language? 1
- | |
|--|
| A. Pick up a language without studying it |
| B. Using a language for real communication |
| C. Language learning is knowing about language |
| D. Unconventional knowledge of a language |

- (iv) Complete the given sentence with an appropriate inference with respect to the following:
The writer states that the ability to pick up languages does not disappear at puberty (paragraph 5), because _____.
- (v) Comment on the writer's reference to having an 'explicit knowledge' of rules, in paragraph 4.
- (vi) Give the most suitable title for the above passage.
- (vii) What do you understand by acquisition of language through subconscious?
8. Read the following passage and prepare notes on the contents of the passage and summarize in about 80 words using the notes that you have made:

1

1

1

2

4+3=7

The great defect of our civilization is that it does not know what to do with its knowledge. Science has given us power fit for the Gods yet we use them like small children. For example, we do not know how to manage our machines. Machines were made to be man's servants. Yet he has become so dependent on them that they are in a fair way to become his masters. Already most men spend most of their lives looking after and waiting upon machines. And the machines are very stern master. They must be kept at the right temperature. And if they do not get their meals when they expect them, they grow sulky and refuse to work or burst with rage and blow up and spread ruin and destruction all around them.

So we have to wait upon them very attentively and do all that we can to keep them in a good temper. Already, we find it difficult either to work or play without the machines and a time may come when they will rule us together just as we rule the animals.

And this brings me to the point at which I asked, what we do with all the time which the machines have provided us and the new energy they have given us? On the whole, it must be admitted, we do very little. For the most part we use our time and energy to make more and better machines which will give us still more time and still more energy. And what are we to do with them? The answer I think is that we should try to become more civilized. For the machines themselves and the power which the machines have given us, are not civilization but aids to civilization. But you will remember that we agreed at the beginning that being civilized meant making and liking beautiful things, thinking freely and living rightly and maintaining justice equally between each of us.

Man has a better chance today to do things than he ever had before; he has more time, more energy, less to fear and less to fight against. If he gives his time, and everything his machines have won for him, for the making of more beautiful things, finding out more and more about the universe, and removing the causes of quarrels between nations, discovering how to prevent them, then I think our civilization would undoubtedly be the greater as it would be more lasting than it has ever been.

SECTION-C (Writing)

11. You are the General Manager of Ivy Software Solutions, Mon. You need a software engineer for your organization. Draft an advertisement in not more than 60-100 words to be published in 'The Eastern Times'.

Or

4

Read the following paragraph and express your opinion in about 60-100 words on whether you agree or disagree with the ideas mentioned in it.

Dictators are out of fashion these days- everyone wants democracy instead. But does democracy work? At election time politicians make big promises, once elected, they break or forget them. Everyone knows that popular legislations are passed just before an election! Dictators may be good or bad, but they at least are free to do what they think needs to be done and not spend their time worrying election polls.

12. You had attended a workshop on personality development for students. Many eminent personalities had been present. Write a report in 150-200 words on how the workshop proved beneficial . You are Loreni/ Lusha.

Or

5

Mental illness is on the rise everywhere affecting adults ,teenagers and children. However, only half of the affected receive treatment , often because of the stigma attached to it and the society we live in. Draft a speech discussing the importance of mental health awareness and effective strategies to promote mental health in about 150-200 words.

- 13 . You are Aren/ Ketu staying at 33, Lerie Street, Kiphire. Last month, you bought a cordless electric iron from Sheetal Electrical Goods, Dimapur against a warranty of 2 years. Now after two weeks, you discover that there is something wrong with the iron. Its heat lasts hardly for a few seconds after it is taken off the mains. Write a letter to the dealer complaining about it. Also request him to change this defective iron against the warranty that goes with it.

6

SECTION-D (Grammar)

14. Rewrite the following as directed: 3x1=3

- (a) I walked for ten minutes. Then I noticed that I had forgotten to take my wallet. (*Combine the sentence using Past Perfect Continuous Tense*)
(b) She _____ (hate)dogs. (*Simple Present Tense*)
(c) Shelly_____ (visit) the park to oversee the arrangements. (*Future Continuous Tense*)

15. Write the meaning of the following idioms and phrases and make sentences of your own: 3x1=3

- (a) A curate's egg
(b) Catch-22
(c) Put the cart before the horse

16. Insert the blanks with correct modals: 4x1=4

- (a) Excuse me,_____I just say something?
(b) I _____go on holiday to Japan next year.
(c) You _____take your umbrella. It is not raining.

ALTERNATIVE ENGLISH - XI & XII

DESIGN OF QUESTION PAPER

Weightage to different forms of questions

Section	Details of Topics/Sections	Types of questions	No. of questions	Marks	Total Marks
Section A- Literature	Prose	MCQ	4	4x1=4	20
		SA- I	2	2x2=4	
		SA-II	1	1x3=3	
		SA- III	1	1x4=4	
		LA- I	1	1x5=5	
	Poetry	MCQ	2	2x1=2	15
		SA- I	2	2x2=4	
		SA- III	1	1x4=4	
		LA- I	1	1x5=5	
	Drama	SA- I	1	1x2=2	10
		SA- II	1	1x3=3	
		LA-I	1	1x5=5	
Fiction	VSA	1	1x1=1	15	
	SA-I	1	1x2=2		
	SA-II	1	1x3=3		
	SA-III	1	1x4=4		
	LA-I	1	1x5=5		
Section B- Grammar	Grammar	VSA	10	10x1=10	10
Section C- Reading	One unseen passage of 200-300 words.	MCQ	4	4x1=4	10
		LA-II	1	1x6=6	

Sl.no.	Forms of Questions	Marks for each question	No. of Questions	Total marks
1.	MCQ	1	10	10
2.	VSA	1	11	11
3.	SA - I	2	6	12
4.	SA - II	3	3	9
5.	SA - III	4	3	12
6.	LA - I	5	4	20
7.	LA - II	6	1	6
	TOTAL		38	80

Weightage level of questions

Sl.no	Level	Percentage	Marks
1.	Easy	20	16
2.	Average	65	52
3.	Difficult	15	12

Scheme of options:

Internal option shall be provided for:

i. 3 (three) 4 marks question

ii. 4 (four) 5 marks question

Note : Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

MILs - XI & XII

DESIGN OF QUESTION PAPER

Weightage to different forms of questions

Section	Details of Topics/Sections	Types of questions	No. of questions	Marks	Total Marks
Section A- Reading	One unseen passage of 200-300 words. There will be questions to test vocabulary and grammar.	MCQ	4	4x1=4	10
		LA-II	1	1x6=6	
Section B- Writing	Writing	LA- II	1	1x6=6	10
		SA- III	1	1x4=4	
Section C- Grammar	Grammar Translation	VSA	12	12x1=12	15
		SA- II	1	1x3=3	
Section D- Literature	Prose	MCQ	4	4x1=4	20
		SA- I	2	2x2=4	
		SA-II	1	1x3=3	
		SA- III	1	1x4=4	
		LA- I	1	1x5=5	
	Poetry	MCQ	2	2x1=2	15
		SA- I	2	2x2=4	
		SA- III	1	1x4=4	
		LA- I	1	1x5=5	
	Fiction	SA- I	1	1x2=2	10
		SA- II	1	1x3=3	
		LA-I	1	1x5=5	

Sl.no.	Forms of Questions	Marks for each question	No. of Questions	Total marks
1.	MCQ	1	10	10
2.	VSA	1	12	12
3.	SA - I	2	5	10
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5.	SA - III	4	3	12
6.	LA-I	5	3	15
7.	LA-II	6	2	12
	TOTAL		38	80

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1.	Easy	20	16
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Scheme of options:

Internal option shall be provided for:

i. 3 (three) 4 marks question

ii. 3(one) 5 marks question

iii. 1(one) 6 marks question

Note : Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

SAMPLE QUESTION PAPER 2023

ALTERNATIVE ENGLISH - XII

Total Marks: 80

Time: 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 16 questions divided into 4 sections A, B & C.*
- iii) *Attempt questions based on specific instructions for each part. Write the correct number in your answer sheet to indicate the option/s being attempted.*
- iv) *General and Internal choice has been provided in some questions.*

N.B: Check that all pages of the question paper is complete as indicated on the top left side.

SECTION – A (LITERATURE)

PROSE

1. **Choose the correct answer from the alternatives given:** **4x1=4**
- a. Letter to My Daughter is a collection of how many letters?
 - i) Twenty letters
 - ii) Thirty letters
 - iii) Forty letters
 - iv) Fifty letters
 - b. According to Bertrand Russell, the essence of wisdom is_____.
 - i) comprehensiveness
 - ii) egoism
 - iii) emancipation
 - iv) compatible
 - c. Who are the dangerous followers?
 - i) Costly
 - ii) Factious
 - iii) Glorious
 - iv) Espials
 - d. What did M.Hamel write in his new copies?
 - i) France, Alsace, France, Alsace
 - ii) Vive La France
 - iii) Alsace, France, Alsace, France
 - iv) France, Lorraine, France, Lorraine
2. What is the central theme of Bacon's essay? **2**
3. Why had M. Hamel put on his fine Sunday clothes? **2**
4. "It was delightful to feel the cool night air and to see the phantom trees and men and animals rush by in the semidarkness...". Explain in your own words in about 40-50 words. **3**
5. a. Mention any four qualities Bacon ask to keep in mind when associating with followers. **4**
- OR**
- b. What promise do you think Nehru might have made to Indira? Why do you think he made the promise. Mention any three points to support your answer. **1+3=4**

6. a. *I won't scold you, little Franz; you must feel bad enough. See how it is! Every day we have said to ourselves: "Bah! I've plenty of time. I'll learn it tomorrow." And now you see where we've come out. Ah, that's the great trouble with Alsace; she puts off learning till tomorrow. Now those fellows out there will have the right to say to you: "How is it; you pretend to be Frenchmen, and yet you can neither speak nor write our own language?" but you are the worst, poor little Franz. We've all a great deal to reproach ourselves with.*
- i) Why did M. Hamel tell little Franz that he will not scold him? **1**
- ii) "She puts off learning till tomorrow." Who is 'she' referred to here? **1**
- iii) Who are those 'fellows' M. Hamel is referring to? **1**
- iv) "I'll learn it tomorrow." What does 'it' mean here? **1**
- v) Which word can be a good synonym for 'reproach'?
- a. express disappointment b. express annoyance
- c. express happiness d. express confidence

OR

- b. *Many men in past ages devoted their lives to a search for the philosopher's stone and the elixir of life. No doubt, if they could have found them, they would have conferred great benefits upon mankind, but as it was their lives were wasted.*
- i) What did the men in the past ages search? **1**
- ii) An apt antonym for the word 'devoted' is **1**
- a. faithful b. steadfast
- c. constant d. disloyal
- iii) Why were their lives wasted? **1**
- iv) What do you understand by the 'Philosopher's stone' and the 'elixir of life'? **2**

POETRY

7. **Choose the correct answer from the alternatives given:** **2x1=2**
- a. In 'All the World's a Stage' who carries the satchel?
- i) The nurse ii) The schoolboy
- iii) The soldier iv) The justice
- b. In 'Death, Be not Proud' some people have called Death as –
- i) mighty and mild ii) dreadful and insignificant
- iii) insignificant and mild iv) mighty and dreadful
8. *"...and I choose
Never to stoop..."*
Why did the Duke choose never to stoop? **2**
9. Identify any two literary devices used in the poem, 'Indian Weavers'. **2**
10. **Critically analyse lines given below in about 60-90 words.** **1x4=4**
- a. *Or blush, at least. She thanked men, - good! but thanked
Somehow – I know not how – as if she ranked
My gift of a nine-hundred-years-old name
With anybody's gift. Who'd stoop to blame.*
- b. *Weavers, weaving at break of day,
Why do you weave a garment so gay?...
Blue as the wing of a halcyon wild,
We weave the robes of a newborn child.*

11. a. *All the world's a stage,
And all the men and women merely players:
They have their exits and their entrances;
And one man in his time plays many parts,
His acts being seven ages.*
- i) What does the poet mean by 'All the World's a Stage'? **1**
- ii) What is the poetic device used in the above lines? **1**
- iii) Why are the men and women merely players? **1**
- iv) What is meant by 'exits' and 'entrances'? **2**

OR

- b. *Thou art slave to Fate, Chance, kings and desperate men,
And dost with poison, war, and sickness dwell;
And poppy, or charms can make us sleep as well,
And better than thy stroke; why swell'st thou then?
One short sleep past, we wake eternally,
And death shall be no more; Death, thou shalt die.*
- i) What does the poet mean by 'Why swell'st thou then?' **1**
- ii) What is the Christian theme being indicated with 'we wake eternally'? **1**
- iii) What does Death dwell with? **1**
- iv) Which two activities produce the same effect as death? **1**
- v) An apt synonym for the word 'eternally' is _____. **1**
- a. temporarily b. permanently
- c. provisionally c. momentarily

DRAMA

12. How does Uncle James threaten Philip? **2**
13. *Philip: (to himself) I suppose I shall have to think of another argument.*
...
James: (looking up suddenly as he is doing this amazed) what on earth are you doing?
Philip: Souvenir from France...
- a. Complete the sentence appropriately, with reference to the extract:
According to Philip, souvenir from France is a/an _____. **1**
- b. Why does Philip suppose that he should have to think of another argument? **2**
14. a. Explain the generation gap in society in the context of the conflict between Uncle James and Philip regarding the latter's employment. **5**
- OR**
- b. Prepare a character sketch of Aunt Emily.

FICTION

15. Where does Pip go to educate himself as a gentleman? **1**
16. How does Mr. Joe reacts when he first visits Satis House to meet Miss Havisham? **2**
17. Why does Estella rejects Pip's love? **3**

18. a. *"I could not have spoken one word, though it had been to save my life. I stood, with a hand on the chair-back and a hand on my breast, where I seemed to be suffocating – I stood so, looking wildly at him, until I grasped at the chair, when the room began to surge and turn. He caught me, drew me to the sofa, put me up against the cushions, and bent on one knee before me: bringing the face that I now well remembered, and that I shuddered at, very near to mine. (Chapter 39)*
- i) "He caught me, drew me to the sofa..." 1
Here who is 'he' referred to?
- ii) Why did Pip feel that the room began to surge and turn? 1
- iii) Give any two reasons why Pip could not speak a word, though it had been to save his life. 2

OR

- b. *Ah! Said Joe. 'There's another convict off.' What does that man, Joe?" said I. Mrs. Joe, who always took explanations upon herself, said, snappishly, 'Escaped. Escaped.' Administering the definition like Tar-water. While Mrs. Joe sat with her head bending over her needlework, I put my mouth into the forms of saying to Joe, 'What's a convict?' Joe put his mouth into the forms of returning such a highly elaborate answer, that I could make out nothing of it but the single word 'Pip.' (Chapter 2)*
- i) Here, who is the 'another convict'? 1
- ii) 'Escaped. Escaped.' The convict escaped from _____. 1
a. London b. marshes
c. hulk d. Satis
- iii) Give any two reasons why Pip and Mr. Joe could not have a proper conversation when Pip wanted to know what a convict is? 2

19. a. Discuss any five important moral lessons in Great Expectations in about 100-150 words. 5
- OR**
- b. Compare and contrast Mr. and Mrs. Joe Gargery in about 100-150 words.

SECTION – B (GRAMMAR)

20. **Fill in the blanks with suitable prepositions:** 3x1=3
- a. The guests were waiting _____ the lobby.
- b. We returned to find a red car parked _____ our gate.
- c. It has been snowing here _____ last Friday.
21. **Insert correct conjunction:** 3x1=3
- a. Kevi is not here today _____ your partner will be Wati.
- b. The place was easy to find; _____ there was nothing to see there.
- c. _____ I was sleeping, she worked on her essay.
22. a. **Correct the following sentences and rewrite them:** 2x1=2
- i) Read either the stories and tell me which on you like.
- ii) The Hobbit is an interested book.
- b. **Choose the right word given within the brackets to complete these sentences:** 2x1=2
- i) There was a (breach/breech) of security at the football match yesterday.
- ii) (Complementing/complimenting) my mother on her cooking is the best way to win her over.

SECTION – C (READING)

23. **Read the passage given below and answer the questions that follow:**

1. Necessity is indeed the mother of invention. When areas in and around Leh began to experience water shortages, life didn't grind to a halt. Why? Because Chewang Norphel, a retired civil engineer in the Jammu and Kashmir government came up with the idea of artificial glaciers.

2. Ladakh, a cold dessert at an altitude of 3,000 – 3,500 metres above sea level, has a low average annual rainfall rate of 50mm. Glaciers have always been the only source of water. Agriculture is completely dependent on glacier melt unlike the rest of river/monsoon-fed India. But over the years with increasing effects of climate change, rainfall and snowfall patterns have been changing, resulting in severe shortage and drought situations. Given the severe winter conditions, the window for farming is usually limited to one harvest season.

3. It is located between the natural glacier above and the village below. The one closer to the village and lowest in altitude melts first, providing water during April/May, the crucial sowing season. Further layers of ice ensuring continuous supply to the fields. Thus, farmers have been able to manage two crops instead of one. It costs about a 1,50,000 and above to create one.

4. Fondly called the 'glacier man', Mr. Norphel has designed over 15 artificial glaciers in and around Leh since 1987. In recognition of his pioneering effort, he was conferred the Padma Shri by President Pranab Mukherjee, in 2015.

5. There are few basic steps followed in creating the artificial glacier.

6. River or stream water at higher altitude is diverted to a shaded area of the hill, facing north, where the winter sun is blocked by a ridge of a mountain range. At the start of winter/November, the diverted water is made to flow onto sloping hill face through distribution channels. Stone embankments are built at regular intervals which impede the flow of water, making shallow pools and freeze, forming a cascade of ice along the slope. Ice formation continues for 3-4 months resulting in a large accumulation of ice which is referred to as an 'artificial glacier.'

- a. Why have the glaciers been the only source of water for Ladakh? **1**
- i) Ladakh is a cold desert at 3,000-3,500 metres
 - ii) Because 15 artificial glaciers have been designed
 - iii) Due to severe shortage and drought situations
 - iv) Because farming is limited to one harvest season
- b. How are Glaciers significant for irrigation? **1**
- i) Because it depends upon agriculture
 - ii) Because it provides water in April/May
 - iii) Because it started in winter/November
 - iv) Because of artificial glacier
- c. How do farmers manage to grow two crops instead of one? **1**
- i) Because of idea artificial glacier
 - ii) Because of harvest method
 - iii) Because sloping hill face through distribution channels
 - iv) Because glaciers and their layers close to the village melt

- d. Find the antonym of the word 'non-deliberate' used in paragraph 4. **1**
i) Designed
ii) Around
iii) Conferred
iv) Recognition
- e. Complete the given sentence with an appropriate inference, with respect to the following: **1**
Farmers in Ladakh have been able to manage two crops instead of one because _____.
- f. Select the most suitable title for the above passage. **1**
i) Necessity is the mother of invention
ii) Glacier man
iii) Ladakh, a cold desert
iv) Artificial glacier
- g. Find the synonyms of – **1+1=2**
i) Waterfall (paragraph 6)
ii) Identification (paragraph 4)
- h. Write any two basic steps followed in creating the artificial glacier from paragraph 6. **2**

POLITICAL SCIENCE – XI & XII

DESIGN OF QUESTION PAPER

Weightage to different forms of questions:

Sl. no.	Forms of questions	Marks for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	SA-I	2	8	16
3.	SA-II	4	5	20
4.	LA-I	6	3	18
5	LA-II	8	2	16
	Total		28	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	30	27
2.	Average	50	45
3.	Difficult	20	18

Note : Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

Sample Question Paper 2023
POLITICAL SCIENCE - XII

Full marks : 80

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
 - ii) *The question paper consists of 28 questions.*
 - iii) *Marks are indicated against each question.*
 - iv) *Answers to questions carrying 2 marks should not exceed 50 words.*
 - v) *Answers to questions carrying 4 marks should not exceed 100 words.*
 - vi) *Answers to questions carrying 6 marks should not exceed 200 words.*
 - vii) *Answers to questions carrying 8 marks should not exceed 300 words.*
- N.B: Check to ensure that all pages of the question paper are complete as indicated on the top left side.*

Choose the correct answer from the given alternatives in questions 1 – 10 (10x1=10)

1. Parties “do not divide they unite”. Who said this?
(a) Roland Young (b) R.G. Gettel
(c) Alan Ball (d) Edmund Burke
2. Which of the following regional party withdrew its support from BJP led NDA Government in April 1999?
(a) Shiv Sena (b) Akali Dal
(c) Trinamool Congress (d) AIADMK
3. The Soviet Union collapsed in the year
(a) 1991 (b) 1990
(c) 1989 (d) 1988
4. The People’s Republic of China was officially proclaimed in the year
(a) October 1, 1949 (b) October 20, 1949
(c) December 1, 1950 (d) December 20, 1950
5. Which of the following best describe Veto Power?
(a) A positive vote by a permanent member
(b) A negative vote by a permanent member
(c) A positive vote by a non-permanent member
(d) A negative vote by a non-permanent member
6. When did the Biological Weapons Convention come into force?
(a) 1974 (b) 1975
(c) 1976 (d) 1977
7. Golaknath case was related
(a) Fundamental Duties (b) Fundamental Rights
(c) Committed Judiciary (d) AIADMK

8. Why did the American and European Firms try to obtain a patent for Neem and Haldi?
- (i) Because it has beautiful leaves
 - (ii) Because this tree is not found in the Western World
 - (iii) Because the Western Firms wanted to extract natural resources from the Neem plant
 - (iv) Because the Western Firms wanted to extract natural resources from the Haldi plants.

Which of the following is correct?

- (a) (i), (ii) and (iv)
- (b) (i), (iii) and (iv)
- (c) (i) and (iii)
- (d) (iii) and (iv)

9. Which of the following were the major political parties in the first General Election held in India in 1951-52?

- (i) Indian National Congress
- (ii) Socialist Party
- (iii) Communist Party of India
- (iv) Communist Party of India (M)

Codes:

- (a) (i), (ii) and (iii)
- (b) (ii), (iii) and (iv)
- (c) (i), (iii) and (iv)
- (d) (i), (ii) and (iv)

10. Which of the following is a new threat to security?

- (i) Global Poverty
- (ii) Migration
- (iii) External attack
- (iv) Violation of human rights

Codes:

- (a) (i), (ii) and (iii)
- (b) (i), (iii) and (iv)
- (c) (i), (ii) and (iv)
- (d) (ii), (iii) and (iv)

11. What was the Truman Doctrine? 2
12. What is the Limited Nuclear Test Ban Treaty of 1962? 2
13. Why did the Rightists oppose globalization in India? 2
14. When and by whom was the 'Tryst with Destiny' speech delivered? 1+1=2
15. State any two differences between one-party undemocratic regime and India's one party dominant system. 2
16. Write any two causes of ethnic tensions in Sri Lanka. 2
17. State the main idea of India's nuclear doctrine. 2
18. Briefly explain the effect of Allahabad High Court's judgment of 12th June, 1975. 2

Answer all from questions 19 - 23

5x4=20

19. Describe the Shock Therapy after the end of the Communist rule in Russia. (4)
20. Analyse the significance of ASEAN as an Economic Community. (4)

21. India's refusal to sign NPT and CTBT is based on reasons. Justify. (4)

22. Read the following passage carefully and answer the questions that follow:

(1+2+1=4)

Just before independence, it was announced by the British Government that with the end of their rule over India, the paramountcy of the British Crown over the princely states would also lapse. This meant that all the states, as many as 565 in all, would become legally independent. The British Government took the view that all these states were free to join either India or Pakistan or remain independent if they so desired. This decision was left not to the people but to the princely rulers of these states. This was a very serious problem and could threaten the very existence of a united India. The problem started very soon. First of all, the ruler of Travancore announced that the state had decided on independence. The Nizam of Hyderabad made a similar announcement the next day. Rulers like the Nawab of Bhopal were averse to joining the Constituent Assembly. (Internet source)

- i) Name any two princely states that resisted their merger with the Indian Union.
- ii) Under what condition the British Crown left the princely states.
- iii) What was meant by princely states?

23. Read the passage given below and answer the questions that follow:

(1+1+1+1=4)

The most visible impacts of globalization are definitely the ones affecting the economic world. Globalization has not only led to a sharp increase in the trade and economic exchanges, but also to a multiplication of financial exchanges. In the 1970's the world economies opened up and the development of free trade policies accelerated the globalization phenomenon. Between 1950 and 2010, world exports increased by 33 folds. This significantly contributed in increasing the interactions between different regions of the world. This acceleration of the economic exchanges has led to strong global economic growth. It has fostered a rapid global industrial development that allowed the rapid development of many of the technologies and commodities as well. Knowledge became easily shared and international cooperation among the brightest minds speeded up things. According to some analysts, globalization has also contributed to improving global economic conditions, creating much economic wealth. At the same time, finance also became globalized. From the 1980's, driven by neo-liberal policies, the world of finance gradually opened. Many countries, particularly the US under Ronald Reagan and UK under Margaret Thatcher introduced the famous '3D Policy'. (Internet source)

- i) What is the impact of an increase in the economic exchanges between the countries of the world?
 - (a) Strong global economic growth
 - (b) Sharp decline in the trade
 - (c) Decline in unemployment
 - (d) Increase in the index of poverty
- ii) Which of the following statement is true about the cause of globalization?
 - (a) Globalization originated from the United State
 - (b) Economic interdependence alone cause globalization
 - (c) Technology is an important cause of globalization
 - (d) Financial stability leads to globalization

- iii) Globalization has led to the flow of idea across
 (a) state boundaries (b) national boundaries
 (c) developed nations (d) developing nations
- iv) Which of the following is the key idea behind understanding the process of globalization and its impact?
 (a) Integration of economic activities (b) Integration of trade
 (c) Integration of industries (d) Integration of markets

Answer any three from questions 24 - 29

6x3=18

24. (a) Explain any six features of the party system in India. (6)
OR
 (b) Analyze the factors responsible for the dominance of the Congress party from 1952 to 1962. (6)
25. (a) Differentiate between the Planning Commission and the NITI Aayog (6)
OR
 (b) Describe the causes of the Emergency of 1975. (6)
26. (a) Explain the efforts made by China to become world's biggest economic power next to the US. (6)
OR
 (b) Identify SAARC's role in bringing about cooperation among the member-nations. (6)

Answer any two from questions 27 - 28

8x2=16

27. (a) Analyse the role of Pressure Groups in India. (8)
OR
 (b) Explain the features of coalition politics in India. (8)
28. (a) Assess the reform of the United Nations and what recommendations have been made to bring about these reforms. (4+4=8)
OR
 (b) Evaluate the new threats to security of persons and states. (8)

HISTORY – XI & XII

Design of Question paper

Weightage to different forms of questions:

Sl. no.	Forms of questions	Marks for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	SA-I	2	8	16
3.	SA-II	4	5	20
4.	LA-I	6	2*+1(map)	18
5.	LA-II	8	2*	16
Total			28	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	30	24
2.	Average	50	40
3.	Difficult	20	16

Note:

1. *Internal choice will be given in questions of 5 & 8 marks
2. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

Sample Question Paper 2023
HISTORY - XII

Full marks: 80

Time: 3 hours

General instructions:

- i. Marks are indicated against each question.
- ii. Answer to questions carrying 1 mark should not exceed one sentence.
- iii. Answer to questions carrying 2 marks should not exceed 50 words.
- iv. Answer to questions carrying 4 marks should not exceed 100 words.
- v. Answer to questions carrying 6 marks should not exceed 200 words.
- vi. Answer to questions carrying 8 marks should not exceed 300 words.

Choose the correct answer from the given option in Questions 1-10

1. Which of the Vedas is known as the “Book of Sacrificial Prayers”? 1
(a) Rig Veda (b) Yajur Veda
(c) Sama Veda (d) Atharva Veda
2. Which countries introduced maize in India? 1
(a) England and Germany (b) Africa and Spain
(c) Italy and France (d) China and Japan
3. Which battle crippled the Vijayanagara Kingdom? 1
(a) Battle of Talikota (b) Battle of Mysore
(c) Battle of Panipat (d) Battle of Plassey
4. When was Mangal Pandey hanged? 1
(a) 7th March 1857 (b) 7th April 1857
(c) 8th April 1857 (d) 8th May 1857
5. Who is described as “the bridge between the Bhakti movement of the south and that of the north”? 1
(a) Shri Chaitanya (b) Namdeva
(c) Mirabai (d) Ramananda
6. Match the following and select the correct option. 1

List -I (Era)	List – II (Year)
1 Ravi aspect of the Hakra Phase	a 2800BC – 2600 BC
2 Kot Digi Phase	b 1900 BC – 1800 BC
3 Harappa Phase	c 3300 BC – 2800 BC
4 Late Harappa Transitional Phase	d 2600 BC – 1900 BC

(a) 1 - b, 2 - c, 3 - a, 4 - d (b) 1 - a, 2 - d, 3 - b, 4 - c
(c) 1 - c, 2 - a, 3 - d, 4 - b (d) 1 - d, 2 - b, 3 - c, 4 - a
7. The composition of the Mahabharata has been traditionally attributed to a sage. Identify his name from the following option 1
(a) Sage Kanada (b) Sage Kapila
(c) Sage Agastya (d) Sage Ved Vyas

8. Krishnadeva Raya belonged to which of the following dynasty? **1**
 (a) Sangama (b) Tuluva
 (c) Saluva (d) Aravidu
9. Complete the following with the correct option - Rihla: Ibn Batuta, Kitab- ul Hind: Al-Biruni, Storia de Mogor: **1**
 (a) Niccolo Manucci (b) Domingo Paes
 (c) Marco Polo (d) Francois Bernier
10. Which among the following is correctly matched? **1**
 (a) Permanent Settlement - 1875 (b) Santhal Rebellion - 1793
 (c) Deccan Riots - 1855 (d) Treaty of Allahabad - 1765
11. What is Social History? **2**
12. Why were Women considered as an important resource in the agrarian society? **2**
13. Who was Marco Polo? When did he visit India? **1+1= 2**
14. Give two features of Permanent Settlement. **2**
15. Why were guilds organized? **2**
16. What were the influences of Mahabharata? **2**
17. Mention any two features of Ain-i-Akbari. **2**
18. Why did Gandhi established the Satyagraha Ashram? **2**
19. Explain any four political ideologies of Gandhiji. **4**
20. Why did Jainism have little appeal among the masses? **4**
21. Discuss Al-Biruni's account of the social condition of India. **4**
22. Read the source given below and answer the questions that follow: **4**

Coins and Kings

Coins are a rich and plentiful source for the history of ancient India. They present a wide variety of types as is shown in their legends, symbols, standard weight or fabric. Amongst the earliest to be minted and used were punch-marked coins. Numismatics (specialists in the study of coins) study these coins to reconstruct possible commercial contacts and the names of Kings chronologically.

The symbols on punched marked coins with the names of specific ruling dynasties suggest that these were issued by the kings. It seems that coins were also issued by merchants, bankers and towns people.

The Kushans were the first to issue gold coins in India. These were virtually identical in weight. The widespread used of gold coins indicates that networks of trade were not confined within political boundaries. Though South India was not a part of the Roman Empire, they had close connections through trade.

(Rai Raghunath: "Themes in Indian History"- NBSE. Page 42-43)

- (a) Name the earliest type of coins used. (1)
- (b) How do we know that these coins were issued by kings? (1)
- (c) Why are coins considered as important source of information? (2)

23. Read the source given below and answer the questions that follow: **4**

The Bazaar

Paes gives a vivid description of the bazaar: Going forward, you have a broad and beautiful street. In this street live many merchants, and there you will find all sorts of rubies, and diamonds, and emeralds, and pearls, and seed- pearls, and cloths, and every other sort of thing there is on earth and that you may wish to buy. Then you have there every evening a fair where they sell many common horses and nags, and also many citrons, and limes, and oranges, and grapes, and every other kind of garden stuff, and wood; you have all in this street.

More generally, he described the city as being “the best-provided city in the world” with the markets “stocked with provisions such as rice, wheat, grains, Indian corn and a certain amount of barley and beans, moong, pulses and horse-gram” all of which were cheaply and abundantly available. According to Fernao Nuniz, the Vijayanagara markets were “overflowing with an abundance of fruits, grapes and oranges, limes, pomegranates, jackfruit and mangoes and all very cheap.”

Meat too was sold in abundance in the marketplaces. Nuniz describes “mutton, pork, venison, partridges, hares, doves, quail and all kinds of birds, sparrows, rats and cats and lizards” as being sold in the market of Bisnaga.

(Source: internet)

- (a) According to Paes, name any four things that can be purchased from the market. (2)
- (b) According to Fernao Nuniz, what were the features of the bazaars of Vijayanagara? (2)

24. Discuss how Sufism influenced the socio-religious life of the people in India.

OR

6

Discuss the contribution of Guru Nanak Dev and Kabir in the Bhakti Movement.

25. Describe how the constituent Assembly framed the Constitution of India.

OR

6

Explain any six basic values of the Indian Constitution.

26. Explain the causes of disappearance of the Harappan Civilization.

What were its legacies?

(6+2)

OR

8

Describe the story of discovery of Harappan Civilization upto the present time.

27. The revolt of 1857 was the First War of Indian Independence. Justify

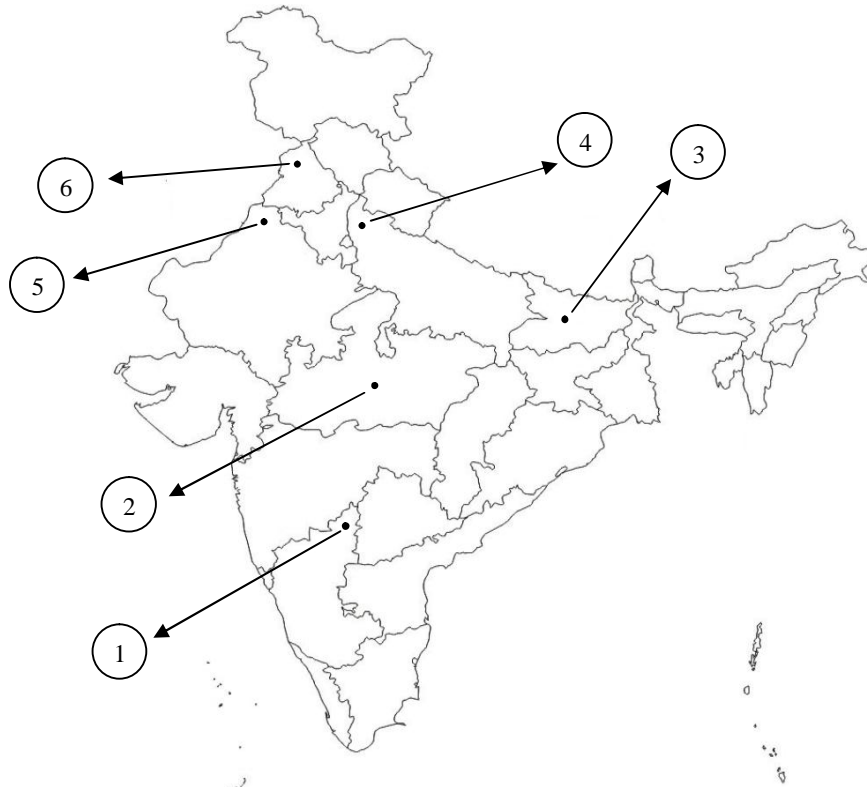
OR

8

Describe why the revolt was particularly widespread in Awadh and what prompted the peasants, Taluqdars and Zamindars to join the revolt?

28. On the map given below, six places have been numbered as 1, 2, 3, 4, 5 and 6. Name these numbered places that represent the following.

6x1=6



- | | |
|------------------------------|-----------------------------|
| (a) Capital of Magadha | (b) Kalibangan Harappa site |
| (c) Jallianwala Bagh Masacre | (d) Sanchi Stupa |
| (e) Vijayanagara Empire | (f) Start of Revolt of 1857 |

Questions for visually impaired student:

- What is the capital of Magadha?
- In which state is the Kalibangan Harappa site located?
- In which state did the Jallianwala Bagh Masacre take place?
- Where is Sanchi Stupa located?
- In which state did the Vijayanagara Empire flourish?
- Where did the revolt of 1857 first start?

PSYCHOLOGY – XI & XII

Design of Question paper

Weightage to different forms of questions:

Sl. no.	Forms of questions	Marks for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	SA-I	2	8	16
3.	SA-II	4	5	20
4.	LA-I	6	2	18
5.	LA-II	8	2	16
	Total		28	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	30	24
2.	Average	50	40
3.	Difficult	20	16

Note:

1. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

Sample Question Paper 2023
PSYCHOLOGY - XII

Full marks : 80

Time : 3 hours

General instructions:

- i. *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii. *The question paper consists of 28 questions.*
- iii. *Marks are indicated against each question.*
- iv. *Answers to questions carrying 1 mark should not exceed one sentence.*
- v. *Answers to questions carrying 2 marks should not exceed 50 words.*
- vi. *Answers to questions carrying 4 marks should not exceed 100 words.*
- vii. *Answers to questions carrying 6 marks should not exceed 200 words.*
- viii. *Answers to questions carrying 8 marks should not exceed 300 words.*

N.B: Check that all pages of the question paper are complete as indicated on the top left side.

(The figures in the margin indicate full marks to the questions)

Choose the correct answer from the given alternatives in questions 1 to 10.

1. The Two-factor theory of intelligence was given by: **1**
(a) Arthur Jensen (b) J.P Guilford
(c) Charles Spearman (d) Louis Thurstone.

2. Ato has high skills in scientific thinking, problem solving and abstract reasoning. Identify the intelligence displayed by ato. **1**
(a) Spatial (b) Bodily-kinesthetic
(c) Naturalistic (d) logical-Mathematical.

3. Halo effect is a tendency found in which behavioural analysis method. **1**
(a) Behavioural ratings (b) Nomination
(c) Observation (d) Situational-tests.

4. Which of the following is a direct method of personality assessment. **1**
(a) Roschach Inklot Test (b) Sentence Completion test
(c) Thematic Apperception Test (d) Eysenck Personality Questionnaire

5. _____ is when people develop a fear of entering unfamiliar situation. **1**
(a) Social phobia (b) Agoraphobia
(c) Specific phobia (d) Separation anxiety phobia

6. While driving Meren suddenly experienced his heart breathing rapidly. He started sweating profusely and even felt short of breath this was most likely to be **1**
(a) A manic episode (c) A dissociative episode.
(c) A panic attack. (d) A generalised anxiety episode.

7. Which of the following technique is used for treating phobias or irrational fears? **1**
(a) Systematic desensitisation (b) Differential reinforcement.
(c) Aversive conditioning (d) Token economy.

8. If a child does not do work regularly _____ may be used by the child's mother by preparing the child's favourite dish whenever he/she does homework at the appointed time. **1**
 (a) Reciprocal inhibition (b) Modelling
 (c) Positive reinforcement (d) Negative reinforcement
9. Which one of the following is a component of attitude? **1**
 (a) Cognitive (b) Valence
 (c) Extremeness (d) Centrality
10. When a child constantly falls ill because he/she eats junk food instead of proper meals, then the child is likely to develop a negative attitude towards junk food, and also a positive attitude towards eating healthy food this is through:- **1**
 (a) Learning attitudes by association.
 (b) Learning through exposure to information.
 (c) Learning attitudes through modelling.
 (d) Learning attitudes by being rewarded or punished.
11. Write down any two psychological techniques of self- control. **2**
12. Kajal made a plan of action and followed it to deal with stress, which coping strategy is being used by her to cope up with her stress. Explain briefly **2**
13. H.J. Eysenck's theory of personality is divided into three dimensions. Explain any one of them. **2**
14. Raju believes that his feelings, thoughts and actions are controlled by others. Identify the disorder and the symptom that raju is experiencing. Explain any psychomotor symptom of this disorder. **(1+1=2)**
15. State any two ethical standards that need to be practiced by professional psychotherapist. **2**
16. What is the main goal of logotherapy?. **2**
17. Highlight any one factor that influence attitude change. **2**
18. Prejudices are examples of attitudes towards a particular group. Suggest any one source of prejudice. **2**
19. Our intelligence is the result of heredity (nature) and environment (nurture). Discuss **4**

20. Ketho has been studying for his final examination which is going to take place tomorrow morning. He studies till 1 am in the night unable to concentrate anymore, he sets the alarm for 6 am and tries to go of to sleep. As he is very tense, he keeps tossing and turning in bed. Images flashes through his mind of not being able to secure the marks he needs to opt for the subject of his choice. He blames himself for fooling around with his friends and not preparing thoroughly for the examination. In the morning he wakes up with a heavy head, misses breakfast, and barely makes it in time to school for his examination. He opens the question paper, his heart pounding, hand clammy with sweat and then he finds his mind has gone completely blank. **2+2=4**
- (a) Identify the emotional effects experienced by Ketho.
 (b) How can Ketho overcome the examination anxiety?
21. What are the characteristics of psychotherapeutic approaches. **4**
22. Present an example of an attitude towards environment showing the relationship between the three (A-B-C) components of attitude. **4**
23. Explain any two conditions that facilitate group formation. **2+2=4**
24. (a) How do psychologists classify people on the basis of their IQ scores. Find out the IQ of a 18 year old child with a mental age of 16. **4+2=6**
Or
 (b) what happens to the body when stress is prolonged. Explain with the help of the GAS model. **6**
25. (a) Describe any three factors that influence attitude formation. **2×3=6**
Or
 (b) Explain any three elements of group structure **6**
26. (a) Freud believed that people avoid anxiety mainly by developing defence mechanisms. What are defence mechanisms, explain any four kinds of defence mechanisms. **2+4=6**
Or
 (b) Explain Client-centered therapy. **6**
27. (a) All persons do not have the same intellectual capacity. Who are the intellectually gifted individuals. Mention any four characteristics of gifted individual. **4+4=8**
Or
 (b) with the help of diagram, explain Freud's structure of personality. **2+6=8**
28. (a) Stress is a silent killer and is on the increase. Suggest any four techniques that you think will be helpful to manage stress. **2×4=8**
Or
 (b) Mental disorders can be explained through various psychological models. Describe any four such models. **2×4=8**

PHILOSOPHY – XI & XII

Weightage to different forms of questions:

Sl. no.	Forms of questions	Marks for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	SA-I	2	8	16
3.	SA-II	4	5	20
4.	LA-I	6	3*	18
5.	LA-II	8	2*	16
	Total		28	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	30	24
2.	Average	50	40
3.	Difficult	20	16

Note:

1. *Internal choice will be given in questions of 5 & 8 marks
2. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

Sample Question Paper 2023
PHILOSOPHY

Full marks: 80

Time: 3 hours

General instructions:

- i. Marks are indicated against each question.
- ii. Answer to questions carrying 1 mark should not exceed one sentence.
- iii. Answer to questions carrying 2 marks should not exceed 50 words.
- iv. Answer to questions carrying 4 marks should not exceed 100 words.
- v. Answer to questions carrying 6 marks should not exceed 200 words.
- vi. Answer to questions carrying 8 marks should not exceed 300 words.

Choose the correct answer from the given option in Questions 1-10.

1. _____ is said to be the origin of Philosophy. 1
(a) Knowledge (b) Experience
(c) Reason (d) Wonder

2. 'Meditations' is written by 1
(a) Decartes (b) Locke
(c) Hume (d) Spinoza

3. Representative realism is advocated by 1
(a) Leibnitz (b) Berkeley
(c) Locke (d) Hume

4. Ethics is derived from the _____ word. 1
(a) Greek (b) Latin
(c) Sanskrit (d) Aramic

5. The term Nyaya means 1
(a) Number (b) Argumentation
(c) Knowledge (d) Perception

Tick [✓] the correct reason of the given assertion:

6. Assertion: Philosophy is worth studying 1
Reason: (a) Philosophy makes a man wealthy []
(b) Philosophy bad to atheism []
(c) Philosophy leads to sense pleasure []
(d) Philosophy helps in understanding life in its totality []

7. Assertion: Experience is the source of all knowledge 1
Reason: (a) Mind is a clean slate at birth []
(b) All knowledge is a priori []
(c) All mathematical propositions are empirical generalisation []
(d) Analytical propositions are empty of content []

8. Assertion: According to Kant all analytic statement are a priori 1
Reason: (a) a priori knowledge are not derived from experience []
(b) a priori knowledge are derived from experience []
(c) a priori knowledge is idealistic []
(d) a priori knowledge are not given in space and time []
9. Assertion: “An action as necessary of itself without reference to another and, that is, as objectively necessary” 1
Reason: (a) Copernican Revolution []
(b) Categorical Imperative []
(c) Critique of Pure Reason []
(d) Critique of Judgment []
10. Ethics deals with the ‘_____ of human being living in societies’. 1
(a) Conduct (b) Duties
(c) Rights (d) Desires
11. What is a posteriori knowledge? 2
12. What is Anekantavada? 2
13. Name the two sects of Jainism. 2
14. What is Vyapti? 2
15. What is Rationalism? 2
16. Define Vitro fertilization (IVF). 2
17. Distinguish between orthodox and heterodox schools. 2
18. What is Ekantavada? 2
19. How is philosophy related to science? 4
20. Distinguish between realism and idealism. 4
21. What are the two stages of perception according to Nyaya? 4
22. G K Chesterton calls suicide “the ultimate and absolute evil, the refusal to take an interest in existence”. Suggest any four measures to prevent suicide. 4
23. Read the source given below and answer the questions that follow: 4
Faith
“And without faith it is impossible to please God, because anyone who comes to him must believe that he exists and that he rewards those who earnestly seek him”.
(Source: Hebrews 11:6)
(a) What is faith? (2)
(b) How do we please God? (1)
(c) How is reconciliation attained? (1)

24. (a) Explain the distinctive features of Indian philosophy. 6
OR
(b) Define Philosophy. Is Indian philosophy pessimistic? (2+4=6)
25. (a) Define Cosmos. Explain in brief the five ways put forwarded by St. Thomas Aquinas to prove the existence of God. (1+5=6)
OR 6
(b) Explain any six paths from the Eight-Noble Truths of Buddhism
26. (a) Name the twelve links of causal wheel of Dependent Origination. 6
OR
(b) Is the God of Islam the same as the God of Christian? Explain Islam concept of God. (3+3=6)
27. (a) What is the importance of studying social philosophy? How is it related to sociology? (4+4= 8)
OR
(b) When and who coined the word 'Social Justice'? Explain David Miller concept of Social Justice. (2+6= 8)
28. Answer **any two** 2x4=8
a. Name the Padarthas of Vaisesika.
b. What is the nature of Prakriti.
- OR
- c. Name the Eight-fold paths of Yoga.
d. Explain the nature of Brahman.

SOCIOLOGY – XI & XII

Weightage to different forms of questions:

Sl. no	Forms of questions	Marks for each question	No of Questions	Total
1	MCQ	1	10	10
2	SA –I	2	8	16
3	SA –II	4	5	20
4	LA-I	6	3	18
5	LA – II	8	2	16
	Total		28	80

Weightage level of questions:

Sl no.	Level	Percentage	Marks
1	Easy	30	24
2	Average	50	40
3	Difficult	20	16

Scheme of options:

Questions of 6 & 8 marks will be internal in option.

Note:

1. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

Sample Question Paper 2023
SOCIOLOGY - XII

Full marks : 80

Time : 3 hours

General instructions:

- i. *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii. *The question paper consists of 28 questions.*
- iii. *Marks are indicated against each question.*
- iv. *Answers to questions carrying 1 mark should not exceed one sentence.*
- v. *Answers to questions carrying 2 marks should not exceed 50 words.*
- vi. *Answers to question carrying 4 marks should not exceed 100 words.*
- vii. *Answers to questions carrying 6 marks should not exceed 200 words.*
- viii. *Answers to questions carrying 8 marks should not exceed 300 words*

N.B: Check that all pages of the question paper are complete as indicated on the top left side.

(The figures in the margin indicate full marks to the questions)

Choose the correct answer from the given alternatives from questions 1 to 10.

1. How many types of racial groups are in India there according to B.S Guha? 1
(a) 4 (b) 5 (c) 6 (d) 8
2. What is it called when a group of people believe that their religion alone is true? 1
(a) Communalism (b) Fundamentalism
(c) Fanaticism (d) Casteism
3. At what age of a person is the literacy rate of India calculated? 1
(a) 7 years and above (b) 18 years and above
(c) 21 years and above (d) age group of 15-59 years
4. Local self government like Kohima Town & Dimapur Town will come under which of the following category? 1
(a) Panchayat (b) Municipality
(c) Corporation (d) Census Town
5. The practice of a woman re-marrying the younger brother of her deceased husband is called? 1
(a) Sororate marriage (b) Liverate marriage
(c) Partilom marriage (d) Anulom marriage
6. If your family's descendent is traced only through your father down to your brother, what descent is it called? 1
(a) Patrilineal decent (b) Matrilineal decent
(c) Unilineal decent (d) Bilineal decent

7. Genna days are observed by the Nagas : 1
 (a) During birth of a child.
 (b) Before going on a hunting expedition
 (c) To avert calamities caused by the spirits
 (d) To please the good spirits
8. Which Government declared Nagaland as a full fledged State on 1st December 1963? 1
 (a) British Government (b) Assam Government
 (c) Indian Government (d) Nagaland Government
9. Who is the Author of 'Modernisation of Indian tradition'? 1
 (a) M.N Srinivas (b) G.S Ghurye
 (c) Yogendra Singh (d) R.K Mukherjee
10. Which of the following is not an example of structural realities in Indian society? 1
 (a) Family (b) Kinship
 (c) Cast (d) Customs
11. India is a multi-lingual, multi-cultural, multi-religious State. Mention two religious factors of unity in India. 2
12. Write the means of social control for both rural and urban society. 2
13. Give two examples of an irregular Muslim marriage. 2
14. Write one occurrences each of benevolent and malevolent spirits. 2
15. State two important consequences of westernisation. 2
16. What is a welfare State? 2
17. What impact did Green Revolution have on the small farmers? 2
18. According to Yogendra Singh why is the concept of modernisation composite and ideological? 2
19. Read the passage given below and answer the questions that follow:
 India is a multi lingual country and occupies a unique place in the world for its amazing linguistic heterogeneity. The inhabitants of India speak many languages and dialects because of the fact that this sub-continent has been for quite some time the destination of diverse racial groups. The Chief linguistic families are Indo Aryan, Dravidians, Mundari and Tibeto-Burman. In North East India, including Nagaland, people speak Tibeto-Burman language.
 Nagamese is the most popular among the spoken languages in Nagaland, widely spoken by the Tribal people of the State. Nagamese is a mixture of different Naga, Assamese and Bengali languages. Though there are many languages in Nagaland, Nagamese act as the inter-link between the languages and helps in better communication.

- (a) Write the importance of link language-Nagamese in Nagaland. 2
 (b) Mention any two challenges of linguistic diversities in Nagaland. 2
20. Write the difference between short-term and long-term migration with one example each. 4
21. What are the factors that are now leading to the breakup of the joint family system? 4
22. 'The traditional religion of the Nagas cannot simply be called Animism'. Give reasons to support the statement. 4
23. Explain any one social movement in India. 4
24. (a) Explain the changes Urbanisation has brought to the family structure and the Caste system in India. 6
 Or
 (b) Elaborate the changes a person has to go through in the process of Sanskritisation.
25. (a) Why did the need of 'land reforms' emerge during the freedom struggle? Explain the social consequences of the land reforms. 3+3=6
 Or
 (b) What is Liberalization? Explain its consequences.
26. (a) Discuss the origin and development of Sociology as a subject in India. 6
 Or
 (b) What are values? What are the various tags of values at different levels of social integration? (1+5=6)
27. (a) Mention eight problems of Scheduled Caste. 8
 Or
 (b) State the Constitutional provisions for the Minorities.
28. (a) Discuss how education has played a role in bringing about social change in India. 8
 Or
 (b) Examine how mass media has an impact on your daily life and what are the criticisms directed at mass media? (4+4=8)

GEOGRAPHY – XI & XII

DESIGN OF QUESTION PAPER

Weightage to different forms of questions:

Sl.No.	Forms of Questions	Marks for each question	No. of questions	Total marks
1.	MCQ	1	10	10
3.	SA-I	2	7	14
4.	SA-II	3	7	21
5.	LA-I	5	4	20
6.	MAP QUESTION	2+3	2	5
		Total	30	70

Weightage level of questions:

Sl.No	Level	Percentage	Marks
1.	Easy	20	14
2.	Average	60	42
3.	Difficult	20	14
		Total	70

Scheme of options:

1. There will be no overall option.
2. Internal choice shall be provided in 2(two) questions of 3 marks and 4(four) questions of 5 marks each.

Note:

1. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

Sample Question Paper 2023
GEOGRAPHY - XII

Total marks: 70

Time: 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *All questions are compulsory. Marks are indicated against each question.*
- iii) *The question paper consists of 30 questions divided into Section A and Section B.*
- iv) *Internal choice has been provided in some questions.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

Section –A

1. (I) Ever since man took birth, he has been constantly interacting with his physical environment.
(II) Human beings interact with physical environment with the help of technology developed by them. 1
 - (a) Only statement I is correct
 - (b) Both the statements are true and related to one another
 - (c) Only statement II is correct
 - (d) Both the statements are correct but not related

2. The term population distribution refers to 1
 - (a) the way population is a part of the earth
 - (b) the way demographic structure is designed
 - (c) the way people are spaced on the earth's surface
 - (d) the way population is over crowded.

3. The principle crop for extensive commercial grain cultivation is 1
 - (a) corn (b) barley
 - (c) rice (d) wheat

4. The chief objective of development is to create conditions in which people can live 1
 - (a) meaningful lives (b) long and healthy lives
 - (c) a life of freedom (d) according to their own choices

5. Any part of the sea extending beyond the limit of EEZ is known as 1
 - (a) territorial sea (b) internal water
 - (c) contiguous zone (d) high sea

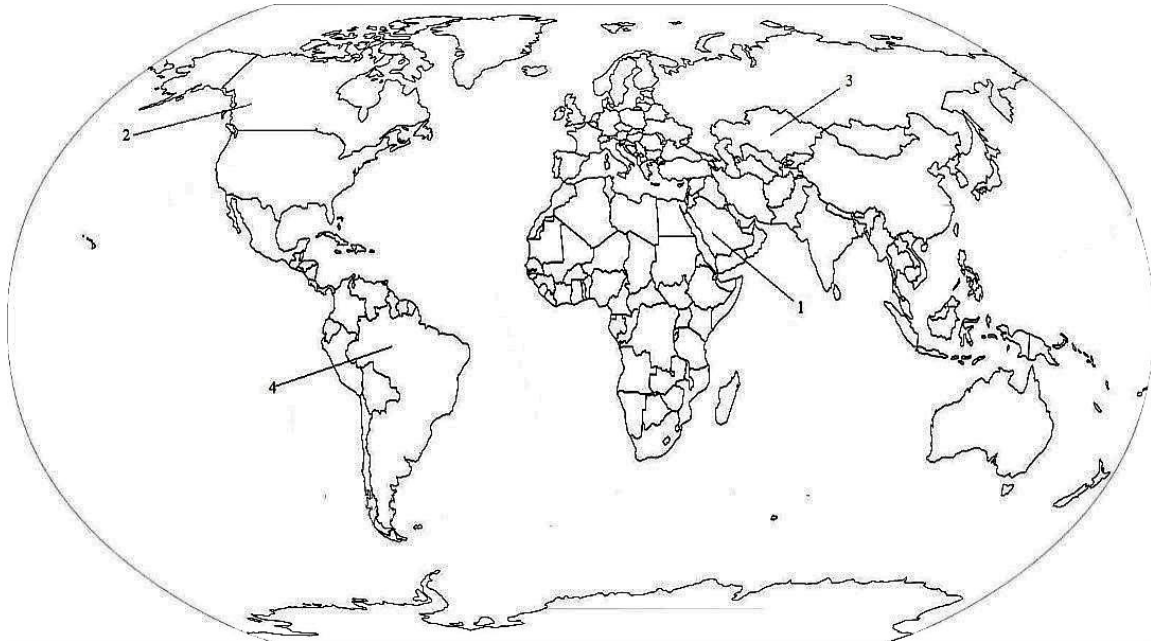
6. Define human geography. 2

7. What is meant by Geographical Information System? 2

8. What are commuter trains? 2

9. How is natural rate of growth different from actual growth rate in population? **3**
10. What are the three types of marketing centres? **3**
11. Read the following passage carefully and answer the following questions:
- There are different levels at which services are provided and availed. Some services are meant for industry, some for people; and some for both industry and people i.e. Transport. Every service has its cost and services are provided only to those individual who have the means to pay for them. Low-order services, such as groceries shops and laundries are more common and widespread than high-order services or more specialized ones like those of accountant, consultants and physicians. Services involve physical or mental labour. For example, the gardener, the launderers and the barber do primarily physical labour. Teachers, lawyers, physicians, musicians and others perform mental labour.
- A large number of services have been regulated. Making and maintaining highways and bridges, maintaining fire fighting departments and supplying or supervising education and customer care are some important examples of regulated services. These services are often supervised or performed by governments or companies. Corporations constituted by Central and State governments of services like transport, telecommunication, energy and water supply. Primary health care, engineering, law and management are professional services.
- Health and business services deserve a special mention in this context. As the health services became easy in India and other developed as well developing countries, they result in a great change in the health profile of the masses and are likely to play a still bigger role in future. The death rate came down drastically in most of the Asian and African countries and they experienced rapid increase in population, putting more strain on health services. **(1x3=3)**
- a) Mention one example of regulated services.
 b) How can you say that every service has its cost?
 c) How did the death rates come down drastically in most of Asian and African countries?
12. **a)** Discuss briefly three factors that international trade depends on. **3**
Or
b) Define the terms **(1+1+1=3)**
 i) Balance of trade
 ii) Free trade
 iii) Bilateral trade
13. **a)** Mention any five characteristics of dairy farming. **5**
Or
b) Differentiate between small scale and large scale industries.
14. **a)** Write three advantages and two disadvantages of inland waterways. **3+2=5**
Or
b) What is meant by road density? Write any four advantages of roads. **(1+4=5)**

15. On the given world map, four areas are numbered. Choose any two and match with the names given below. 1+1=2
- (a) Amazon Basin
 (b) Largest temperate grassland in the world



For Visually Impaired Students in lieu of Q.no.15

- (a) Amazon Basin is located in which continent?
 (b) Name the largest temperate grassland in the world.

Section –B

16. Cities having population varying from one to five million are called 1
 (a) metropolitan cities (b) mega cities
 (c) towns (d) urban outgrowth.
17. Those resources which can be used again after due processing are called. 1
 (a) renewable resources (b) cyclic resources
 (c) biotic resources (d) inexhaustible resources.
18. Food crops can be divided into three groups such as 1
 (a) (i) kharif (ii) rabi (iii) zaid
 (b) (i) nutritious (ii) carbohydrates (iii) fibres
 (c) (i) cereal and millets (ii) pulses (iii) fruits and vegetables
 (d) (i) pulses (ii) vegetables (iii) grains.
19. The most sacred, worshipped and also the most polluted river of India is 1
 (a) Yamuna (b) Kaveri
 (c) Brahmaputra (d) Ganga.

20. **Assertion:-** Situation of hunger and malnutrition arises when the population growth outpaces the growth of foodgrains.
Reason:- Food items becomes so costly to be out of reach of the common man. 1
- (a) Only assertion is correct
(b) Only reason is correct
(c) Both statements are correct and statement II correctly explains statement I
(d) Both are correct but not related to each other

21. Write any two factors for poor female participation in work in India. 2

22. Mention any two problems created as a result of Green Revolution to our environment. 2

23. What are the two groups of satellite system in India? 2

24. What are slums? 2

25. Case study on Adolescents in India. 3

Adolescent population is a very important segment of our overall population and its growth has a special significance in the demographic scene of India. Although this segment of population is full of energy and has vast potentials yet these youngsters are quite vulnerable and can fall prey to many ills if not properly guided and their energy channelized in a proper way. There are many challenges for the society as far as these adolescents are concerned, some of which are lower age at marriage, illiteracy- particularly female illiteracy, school dropouts, low intake of nutrients, high rate of maternal mortality of adolescent mothers, high rates of HIV/AIDS infections, physical and mental disability or retardedness, drug abuse and alcoholism, juvenile delinquency and committing crimes, etc.

Keeping the above situation in mind, the Government of India launched the National Young Policy in 2003 with the primary aim of all round improvement of youth and adolescents so that they are able to shoulder responsibility towards constructive development of the country. It also aims at infusing spirit of patriotism among the youth and make responsible citizens.

The thrust of the policy is the empowerment of youth so that they can participate effectively in decision making and can carry the responsibility of the able leader. Special emphasis has been laid on empowerment of women and girl child so that they are at par with their male counterparts. Special efforts were made to look into youth health, sports and recreation, creativity and awareness about new innovations in the spheres of science and technology.

(1x3=3)

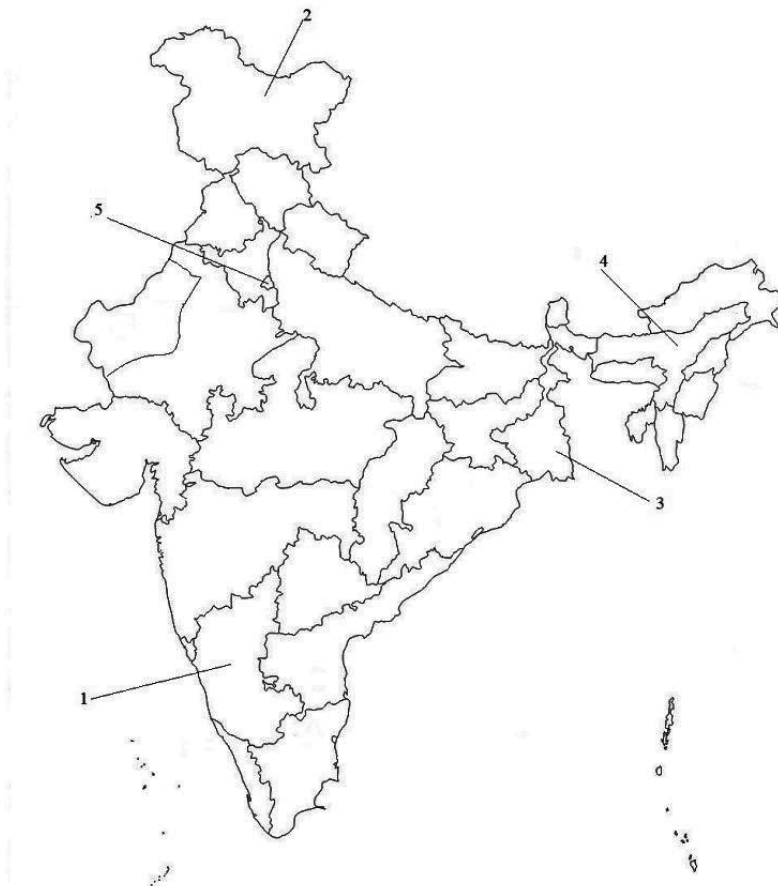
- a) Mention one challenge faced by India concerning adolescents.
b) What are some special area where efforts were given for the youth?
c) Why was the National Young Policy launched?

26. Mention three geographical conditions for the growth of sugarcane. 3

27. a) Explain in brief, any three types of rural settlements of India. 3

Or

- b) Differentiate between administrative towns and commercial towns with examples. (1½ + 1½ = 3)
28. a) "Irrigation is the key to success of Indian Agriculture". Give five reasons to support this statement. **5**
- Or**
- b) Write a short note on five non-conventional sources of energy that India has succeeded in harnessing energy.
29. a) What are airports? What are the four classes of Indian airports? **1+4=5**
- Or**
- b) Give three advantages and two disadvantages of pipelines transport. (3+2=5)
30. On the given map of India, five areas are numbered. Choose any three and match with the names given below. **1+1+1=3**
- a) Indus Basin
b) Capital of India
c) Manas biosphere reserve



For Visually Impaired Students in lieu of Q.no.30

- (a) Indus Basin spreads over which states of India?
(b) Name the capital of India.
(c) Where is Manas biosphere reserve located?

EDUCATION – XI & XII

Design of Question Paper

Weightage to different forms of questions:

Sl. no.	Forms of questions	Marks for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	SA-I	2	8	16
3.	SA-II	4	5	20
4.	LA-I	6	3	18
5.	LA-II	8	2	16
	Total		28	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1.	Easy	30	24
2.	Average	50	40
3.	Difficult	20	16

Note:

1. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

Sample Question Paper 2023
EDUCATION – XII

Full marks : 80

Time : 3 hours

General instructions:

- i. *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii. *The question paper consists of 28 questions.*
- iii. *Marks are indicated against each question.*
- iv. *Answers to questions carrying 1 mark should not exceed one sentence.*
- v. *Answers to questions carrying 2 marks should not exceed 50 words.*
- vi. *Answers to questions carrying 4 marks should not exceed 100 words.*
- vii. *Answers to questions carrying 6 marks should not exceed 200 words.*
- viii. *Answers to questions carrying 8 marks should not exceed 300 words.*

N.B: Check that all pages of the question paper are complete as indicated on the top left side.

(The figures in the margin indicate full marks to the questions)

Choose the correct answer from the given alternatives in questions 1 to 10.

1. The term 'psychology' is derived from two _____ words: **1**
(a) Latin (b) Greek
(c) French (d) Sanskrit

2. Who divided human life into four major classes? **1**
(a) William James (b) Skinner
(c) Crow and Crow (d) Hurlock.

3. In which month an infant shows excitement, distress and delight. **1**
(a) 3 months (b) 6 months
(c) 12 months (d) 18 months

4. Which is the first step for reproduction. **1**
(a) Growth (b) Chance factor
(c) Mating (d) Genes

5. The 3 R'S of habit formation are: **1**
(a) Reminder, Recall, Reward (b) Reminder, Routine, Reward
(c) Routine, Recall, Reward (d) Reminder, Routine, recall

6. Leo eats a lot of "junk foods", he will likely end up nice and comfortable, but gain weight which will make him lazy and inactive, is an example of. **1**
(a) Bad habits related to diet and nutrition.
(b) Bad habits that impact health.
(c) Poor fitness habits.
(d) Personal bad habits

7. Roko is a 10 year old boy, he is able to do all the tests meant for 10 years old, so he falls under the classification of? **1**
 (a) Very superior (b) Low average
 (c) Normal and average (d) High average
8. Akala is an extrovert, she is socially adaptable and like social events. Which of the following is not a characteristic of an extrovert? **1**
 (a) Balanced social behaviour (b) Command a lot of attention
 (c) Keen sense of observation (d) Like public acknowledgement
9. Acquired traits of individual differences includes which of the following. **1**
 (a) Physical, Mental, Social and Temperamental.
 (b) Mental, Social, Temperamental and culture.
 (c) Educational, Emotional, Mental and Physical.
 (d) Social, Cultural, Educational and Emotional.
10. Rokono do not have any disease or any physical defect but her health is not so sound. In which category of differently abled children will she fall :- **1**
 (a) Tired Children (b) Delicate Children
 (b) Disturbed Children (d) Sickly Children
11. Suggest any two aspects of development. **2**
12. Differentiate between sensation and perception. **2**
13. Bring out any two indicators of poor mental health. **2**
14. List out four different factors in memory. **2**
15. Give any two advantages of habit formation. **2**
16. Who devised the concept of IQ? Write the formula of IQ. **(1+1=2)**
17. State any two causes of individual differences. **2**
18. Mary is emotionally disturbed; she tends to worry and has developed inferiority complex. Suggest any two preventive measures to help her overcome her maladjusted behaviour. **2**
19. Differentiate between Psychology and Education. **4**
20. State the principles of growth and development. **4**
21. Identify any four signs of good memory. **4**
22. Calculate the value of median from the following data: **4**
 15, 20, 27, 49, 57, 35, 33, 17, 19

23. Read the case and answer the questions that follow:

2+2=4

Siddhart and Aditya are best friends with different personalities. They are neighbours and go to the same school. Though they are best friends they show striking personality differences between them. Aditya is aggressive whereas Siddhart is shy and withdrawn. As we all know every child is different from the other, some are obedient and punctual, finishes his/her classwork/homework on time. Some students never interact in the class, likes to be alone, destroys school property, involves in physical fights, spits in and around the school campus, bullies other children, does not participate in any activities organised by the school.

- a) Identify any two personalities of Siddarth.
- b) Identify any two personalities of Aditya.

24. (a) Describe the various changes that takes place in childhood stage 6
Or
(b) Illustrate the role of sensation, perception and conception in cognitive development. 6
25. (a) Explain the laws of heredity. 6
Or
(b) Describe why mental health is important. 6
26. (a) Outline any six classification of intelligence by Gardner. 6
Or
(b) State the characteristics of habits. 6
27. (a) State the utility of psychology in education. 8
Or
(b) How can attention and interest be inseparable in education 8
28. (a) Elaborate the various factors affecting personality. 8
Or
(b) What is learning? Describe the various methods of learning. 1+7=8

ECONOMICS – XI & XII

Design of Question paper:

Sl. No.	Forms of Questions	Marks for each question	No. of questions	Total Marks
1	Multiple Choice Questions (MCQ)	1	10 – Part I – 4 Q Part II – 6 Q	10
2	Short Answer (SA – I)	2	8 – Part I – 4 Q Part II – 4 Q	16
3	Short Answer (SA – II)	4	5 – Part I – 3 Q Part II – 2 Q	20
4	Long Answer (LA – I)	6	3 – Part I – 2 Q Part II – 1 Q	18
5	Long Answer (LA – II)	8	2 – Part I – 1 Q Part II – 1 Q	16
Total			28	80

Weightage level of questions:

Sl. No.	Level	Percentage	Marks
1	Easy	30	24
2	Average	50	40
3	Difficult	20	16

Scheme of options:

Questions of 6 & 8 marks will be internal option.

Note:

- Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

SAMPLE QUESTION PAPER 2023
ECONOMICS – XII

Total marks : 80

Time : 3 hours

General instructions:

- i) Approximately 15 minutes is allotted to read the question paper and revise the answers.*
 - ii) The question paper consists of 28 questions.*
 - iii) Marks are indicated against each question.*
 - iv) Answers to questions carrying 1 mark should not exceed one sentence.*
 - v) Answers to questions carrying 2 marks should not exceed 40 words.*
 - vi) Answers to questions carrying 4 marks should not exceed 80 words.*
 - vii) Answers to questions carrying 6 marks should not exceed 120 words.*
 - viii) Answers to questions carrying 8 marks should not exceed 200 words.*
- N.B: Check that all pages of the question paper is complete as indicated on the top left side.***

Choose the correct answer from the given alternative:

1. An example of flow variable is **1**
 - a) wealth
 - b) loan
 - c) money supply
 - d) income

2. In India, coins are limited legal tender because coins of 1, 2, 5, 10 are accepted upto maximum sum of **1**
 - a) 100
 - b) 1,000
 - c) 10,000
 - d) 10,00,000

3. The process of creating credit by commercial banks is best explained by **1**
 - a) issue of loan
 - b) accepting new deposits
 - c) through statutory liquidity ratio
 - d) purchase of Government securities

4. Which sector gives the largest number of employment in India? **1**
 - a) primary
 - b) secondary
 - c) tertiary
 - d) foreign trade

5. Which of the following allow people from Below Poverty Line (BPL) to get essential goods at subsidized rates. **1**
 - a) Public Distribution System
 - b) Minimum Support Price
 - b) Buffer Stock
 - d) Direct Benefit Transfer

6. Due to some exigencies;
Statement I: One year Plans were made in 1966 – 69
Statement II: One year Plans were made in 1980 – 83
In the light of the given statements, choose the correct alternative: **1**
 - a) Statement I is false and statement II is true
 - b) Statement I is true and statement II is false
 - c) Both statements I and II are true
 - d) Both statements I and II are false

7. Which of the following is the objective of economic planning? **1**
 a) rise in prices
 b) more cyclical fluctuations
 c) self sufficiency
 d) environmental protection
8. In BRICS, C stands for **1**
 a) Cambodia b) Canada
 c) Chile d) China
9. If printing of currency to meet fiscal deficit can cause inflationary pressure, what can be the alternative solution to handle the problem? **1**
 a) borrowing from the public
 b) borrowing from the RBI
 c) borrowing from World Bank
 d) borrowing from other countries
10. Why is labour intensity so high in an unorganized sector? **1**
 a) presence of social security
 b) large number of labour force
 c) large production
 d) high wage rate
11. Distinguish between indirect taxes and subsidies. **2**
12. Differentiate between production for self-consumption and production for exchange. **2**
13. State any four challenges of Indian economy on the eve of independence. **2**
14. How is Market Access Initiatives (MAI) different from Market Development Assistance (MDA)? **2**
15. Write any two points of difference between commercial banks and central bank. **2**
16. How is delicensing of industries an advantage for the private sector? **2**
17. Why should organic farming be encouraged? **2**
18. On 8th November 2016, Government of India demonetized existing currency notes of ` 1000 and ` 500. State two positive outcomes brought about by demonetization. **2**
19. Explain any four importance of macro economics. **4**
20. “Sale of petroleum products and vehicles are rising in India”. Analyse its impact on GDP and welfare. **4**
21. State the features of Average Propensity to Consume (APC). **4**

22. Explain any two failures of economic planning. 4
23. “We’re totally delighted that this process is complete and happy to have Air India back in the Tata Group”, said Tata Sons Chairman N Chandrasekaran. The debt- laden Air India has been purchased by Tata Sons from the Government of India on 27th January 2022. The Government said running the airline was incurring losses of nearly \$2.6 million every day. The airline’s management cited rising aviation fuel prices and airport usage charges as well as competition from low-cost carrier, a weakening rupee and the interest burden for its poor financial performances.
- Explain any two positive and two negative impacts of privatizing Air India. 2+2=4
24. a.Explain the precautions taken while estimating national income by value added/product method. 6
Or
 b. Explain any three components of final expenditure on GDP.
25. a.Make a comparative study of population below poverty line between India and China. 6
Or
 b. How is China’s trade expanding more than India’s?
26. a.How do changes in repo rates and cash reserves ratio solve the problems of excess demand and deficient demand? 6
Or
 b. Discuss any two means adopted by the Government to finance fiscal deficit.
27. a. How is full employment equilibrium achieved? Explain with a suitable diagram. 8
Or
 b. Explain the working of investment multiplier with the help of a diagram.
28. a.Explain the dimensions of sustainable development. 8
Or
 b. Explain the challenges in the formation of human capital in India.

INFORMATICS PRACTICES – XI & XII

Design of the Question Paper

Weightage to different forms of questions

Sl.No.	Forms of questions	Marks for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	SA – I	2	11	22
3.	SA – II	3	6	18
4.	LA	5	4	20
Total:			31	70

Weightage level of questions

Sl.No.	Level	Percentage	Marks
1.	Easy	15	11
2.	Average	70	49
3.	Difficult	15	10
Total:		100	70

Scheme of options:

- i. Internal choice shall be provided in 3(three) questions of 3 marks.
- ii. Internal choice shall be provided in 4(four) questions of 5 marks.

Note:

1. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

Sample Question Paper 2023
INFORMATICS PRACTICES

Total marks : 70

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 22 questions. All questions are compulsory.*
- iii) *Marks are indicated against each question.*

N.B: Check that all pages of the question paper are complete as indicated on the top left side.

1. Choose the correct answer from the given alternatives:

- (a) Which of the following is not used in wired communication? **1**
 - (i) Optical Fiber
 - (ii) UTP cable
 - (iii) Radio Waves
 - (iv) Coaxial Cable

- (b) In fiber optic cable data travels in the form of _____. **1**
 - (i) sound
 - (ii) magnetic wave
 - (iii) light
 - (iv) none of these

- (c) Which of the following is/are features of GUI Applications? **1**
 - (i) Has user friendly interface
 - (ii) Is event driven
 - (iii) Allows use of mouse
 - (iv) All of these

- (d) Which method of Float class can convert its value to string? **1**
 - (i) toString()
 - (ii) toString()
 - (iii) ConvertToString()
 - (iv) parseString()

- (e) A class acts as _____ for an object. **1**
 - (i) template
 - (ii) copy
 - (iii) container
 - (iv) none of these

- (f) Which of the following class will one use to create an object for storing records returned by a SQL query? **1**
 - (i) RecordsSet
 - (ii) Output
 - (iii) ResultSet
 - (iv) QuerySet

- (g) In RDBMS the tables related to each other using primary key and foreign key are called _____ and _____ table respectively. **1**
 - (i) Parent, Child
 - (ii) Child, Parent
 - (iii) Primary, Secondary
 - (iv) Mother, Child

- (h) Which statement is used to retrieve data from a table? **1**
 - (i) SELECT
 - (ii) READ
 - (iii) DISPLAY
 - (iv) EXTRACT

- (i) % is a _____ character. 1
 (i) Pattern matching (ii) Modulo operator
 (iii) Percentile Operator (iv) none of these
- (j) Identify the odd one out. 1
 (i) ODBC (ii) MSQL/NET
 (iii) JDBC (iv) PHP
2. What is the difference between the use of JTextField and JPasswordField in a program? 2
3. What is the significance of System.exit(0) method? 2
4. Define a constructor. 2
5. Write the Syntax to define a method in java. 2
6. Differentiate between and tag. 2
7. How does Java application connect to a database? 2
8. Write the command to do the following:
 (i) Creating database (ii) Dropping database 2
9. What is RDBMS? What is the use of NULL in RDBMS? 2
10. Define UNION operator. 2
11. What is transitive dependency? 2
12. What is the use of random () method? 2
13. a. What is Topology? Explain any two types of Topology. 3
- Or**
- b. Explain the various open source software tools available.
14. a. What is ComboBox? How will one create a ComBox in HTML? 3
- Or**
- b. What are the various components of database server URL? Discuss any two.
15. Define: Atomicity, Domain Integrity and Referential Integrity. 3
16. Discuss in brief the various tools of MYSQL. 3

17. **a.** Write a short notes on primary key, unique key and foreign key. **3**
- Or**
- b.** What is the need of Boyce-Cod normal form?
18. What are the list of methods and classes to be used in Message Board Application with description? **3**
19. **a.** Discuss in brief the possible solutions to overcome computer threats. **5**
- Or**
- b.** Differentiate between proprietary software and open source software.
20. **a.** What is an event? Name the interfaces available in Java that facilitate event handling. **5**
- Or**
- b.** What are the features of OOPs? Explain them briefly.
21. **a.** What are the various operators available in MySQL? Discuss with example. **5**
- Or**
- b.** What are the various grouping functions available in MySQL, discuss with example?
22. **a.** What is a subquery? Mention its rules. **5**
- Or**
- b.** What is meant by functional dependency? Discuss with the help of example.

Computer Science – XI & XII

Design of the Question Paper

Weightage to different forms of questions

Sl.No.	Forms of questions	Marks for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	SA – I	2	8	16
3.	SA – II	3	8	24
4.	LA	5	4	20
Total:			30	70

Weightage level of questions

Sl.No.	Level	Percentage	Marks
1.	Easy	15	11
2.	Average	70	49
3.	Difficult	15	10
Total:		100	70

Scheme of options:

- i. Internal choice shall be provided in 4(four) questions of 3 marks.
- ii. Internal choice shall be provided in 4(four) questions of 5 marks.

Note:

1. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

Sample Question Paper 2023
COMPUTER SCIENCE

Total marks : 70

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 21 questions. All questions are compulsory.*
- iii) *Marks are indicated against each question.*

N.B: *Check that all pages of the question paper are complete as indicated on the top left side.*

1. Choose the correct answer from the given alternatives:

- (a) Which file must be there in a package? **1**
 - (i) `__init__.py` (ii) `__initialize__.py`
 - (ii) both (iv) None of the above

- (b) The algorithm should be efficient both in terms of **1**
 - (i) Base (ii) time and space
 - (iii) depth and search (iv) none of these

- (c) In python, how do we access the first element of list L? **1**
 - (i) `L [0]` (ii) `L(0)`
 - (iii) `L[-1]` (iv) `L(1)`

- (d) In a stack, what is the value of TOP when a stack is full? **1**
 - (i) `MIN-1` (ii) `FRONT = REAR`
 - (iii) `MAX-1` (iv) none of these

- (e) Which of the following layer is responsible for encryption? **1**
 - (i) Presentation layer (ii) Application layer
 - (iii) Transport layer (iv) Networking layer

- (f) Which of the following is used to change the values in a table? **1**
 - (i) UPDATE (ii) ALTER
 - (iii) SELECT (iv) none of these

- (g) What is the need of the HAVING clause? **1**
 - (i) Depends on the table
 - (ii) Cannot say
 - (iii) WHERE keyword could not be used with aggregate functions
 - (iv) Scalar functions.

- (h) Which of the following are passed as arguments to the connect method? **1**
 - (i) host (ii) username
 - (iii) password (iv) all of the above

- (i) Which sections were added to the IT Act in 2008? 1
 (i) 66A (ii) 69
 (iii) both (iv) none of the above
- (j) In which of the following e-waste pose threat to 1
 (i) people working in e-waste management plants
 (ii) execution of a power of attorney
 (iii) Industrial design
 (iv) All of the above
2. What are statements? 2
3. Differentiate between list and tuple. 2
4. Write the steps to create a package in python. 2
5. Give the importance of repeater devices. 2
6. Explain POP3 which post does it use? 2
7. What is modulation? 2
8. State the steps in creating a Django project. 2
9. Which method is used to show the number of rows affected by executing the query? 2
10. a. Write a function to implement linear search.
- Or** 3
- b. What is recursion? What are the conditions for writing a recursion function?
11. a. What is a package? Differentiate between a package and a module.
- Or** 3
- b. Briefly explain the usage of the following OS function in python:
 i) mkdir ii) chdir iii) getcwd
12. Define the following asymptotic notations: 3
 i) Big Oh ii) Omega iii) Theta
13. Explain the features of matplotlib. 3
14. What is a graph? State a few applications of a graph. 3

15. **a.** Explain the three models in cloud services. **3**
- Or**
- b.** Differentiate between LAN, WAN and MAN.
16. Write steps to create a primary key in the table using the sql connector. **3**
17. **a.** Define IP and state its types. **3**
- Or**
- b.** Write a short note on how to prevent phishing.
18. **a.** Which function is used to plot a bar in matplotlib? Explain its arguments. **5**
- Or**
- b.** Convert $(a + b) - (c / d)$ into postfix expression.
19. **a.** What is meant by Topology? Explain the different types of topologies. **5**
- Or**
- b.** Explain OSI protocol suite.
20. **a.** Explain GROUP BY and HAVING clause and state its syntax. **5**
- Or**
- b.** State some of the characteristics of Django.
21. **a.** Define Cyber Crimes. Explain any four types of Cyber Crimes. **5**
- Or**
- b.** Write a note on e-waste management.

ACCOUNTANCY - XI

Design of Question Paper

Weightage to different forms of questions:

Sl.no.	Forms of questions	Marks for each question	No. of questions	Total marks
1	MCQ	1	10	10
2	SA-I	2	8	16
3	SA-II	4	5	20
4	LA-I	6	3	18
5	LA-II	8	2	16
	Total		28	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1	Easy	20	16
2	Average	60	48
3	Difficult	20	16
	Total	100	80

Note:

1. There will be no overall choice. However, internal choice shall be provided in 6 marks and 8 marks questions.
2. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

ACCOUNTANCY - XII

Design of Question Paper

Weightage to different forms of questions:

Sl.no.	Forms of questions	Marks for each question	No. of questions	Total marks
1	MCQ	1	10	10
2	SA-I	2	7	14
3	SA-II	4	3	12
4	LA-I	6	3	18
5	LA-II	8	2	16
	Total		25	70

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1	Easy	20	14
2	Average	60	42
3	Difficult	20	14
	Total	100	70

Note:

1. There will be no overall choice. However, internal choice shall be provided in 6 marks and 8 marks questions.
2. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

**SAMPLE QUESTION PAPER 2023
ACCOUNTANCY - XII**

Full marks: 70

Time: 3 hours

General Instructions:

- i) *Approximatley 15 mintues is allotted to read the question paper and revise the answers.*
- ii) *The question paper contains 25 questions. All questions are compulsory.*
- iii) *Answer to questions carrying 2 marks should not exceed 50 words.*
- iv) *Answer to questions carrying 4 marks should not exceed 100 words.*
- v) *Answer to questions carrying 6 marks should not exceed 200 words.*
- vi) *Answer to questions carrying 8 marks should not exceed 300 words.*
- vii) *Internal choice has been provided in 6 marks and 8 marks questions.*

Choose the correct answer from the given alternatives in question 1 to 10.

1. Calculate interest on the drawing if partner withdrew ` 6,000 at the end of each quarter. Rate of interest on drawings is 10% per annum and the accounting period is 1st January to 31st December. 1
 - a) ` 900
 - b) ` 1,800
 - c) ` 975
 - d) ` 950

2. How many persons are required to start a partnership firm? 1
 - a) three or more persons
 - b) only one person
 - c) at least two persons
 - d) at least three persons.

3. Which type of capital will be written after the authorized capital in the balance sheet? 1
 - a) Subscribed Capital
 - b) Issued Capital
 - c) Paid-up Capital
 - d) Called-up Capital.

4. Amount of calls-in-arrears will be deducted from _____. 1
 - a) Subscribe but not fully paid-up
 - b) Subscribed but fully paid-up capital
 - c) Authorised capital
 - d) Issued capital.

5. Sushma Limited issued 1,000, 13% debentures of ` 100 each at a premium of 10%. Applications were received for 900 debentures only. All applications were accepted and debentures were allotted. What amount is to be credited to the Securities Premium Account? 1
 - a) ` 1,000
 - b) ` 10,000
 - c) ` 900
 - d) ` 9,000

6. Premium on issue of shares can be used for _____. 1
 - a) writing off goodwill
 - b) issue of fully paid bonus shares
 - c) paid for dividend
 - d) writing off patent.

7. Example of inventories are _____. 1
 - a) raw materials
 - b) buildings
 - c) furnitures
 - d) debtors.

8. Standard current ratio is _____. 1
a) 2:1 b) 3:1
c) 1:2 d) 1:1
9. Statement of cash flows includes _____. 1
a) financial activities b) business activities
c) non- investing activities d) revenue activities.
10. A company that issues stock and bonds to raise funds results in _____. 1
a) decreases in cash b) increases in cash
c) increases in equity d) decreases in liabilities.
11. Write any two features of not for profit organisation. 2
12. Calculate the salaries expenses for the year ended 31/12/ 2022: Salaries paid during the year 2022 ₹ 36,000. Salaries ₹ 54,000 was paid in advance at the end of the previous year. 2
13. U, V and W are partners sharing profits in the ratio of 2:2:1. They decided to share future profits in the ratio 5:3:2. On that date the profit and loss account showed the credit balance of ₹ 90,000. Pass necessary journal entries. 2
14. A, B, C and D were partners sharing profits in the ratio of 5:3:2:2. B died on 1st March, 2018. Goodwill of the firm was valued at ₹ 6,00,000. A, C and D decided to share future profits equally. Write the necessary journal entries. 2
15. Write any two differences between over subscription and under subscription. 2
16. Total debt ₹ 2,16,000, current liabilities ₹ 72000, capital employed ₹ 2,16,000. Calculate total assets to debt ratio. 2
17. Write any two objectives of ratio analysis. 2
18. From the following information compute the outstanding subscription for the year 2022: 4
A club has 70 members each paying annual subscription of ₹ 600.
Subscriptions received during 2022 ₹ 42,000.
Subscription received in advance as at 31/12/2021 ₹ 7,200.
Subscription received in advance as at 31/12/2022 ₹ 6,600.
Subscription outstanding as at 31/12/2021 ₹ 9,600.
19. Write any 4 differences between reserve capital and capital reserve. 4
20. W Limited purchased machinery from Y Limited for ₹ 4,95,000 payable 20% in cash and the balance by issue of fully paid 15% debentures of ₹ 100 each at par. Journalise the above transactions. 4

21. a) Write any 6 differences between the dissolution of partnership and dissolution of firm.

Or

6

- b) From the following information prepare profit and loss appropriation account for the year ended 30th June 2023. X and Y start business on July 1, 2022, each partner contributing ` 1,50,000 as a share of capital. On October 1, Y makes an additional contribution of ` 1,00,000 which is treated as a loan. The profit for the period ending March 2023 was ` 85,000 before charging any interest. All the partners entitled to a salary of ` 3,000 each per quarter. The partners had drawn ` 24,000 each on January 1, 2023.

22. a) Golden Jute Limited made an issue of 10,000 shares of ` 10 each payable ` 3 on Application, ` 3 on Allotment, ` 2 on First Call and ` 2 on Second Call, all the amounts were received, except the following: A who holds 100 shares has paid Application, Allotment and First Call. Y Who holds 200 shares has paid Application and Allotment. Z who holds 300 shares has paid only Application money. The Company forfeited the shares of defaulting shareholders and re-issued 200 of the above shares at a discount of 2%, credited as fully paid. Prepare Cash Book and Forfeited Shares Account.

Or

6

- b) X Limited issued for public subscription 1,00,000 equity shares of ` 10 each at a premium of ` 5 per share payable as under:
On Application ` 5
On Allotment ` 7 (including premium ` 5)
On First & Final Call ` 3

Applications were received for 1,50,000 shares. Allotment was made pro-rata to all the applicants and the money overpaid on application was utilised towards sums due on allotment.

Suruchi, who applied for 1,800 shares failed to pay the allotment and call money and the shares were subsequently forfeited. Two-third of the forfeited shares were re-issued to Supriya as fully paid up at ` 8 per share. Pass the journal entries to record the above transactions.

23. a) State giving reason, whether the Current Ratio will improve or decline or will have no effect in each of the following transactions if Current Ratio is 2 : 1.
- Cash paid to Trade Payables.
 - Bills Payable discharged.
 - Bills Receivable endorsed to a creditor.
 - Payment of final Dividend already declared.
 - Purchase of Stock-in-Trade on credit.
 - Bills Receivable endorsed to a Creditor dishonoured.

Or

6

- b) Financial Statement Analysis have some limitations. Explain any six limitations.

24. a) A, B and C are partners sharing profits and losses in the ratio of 2:2:1. From 1st April, 2019 they decided to share future profits and losses equally.

Following balances appeared in their books:	₹
Profit and Loss Account (Cr.)	20,000
Advertisement Suspense Account (Dr.)	15,000
Workmen Compensation Reserve	60,000

It was agreed that:

- Goodwill should be valued at two year's purchase of super profits. Firm's average profits are ₹ 75,000. Capital invested in the business is ₹ 6,00,000 and normal rate of return is 10%.
 - Furniture (book value of ₹ 50,000) be reduced to ₹ 30,000.
 - Computer (book value of ₹ 40,000) be reduced by ₹ 10,000.
 - Claim on account of workmen's compensation amounted to ₹ 50,000.
 - Investments (book value of ₹ 30,000) were revalued at ₹ 25,000.
- Pass necessary journal entries for the above.

Or

8

- b) A, B and C were partners sharing profits in the ratio of 4:3:2. Their Balance Sheet as at 31st March, 2018 was as follows:

Liabilities		Assets	
Sundry Creditor	20,000	Cash	6,400
Expenses Owing	5,000	Debtors	20,000
Reserve Fund	18,000	Less: Provision	400
Capitals:		Stock	30,000
A	60,000	Patents	8,000
B	50,000	Machinery	1,20,000
C	40,000	Goodwill	9,000
	1,93,000		1,93,000

B retired on the above date upon the following terms:

- Goodwill of the firm be valued at ₹ 63,000.
 - Machinery be written down by 10% and the patents written up by 25%.
 - Provision for doubtful debts be brought upto 5% on debtors and provision of 2½ % on creditors be made for discount.
 - Expenses owing are to be brought down to ₹ 3,900.
 - B is to be paid ₹ 30,000 immediately, which is to be contributed by A and C in their new profit sharing ratio which is 3:2.
- Prepare Revaluation Account, Capital Account and the Balance Sheet of the firm after B's retirement.

25. a) From the following Balance Sheet of Defence Brokers Limited prepare Cash Flow Statement and Balance Sheet as on 31st March 2019.

Particulars	2019(₹)	2018(₹)
I. EQUITY AND LIABILITIES		
1.Share Holders' Funds		
(a)Share Capital	20,00,000	15,00,000
(b)Reserves and Surplus (Deficit)	(1,00,000)	(2,30,000)
2.Non-Current Liabilities		
(a)Long-term Borrowings	13,00,000	15,00,000
(b)Long-term Provisions	3,00,000	2,85,000
3.Current Liabilities		
(a)Short-term Borrowings	45,000	55,000
(b)Trade Payables	1,20,000	1,15,000
(c)Other Current Liabilities	30,000	25,000
Total	36,95,000	32,50,000
II.ASSETS		
1.Non-Current Assets		
(a)Fixed Assets		
(i)Tangible Assets	13,00,000	11,00,000
(ii)Intangible Assets	1,50,000	1,30,000
(b)Non-current Investments	2,50,000	2,60,000
2.Current Assets		
(a)Current Investments	2,00,000	1,90,000
(b)Inventories	9,00,000	7,50,000
(c)Trade Receivables	4,00,000	3,00,000
(d)Cash and Cash Equivalents	4,95,000	5,20,000
Total	36,95,000	32,50,000

Adjustment: Provide depreciation on tangible assets for ₹ 1,00,000.

Or

8

- b) Balance Sheets of Kewal Limited as on 31st March, 2018 and 31st March, 2017 were as follows:

Particulars	31.3.2018	31.3.2017
I.EQUITY AND LIABILITIES:		
(1)Share holder's Funds:		
(a)Share Capital	10,00,000	7,00,000
(b)Reserve and Surplus	2,50,000	1,50,000
(2)Current Liabilities:		
Trade Payables	50,000	40,000
TOTAL	13,00,000	8,90,000
II.ASSETS:		
(1)Non-Current Assets:		
Fixed Tangible Assets	8,00,000	5,00,000
(2)Current Assets:		
(a)Current Investments (Short term Investments)	60,000	45,000
(b)Inventory	1,00,000	75,000
(c)Cash & Bank Balances	3,40,000	2,70,000
TOTAL	13,00,000	8,90,000

Additional information:

- i) ₹ 50,000 depreciation has been charged to Plant and Machinery during the year 2017-18.
 - ii) A piece of machinery costing ₹ 12,000 (book value ₹ 5,000) was sold at 60% profit on book value.
- Prepare Cash Flow Statement.

BUSINESS STUDIES - XI & XII

Design of Question Paper

Weightage to different forms of questions:

Sl.no.	Forms of questions	Marks for each question	No. of questions	Total marks
1	MCQ	1	10	10
2	SA-I	2	8	16
3	SA-II	4	5	20
4	LA-I	6	3	18
5	LA-II	8	2	16
	Total		28	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1	Easy	20	16
2	Average	60	48
3	Difficult	20	16
	Total	100	80

Note:

1. There will be no overall choice. However, internal choice shall be provided in 6 marks and 8 marks questions.
2. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

SAMPLE QUESTION PAPER 2023
BUSINESS STUDIES – XII

Full marks : 80

Time : 3 hours

General Instructions:

- i) Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) The question paper consists of 25 questions. All questions are compulsory.*
- iii) Answer to questions carrying 2 marks should not exceed 50 words.*
- iv) Answer to questions carrying 4 marks should not exceed 100 words.*
- v) Answer to questions carrying 6 marks should not exceed 200 words.*
- vi) Answer to questions carrying 8 marks should not exceed 300 words.*
- vii) Internal choice has been provided in 6 marks and 8 marks questions.*

Choose the correct answer from the given alternatives in questions 1 to 10.

1. Business environment includes both specific and general forces. Which one is the general forces? 1
a) Suppliers b) Customers
c) Investors d) Legal.

2. Which of the following is not a feature of marketing? 1
a) Needs and wants b) Creating a market offer
c) Customer value d) Marketing planning.

3. When is the Consumer Day celebrated? 1
a) June 12 b) April 15
c) March 15 d) June 15.

4. Who is a consumer? 1
a) A person who obtains goods for resale or any other commercial purpose.
b) A person who hires or avails of any services for a consideration.
c) A person who avails services for any commercial purpose.
d) A person who uses the goods without the approval of the buyer.

5. If your grandfather has retired from an organization in which he was responsible for overseeing the efforts of the workforce. At which level of management was he working _____? 1
a) Supervisory Level of Management b) Top Level of Management
c) Middle Level of Management d) Division Head.

6. Mr. Sourav (Sales Manager) has the objective of selling 100 units in a week. He cannot sell them until and unless Mr. Sumit (Production Manager) produces 100 units which is possible only when Mr. Surjit (Purchase Manager) buys enough raw materials to produce 100 units per week, etc. Which force is lacking behind? 1
a) Planning b) Directing
c) Coordination d) Organizing.

7. Prohibition of tobacco sales within a certain radius of an educational institution is an example of _____. **1**
a) Procedure
b) Policy
c) Strategy
d) Rule.
8. A company needs a detailed plan for its new project, 'Construction of a shopping mall', what type of plan is it? **1**
a) Programme
b) Procedure
c) Methods
d) Strategy.
9. Technological up gradation of machinery at work place is an example of _____. **1**
a) Taking corrective action
b) Measuring actual up gradation
c) Comparing actual performance with standards
d) Analyzing deviation.
10. Which of the following is Consumer Organization and NGOs creating consumer awareness? **1**
a) Consumer Forum
b) The Bureau of Indian Standard
c) Consumer Utility and Trust Society
d) Voluntary Organization in Interest of Consumer Education (VOICE).
11. State any two social objectives of management. **2**
12. Write any two examples of money market instruments. **2**
13. Motion study involves close observation of the movements of the body and limbs while performing a job. Give reasons to support the benefits that motion study will serve. **2**
14. Compare single use plan and standing plan. **2**
15. The Manager, Mr. Ram, strictly adheres to the organizational plan. The plan lays down maximum 10% discount to be offered to customer on sale of goods. Mr. Ram could not provide 10.5% discount on a large order to Mr. Shyam (an old customer) when he demanded the same. The firm lost the large order and hence incurred losses.
i) Which limitation of planning is reflected here? **1**
ii) How can this limitation be overcome? **1**
16. Write four examples of a brand name. **2**
17. Explain any two rights as a consumer. **2**
18. Blue Bird Limited, offers financial incentives to their employees to motivate for better performance. Explain any two financial incentives it can offer to the employees. **2**
19. Discuss any four Principles of Management given by Fayol. **4**

20. Explain any four techniques of sales promotion. **4**
21. “Management cannot be considered as a perfect science, rather it is a social science”. Give reasons for the inexactness of science of management. **4**
22. Explain the impacts of demonetization. **4**
23. Once the standard has been determined, the next step is to measure actual performance. Explain four ways for measuring actual performance. **4**
24. **a)** Alex runs a factory manufacturing readymade clothes. The business has been doing well and he intends to expand the business by diversifying into handicrafts and shoes, thereby keeping his company growing. Now, for the proper organization, he adopts an organizational structure in which various divisions are created on the basis of products. Each division or department looks after production, finance, purchase, sales, etc., of one product line.
- (i) Identify and explain the management function highlighted above. **2**
- (ii) Which type of structure is followed by Alex? **1**
- (iii) List any two demerits of above referred organizational structure. **2**
- (iv) For which type of organization this form of organizational structure is suitable? **1**

Or

- b)** Explain any six importance of organizing. **(6)**
25. **a)** Distinguish between money market and capital market.

Or

- b)** Distinguish between primary market and secondary market.
26. **a)** Mr. Charan, a Production Manager of Guru Kripa Textile Ltd. is not able to communicate and provide guidance to the workers of a factory due to overload of the work. So, he decides to appoint a person who is able to spend more time with the workers.
- (i) Identify which function of directing helps the production manager to reduce his workload. **1**
- (ii) What role will the appointed person play? **3**
- (iii) How come he will act as a link between management and workers? **2**

Or

b) In ABC Ltd., Mohan and Sohan are friends working as Production Manager and Sales Manager respectively. They take things easy and are free to approach anyone for minor queries and problems. This has resulted in everyone talking to one another causing thereby inefficiency in the office. It has also resulted in loss of secret and confidential information.

- (i) Identify the type of communication used in the above example. (1)
 - (ii) Name and explain any three networks of the types of communication identified in (i). (3)
 - (iii) Explain any two ways to adopt to improve effective communication. (2)
27. a) Explain any eight factors affecting financing decision. 8

Or

- b)** From the following products, state and give reasons whether working capital requirement is low or high:
- (i) Bread (2)
 - (ii) Car (2)
 - (iii) Furniture (2)
 - (iv) Air Conditioner. (2)
28. a) “Staffing is one of the most important managerial function which helps in obtaining and fulfilling various positions in the organization with most suitable and capable persons”. Explain the different staffing process.

Or

8

- b)** If you are the Personnel Manager of Kapila & Co. Ltd. You have been directed by the Directors of the company to select a Chartered Accountant for the company. Explain the selection procedure you will follow for the same.

Fundamentals of Business Mathematics - XI & XII

Design of Question Paper

Weightage to different forms of questions:

Sl.no.	Forms of questions	Marks for each question	No. of questions	Total marks
1	MCQ	1	10	10
2	SA-I	2	8	16
3	SA-II	4	5	20
4	LA-I	6	3	18
5	LA-II	8	2	16
	Total		28	80

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1	Easy	20	16
2	Average	60	48
3	Difficult	20	16
	Total	100	80

Note:

1. There will be no overall choice. However, internal choice shall be provided in 6 marks and 8 marks questions.
2. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

SAMPLE QUESTION PAPER 2023
FUNDAMENTALS OF BUSINESS MATHEMATICS - XII

Full marks: 80

Time: 3 hours

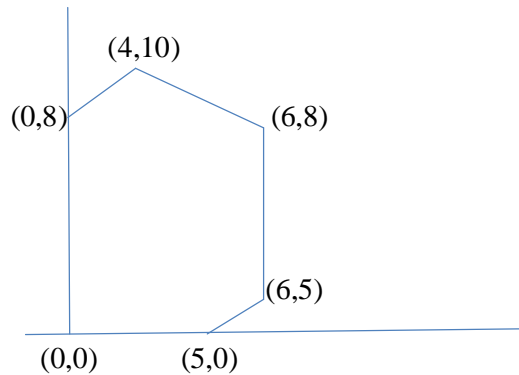
General Instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 28 questions. All questions are compulsory.*
- iii) *Questions 1 to 10 carry 1 mark each.*
- iv) *Questions 11 to 18 carry 2 marks each.*
- v) *Questions 19 to 23 carry 4 marks each.*
- vi) *Questions 24 to 26 carry 6 marks each.*
- vii) *Questions 27 and 28 carry 8 marks each.*
- viii) *Internal choice has been provided in 6 marks and 8 marks questions.*

Choose the correct answer from the given alternatives in question 1 to 10.

1. If $\begin{vmatrix} 4x & 8 \\ 6 & x \end{vmatrix} = \begin{vmatrix} 2 & 4 \\ 5 & 6 \end{vmatrix}$, x is equal to _____ **1**
- a) ± 3
 - b) ± 4
 - c) $\pm\sqrt{10}$
 - d) ± 2
2. $\begin{bmatrix} 5 & 3 & 1 \\ 0 & 6 & 3 \\ 0 & 0 & 9 \end{bmatrix}$ is _____ **1**
- a) Lower Triangular Matrix
 - b) Upper Triangular Matrix
 - c) Involutory Matrix
 - d) Rectangular Matrix.
3. A draws a bill amount of ₹ 2,00,000 on B on 23rd September 2020. The bill is payable after 4 months what is the legal due date of the bill? **1**
- a) 23rd January 2021
 - b) 25th January 2021
 - c) 24th January 2021
 - d) 26th January 2021.
4. The person known as _____ draws a bill of exchange. **1**
- a) Payee
 - b) Drawee
 - c) Drawer
 - d) Holder of the bill.

5. $Z = 3x - 4y$, min Z occurs at _____ **1**
 a) (0,0) b) (0,8)
 c) (5,0) d) (4,10)



6. In a compound weighing 1200 gm two metals are in the ratio of 7:8. Find the difference between their weights. **1**
 a) 0.080 kg b) 800 gm
 c) 1.2 kg d) 80 kg

7. If $B = \{X : X \text{ is a natural number less than } 6\}$ then $n(B)$ is _____. **1**
 a) 4 b) 5
 c) 6 d) 8

8. $\begin{bmatrix} 2 & -5 & 6 \\ 7 & 8 & 4 \\ 3 & 7 & 9 \end{bmatrix}$ a_{31} is _____. **1**
 a) 3 b) 6
 c) 9 d) 2

9. Partnership firm agreement is known as _____. **1**
 a) Partnership Contract b) Partnership Act
 c) Partnership Deed d) Agreement.

10. The cost price of a ` 100 stock at 4% discount when brokerage is $\frac{1}{5}\%$ is _____. **1**
 a) ` 96.25 b) ` 96.20
 c) ` 97.25 d) ` 97.50

11. If $A = \{1, 2, 3, 4\}$ $B = \{3, 4, 5, 6\}$ $C = \{4, 5, 6, 7\}$, find
 (a) $A - B$
 (b) $(A \cup B) - C$ **2**

12. $A = \begin{bmatrix} 3 & 1 \\ 5 & 6 \end{bmatrix}$, $B = \begin{bmatrix} 3 & 9 \\ 7 & 1 \end{bmatrix}$, show that $(A + B)' = A' + B'$ **2**

13. A man holds ` 10,000, 5% stock at 110. Calculate his annual income. **2**

14. Find the value of x if $\begin{vmatrix} x-5 & 2 \\ -3 & x \end{vmatrix} = 0$ 2
15. Find the adjoint of A , where $A = \begin{bmatrix} 2 & 5 \\ 6 & 15 \end{bmatrix}$ 2
16. Calculate the banker's gain on ₹ 8,600 due in 18 months at 5% per annum. 2
17. Sketch the graph of following system of inequation 2
 $5x + 4y \leq 20$
 $4x + 6y \leq 12$
 $x, y \geq 0$
18. Three partners A, B and C invests ₹ 16,000, ₹ 20,000, ₹ 14,000 respectively in a business. How should they divide a profit of ₹ 2,500 in proportion of their capital? 2
19. P, Q and R are three partners of a firm. The total of their capital contribution is ₹ 10,000, P's capital is ₹ 800 more than that of Q and ₹ 1,200 more than that of R. The profit made is ₹ 4,000. How will they share the profit if the profits are proportional to the capitals? 4
20. For any 2 sets A and B, prove that $(A \cup B)^c = A^c \cap B^c$. 4
21. If $A = \begin{bmatrix} 1 & 0 & -2 \\ 2 & 2 & 4 \\ 0 & 0 & 2 \end{bmatrix}$, show that $A^2 - 3A + 2I_3$ is null matrix. 4
22. Mr. X borrowed ₹ 800 on 10th January 1985 and agreed to pay ₹ 250 after 1 month, ₹ 400 after 4 months and ₹ 350 after 9 months in full redemption of his debts. Find the rate of interest charged. 4
23. Solve graphically 4
 Max $Z = 2x + y$
 subject to $2x + 3y \leq 30$
 $x - 2y \leq 8$
 $x, y \geq 0$
24. a) The total cost of a manufacturer producing two items x and y is given $C = \ell + mx + ny$ data for 3 months is as follows

Months	Cost (₹)	No. of Items	Produced
1	5,800	30	20
2	5,400	40	10
3	6,200	50	20

Determine ℓ, m and n using determinants method. Also obtained the cost

in the next month for producing items $x = 45$ units and $y = 15$ units.

Or

6

b) Prove that

$$\begin{vmatrix} 1+a & 1 & 1 \\ 1 & 1+b & 1 \\ 1 & 1 & 1+c \end{vmatrix} = abc(1 + 1/a + 1/b + 1/c) = abc + ab + bc + ca$$

25. a) To control a certain crop disease it is necessary to use 8 units of chemical A, 14 units of chemical B and 13 units of chemical C. One barrel of spray P contains 1 unit of A, 2 units of B and 1 unit of C. One barrel of spray Q contains 2 units of A, 3 units of B and 2 units of C. One barrel of spray R contains 3 units of A, 2 units of B and 2 units of C. Find how many barrels of each type of spray be used to just meet the requirements. (Use Matrix inversion)

Or

6

b) Given the following questions for 3 related markets, find the equilibrium conditions for each market. Also find the equilibrium price for each market

$$\begin{aligned} Qs_1 &= 6P_1 - 8 & Qd_1 &= -5P_1 + P_2 + P_3 + 23 \\ Qs_2 &= 3P_2 - 11 & Qd_2 &= P_1 - 3P_2 + 2P_3 + 15 \\ Qs_3 &= 3P_3 - 5 & Qd_3 &= P_1 + 2P_2 - 4P_3 + 19 \end{aligned}$$

where Qs_1 and Qd_1 denotes quantity supplied and demanded respectively for the market, etc.

26. a) Having a certain sum to invest a man puts half of it in 5% stock at 105 and the other half in 4% stock at par, the price in each case being inclusive of brokerage. If he had invested $\frac{2}{3}$ rd of it in the first and rest in the second, his annual income could have been ₹ 2.50 more. How much did he invest?

Or

6

b) Out of two stocks A and B at 120 and 110, the former paying 4% dividend and the latter 3.5%, a person purchases ₹ 80,000 of the less profitable stock initially and then sells it to invest the proceeds in the other, paying $\frac{1}{8}\%$ brokerage on the stock sold. What is his gain in the return by the change in investments?

27. a) (i) Show that the relation R in the set $A = \{x \in \mathbb{W} : 0 \leq x \leq 12\}$ given by $R = \{(a, b) : |a-b| \text{ is multiple of } 4\}$ is an equivalence relation. Find the set of all elements related to R.

(ii) If $f(x) = \frac{x-1}{x+1}$, prove that $\frac{f(a)-f(b)}{1+f(a)f(b)} = \frac{a-b}{1+ab}$

Or

4+4=8

b) (i) Show that relation R in the set Z of all integers given by $R = \{(a, b) : a, b \in Z \text{ and } 5 \text{ divides } a - b\}$ is an equivalence relation.

(ii) Is $f = \{(1, 11), (2, 20), (3, 29)\}$ a function? If this is described by the formula $f(x) = p + 3qx$, then what values should be assigned to p and q ?

- 28. a)** A businessman openly declares to retail his goods at a profit of 5% but he adulterates them by adding $\frac{1}{5}$ th of their weight of an inferior article which costs $\frac{3}{4}$ th of the price of the better. How much percent profit does he make? Also in what proportion must he mix the two kinds so as to gain 10%?

Or

8

b) Gold is valued at ₹ 250 per gram. An alloy of gold and silver weighs 1 kg and its value is ₹ 1,50,000. If the weights of gold and silver are interchanged it would be worth ₹ 1,10,000. Find the proportion of gold and silver in the alloy and also the price of silver per kg.

ENTREPRENEURSHIP - XI & XII

Design of Question Paper

Weightage to different forms of questions:

Sl.no.	Forms of questions	Marks for each question	No. of questions	Total marks
1	MCQ	1	10	10
2	SA-I	2	7	14
3	SA-II	4	3	12
4	LA-I	6	3	18
5	LA-II	8	2	16
	Total		25	70

Weightage level of questions:

Sl.no.	Level	Percentage	Marks
1	Easy	20	14
2	Average	60	42
3	Difficult	20	14
	Total	100	70

Note:

1. There will be no overall choice. However, internal choice shall be provided in 6 marks and 8 marks questions.
2. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.
3. **There is a change in the unit wise weightage of marks in Class XII i.e., Unit-V: Business Arithmetic 10 marks and Unit-VI: Resource Mobilization 10 marks.**

SAMPLE QUESTION PAPER 2023
ENTREPRENEURSHIP - XII

Full marks: 70

Time: 3 hours

General Instructions:

- i) Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) The question paper consists of 25 questions. All questions are compulsory.*
- iii) Answer to questions carrying 2 marks should not exceed 50 words.*
- iv) Answer to questions carrying 4 marks should not exceed 100 words.*
- v) Answer to questions carrying 6 marks should not exceed 200 words.*
- vi) Answer to questions carrying 8 marks should not exceed 300 words.*
- vii) Internal choice has been provided in 6 marks and 8 marks questions.*

Choose the correct answer from the given alternatives in question 1 to 10.

1. Entrepreneurship leads to _____ in GDP. **1**
a) Decrease b) Increase
c) No effect d) Fluctuations

2. Which of the following activities are included in modern business? **1**
a) Ability to perceive and preserve ideas
b) Setting up the enterprise to carry on the project
c) Process of observing and evaluating the economic and non-economic environment to determine the opportunities and threat
d) Innovating new products and services.

3. The strategy using lower initial price to capture a large market is known as _____. **1**
a) Cost plus pricing b) Penetrating pricing
c) Skimming pricing d) Variable pricing.

4. _____ means putting identification mark on the package. **1**
a) Tagline b) Logo
c) Labelling d) Branding.

5. A _____ is a combination of two companies to form a new company. **1**
a) Merger b) Acquisition
c) Joint venture d) Amalgamation.

6. Enterprises can approach non-affiliated angel investors through _____. **1**
a) Advertisement b) SEBI
c) Competitors d) Governments Grants.

7. Which tax is applied if a sole proprietor is selling goods within the state? **1**
a) CST b) VAT
c) Sales Tax d) Custom Tax.

8. Identify the plan which gives detail information regarding personnel. **1**
a) Organizational plan b) Financial plan
c) Marketing plan d) Human resources plan.

9. Haldiram is selling its fast food to the customer. What is the channel of distribution used by the company? 1
 - a) Direct/Zero level channel
 - b) One level channel
 - c) Two level channel
 - d) Three level channel.
10. SEBI objectives is to_____ . 1
 - a) Understand venture capital
 - b) Advertise new products in the market
 - c) Encourage insiders trading in the stock market
 - d) Protect the rights of the investors.
11. Write any two factors involved in sensing the opportunity. 2
12. Mention any two basic contents of operational and production plan. 2
13. What are the two pricing strategies? 2
14. State any two types of franchising. 2
15. Write briefly how socio environment has an impact on the business. 2
16. Why is customer relation important for an organization? 2
17. How does value addition effect the profit margin? 2
18. Explain any four ways how can creativity be used by an entrepreneur. 4
19. Discuss four examples of variable prices using variable price method. 4
20. Write any four objectives/benefits of budgeting. 4
21. a) “An entrepreneur who fails to scan business environment is unlikely to survive in the long run”. Explain this statement.

Or **6**

b) Ram is working on designing of a unique face mask which would not only filter the air inhaled but also sent alert messages on the registered mobile number if the user is in a zone of high pollution. This idea is germinated because of the interest and curiosity of Ram as he is always interested in finding out the specific current problems and their solutions. Before launching his idea, he also analyzed the pros and cons of the product. Now he has to complete two or more steps of an important process. Identify the process. Explain the steps to be completed by Ram in the process identified.

22. a) Explain any six factors affecting working capital.

Or

6

b) Explain any six importance of cash flow statement.

23. a) Explain six ways how public relations are significant to various organizations.

Or

6

b) While fixing the price of a commodity there are certain factors which are to be kept in mind. Explain any six such factors.

24. a) Discuss eight privileges of private company over public company.

Or

8

b) Discuss the essential areas while creating a business plan.

25. a) Explain any eight functions of stock market.

8

Or

b) Define public institutions. Explain seven merits of financial institutions. (1+7=8)

CHEMISTRY – XI & XII

Design of Question paper

Weightage to different forms of questions:

Sl.No.	Forms of Questions	Marks for each question	No. of questions	Total Marks
1	MCQ	1	10	10
2	VSA	1	6	6
3	SA-I	2	6	12
4	SA-II	3	9	27
5	LA	5	3	15
	Total		34	70

Weightage level of questions:

Sl.No.	Level	Percentage	Marks
1	Easy	20	14
2	Average	65	46
3	Difficult	15	10

Scheme of Options:

1. There will be no overall options.
2. Internal choice shall be provided in:
 - i. Any 2 (two) questions in 2 marks
 - ii. Any 3 (three) questions in 3 marks
 - iii. 2 (two) questions in 5 marks
3. Weightage of about 10 marks shall be given for numerical problems.

Note:

1. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

SAMPLE QUESTION PAPER 2023
CHEMISTRY - XII

1. Low concentration of oxygen in the blood and tissues of people living at high altitude is due to 1
 - a) low temperature
 - b) low atmospheric pressure
 - c) high atmospheric pressure
 - d) both low and high atmospheric pressure.


2. While charging the lead storage battery 1
 - a) PbSO_4 anode is reduced to Pb
 - b) PbSO_4 cathode is reduced to Pb
 - c) PbSO_4 cathode is oxidized to Pb
 - d) PbSO_4 anode is oxidized to PbO_2 .


3. In the presence of a catalyst, the heat evolved or absorbed during the reaction 1
 - a) increases b) decrease
 - c) remains unchanged d) may increase or decrease.


4. Electronic configuration of a transition element 'A' in +3 oxidation state is $[\text{Ar}]4s^03d^5$. What is its atomic number? 1
 - a) 25 b) 26
 - c) 27 d) 24.


5. Which of the following species is not expected to be a ligand? 1
 - a) NO b) NH_4^+
 - c) en d) CO.

6. Arrange the following compounds in the increasing order of their densities. 1

A) 

B) 

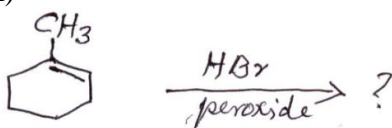
C) 

D) 

 - a) $A < B < C < D$ b) $A < C < B < D$
 - c) $D < C < B < A$ d) $B < C < A < D$.

7. IUPAC name of m-cresol is 1
 - a) 3-methyl phenol b) 3-chlorophenol
 - c) 3-methoxy phenol d) benzene-1,3-diol.

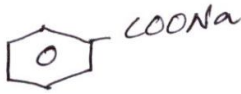
8. The weakest acid among the following is 1
 - a) CHCl_2COOH b) CH_3COOH
 - c) CH_2ClCOOH d) CCl_3COOH .

9. In the nitration of benzene using a mixture of conc. HNO_3 and conc. H_2SO_4 , the species which initiates the reaction is 1
- a) NO_2 b) NO^+
 c) NO_2^+ d) NO_2^- .
10. Which of the following acids is a vitamin? 1
- a) Aspartic acid b) Ascorbic acid
 c) Adipic acid d) Saccharic acid.
11. Define cryoscopic constant. 1
12. Identify the order of reaction from the following unit for its rate constant $\text{Lmol}^{-1}\text{S}^{-1}$. 1
13. A reaction is first order in reactants A and second order in reactant B. Write differential rate equation. 1
14. What is meant by denticity of a ligand? 1
15. Write the IUPAC name of $\text{CH}_3\text{---CH---CH}_2\text{---CH---CH}_3$. 1
- | |
 Br Cl
16. Name the reagent and its formula used in the preparation of Butanoic acid from Butan-1-ol. 1
17. Mention one applications of Henry's law. What is the effect of temperature on solubility of gases in liquids? 2
18. Complete the following giving structures. 2
- i)
- 
- ii) $\text{CH}_3\text{CH}_2\text{Br} + \text{NaI} \rightarrow ?$
19. Write an example of enantiomer and draw the possible enantiomeric structure. 2
20. Convert propene to propan-1-ol. 2
21. a) Identify primary, secondary or tertiary amines.
- i) $(\text{Et})_2\text{CHNH}_2$ ii) $(\text{C}_2\text{H}_5)_2\text{NH}$.
- Or** 2
- b) Why are aliphatic amines stronger bases than aromatic amines?

22. a) What is the structural difference between a nucleoside and a nucleotide?
Or 2
- b) What is glycogen? How is it different from starch?
23. a) At 25⁰ C the saturated vapour pressure of water is 3.165 kpa (23.75 mm of Hg). Find the saturated vapour pressure of a 5% aqueous solution of urea at the same temperature. (Molar mass of urea = 60gmol⁻¹).
Or 3
- b) Calculate the freezing point of a solution when 3g of CaCl₂ (M = 111 gmol⁻¹) was dissolved in 100g of water, assuming CaCl₂ undergoes complete ionization. (K_f for water = 1.86 Kkgmol⁻¹).
24. i) Calculate $\Delta_r G^0$ for the reaction
Mg (s) + Cu²⁺ (aq) → Mg²⁺(aq) + Cu (s). Given: E⁰_{cell} = +2.71v, 1F = 96500Cmol⁻¹.
ii) What type of cell was used in Apollo space programme for providing electrical power? 3
25. a) A first order reaction is 50% completed in 40 minutes at 300k and in 20 minutes in 320k. Calculate the activation energy of the reaction. (Given: log2=0.3010, log4=0.6021, R=8.314JK⁻¹mol⁻¹).
Or 3
- b) A first order reaction has a rate constant of 0.0051 min⁻¹. If it begin with 0.10M concentration of the reactant, what concentration of reactant will remain in solution after 3 hours?
26. Sc³⁺ is colourless in aqueous solution whereas Ti³⁺ is coloured. Explain with reasons. 3
27. a) Explain the following giving an example in each case:
i) linkage isomerism
ii) bidentate ligand
iii) outer orbital complex.
Or 3
- b) Write the electronic configuration of the following complexes on the basis of CFT:
i) [CoF₆]³⁻
ii) [Fe(CN)₆]⁴⁻
iii) [Cu(NH₃)₆]²⁺.
28. What happens when 3
- i) (CH₃)₃COH is treated with Cu at 573K.
ii) Anisole is treated with CH₃Cl/anhydrous AlCl₃.
iii) Phenol is treated with Zn dust. Write chemical equations in support of your answer.

29. Give reasons for the following. 3
- Aldehydes are more reactive than ketones towards nucleophiles.
 - The boiling point of aldehydes and ketones are lower than the corresponding acids.
 - Aldehydes and ketones undergo a number of addition reactions.
30. Illustrate the following reactions giving a chemical equation in each case: 3
- Gabriel phthalimide synthesis
 - Coupling reaction
 - Hoffmann's bromamide reaction.
31. Why are vitamin A and C essential to human being? Give their important sources. 3
32. a) i) Conducting of $2.5 \times 10^{-4} \text{M}$ methanoic acid is $5.2 \times 10^{-5} \text{Scm}^{-1}$. Calculate its molar conductivity.
- ii) Arrange the following metals in which they displace each other from their salt solution: Al, Cu, Fe, Mg, Zn.

Or 5

- b) i) Represent the cell in which the following reaction takes place
 $2\text{Al(s)} + 3\text{Ni}^{2+}(0.1\text{M}) \rightarrow 2\text{Al}^{3+}(0.01\text{M}) + 3\text{Ni(s)}$. Calculate the e.m.f if $E^\circ_{\text{cell}} = 1.41 \text{V}$.
- ii) How does molar conductivity vary with increase in concentration for strong electrolyte and weak electrolyte?
33. Assign reasons for the following: 5
- The enthalpies of atomization of transition elements are high.
 - The transition metals and many of their compounds act as good catalyst.
 - Zn^{2+} salts are white while Cu^{2+} salts are blue.
34. a) Write the products in the following:
- $\text{CH}_3 \cdot \text{CH}=\text{CH} \cdot \text{CN} \xrightarrow{\text{DIBAL-H} / \text{H}_2\text{O}} ?$
 - 
 $+ \text{NaOH} \xrightarrow{\text{CaO} / \Delta} ?$
 - $\text{C}_6\text{H}_5\text{COCl} \xrightarrow{\text{H}_2 / \text{Pd} - \text{BaSO}_4} ? \xrightarrow{\text{conc. NaOH}} ? + ?$

Or 5

- b) An organic compound (A) (molecular formula $\text{C}_8\text{H}_{16}\text{O}_2$) was hydrolysed with dilute sulphuric acid to give a carboxylic acid (B) and an alcohol (C). Oxidation of (C) with chromic acid produced (B). (C) on dehydration gives but-1-ene. Write equation for the reaction involved.

PHYSICS – XI & XII

DESIGN OF QUESTION PAPER

Weightage to different forms of questions:

Sl.No.	Forms of Questions	Marks for each question	No. of questions	Total Marks
1	MCQ	1	10	10
2	VSA	1	6	6
3	SA-I	2	6	12
4	SA-II	3	9	27
5	LA	5	3	15
	Total		34	70

Weightage level of questions:

Sl.No.	Level	Percentage	Marks
1	Easy	20	14
2	Average	65	46
3	Difficult	15	10

Scheme of Options:

1. There will be no overall options.
2. Internal choice shall be provided in:
 - i. Any 2 (two) questions in 2 marks
 - ii. Any 3 (three) questions in 3 marks
 - iii. 2 (two) questions in 5 marks
3. Weightage of about 10 marks shall be given for numerical problems.

Note:

1. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

**SAMPLE QUESTION PAPER
PHYSICS - XII**

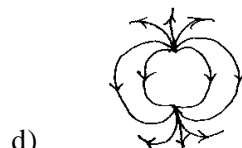
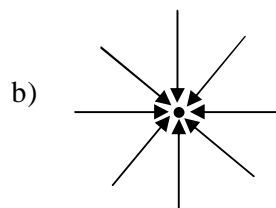
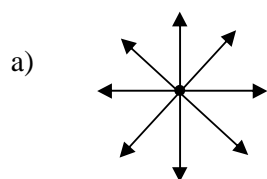
1. An electric charge q is placed at the center of a cube of side 'a'. The electric flux on one of its faces will be 1

- a) $\frac{q}{\sigma\epsilon_0}$ b) $\frac{q}{\epsilon_0 a^2}$
 c) $\frac{q}{4\pi\epsilon_0 a^2}$ d) $\frac{q}{\epsilon_0}$

2. Two conducting wires X & Y of same diameter but of different materials are joined in series across a battery. If the number density of electrons in X is twice that in Y, the ratio of drift velocity of electrons in the two metals will be 1

- a) 1:2 b) 3:5
 c) 2:1 d) 1:1

3. Which of the field patterns given in the following figure is valid for electric field as well as magnetic field? 1



4. A metal ring is held horizontally and bar magnet is dropped through the ring with its length along the axis of the ring. The acceleration of the falling magnet is 1

- a) equal to g b) less than g
 c) more than g d) either (a) or (c)

5. Electromagnetic waves are produced by 1

- a) accelerated charged particles b) charges at rest
 c) charge in uniform motion d) none of these

6. When the distance between slits of young's double slit experiment is reduced to half, then the Fringe width will become 1

- a) constant b) four times
 c) two times d) half

7. Which one of the following statements is not true? 1

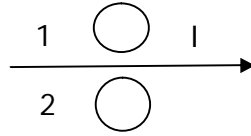
- a) Photons are deviated by magnetic fields.
 b) Photons do not have any charge
 c) Photon is a packet of energy
 d) Photons are not deflected by electric fields.

8. The angular momentum of an electron in the second excited state of a helium ion He^+ is 1
- a) $\frac{h}{\pi}$ b) $\frac{2h}{\pi}$
- c) $\frac{2h}{3\pi}$ d) $\frac{h}{2\pi}$
9. In an unbiased p-n junction, holes diffuse from the P-region to n-region because 1
- a) free electrons in the n-region attract them
- b) they move across the junction by the potential difference
- c) hole concentration in P-region is more as compared to n-region
- d) all the above
10. For television transmission, the frequency employed is normally in the range. 1
- a) 30-300MHz b) 30-300 GHz
- c) 300-300 KHz d) 30-300 Hz
11. Two wires of equal cross-sectional area, one of Copper and the other of magnesium, have same resistance, which one will be longer? 1
12. What will be the nature of force between two parallel wires carrying currents in the same direction placed at a distance apart? 1
13. An alternating current from a source is given by $I = 10\sin \beta 14t$. What is the effective value of current and frequency of the source? 1
14. A proton & an electron have same kinetic energy. Which one has greater de-broglie wavelength? 1
15. What are Isotones? 1
16. Draw energy band diagram of N – type Semi-conductor? 1
17. (a) A charged particle having a charge $4.5 \times 10^{-5}\text{C}$ is placed directly below and at a distance of 8cm from the small sized metal bob of a simple pendulum. What charge should be given to the bob so that the thread supporting the bob becomes loose? Given that mass of the Bob is 0.10Kg.

Or 2

- (b) A charge (-q) and another charge (+Q) are kept at two points A & B respectively. Keeping the charge (+Q) fixed at point B, the charge (-q) at point A is moved to another point C such that ABC forms an equilateral triangle of side 'l'. Find the network done in moving the charge (-q).
18. Show that electric field is directed in that direction in which electric potential decreases more steeply. 2

19. Predict the directions of induced currents in metal rings 1 and 2 lying in the same plane where current I in the wire is increasing steadily 2



20. What are electromagnetic waves? Arrange the following electromagnetic waves in ascending order of their frequencies :- microwaves, radiowaves, x-rays & γ -rays. 2

21. (a) Explain the principle & construction of Photocell.

Or 2

- (b) State the laws of Photoelectric effect.

22. Obtain the binding energy (in Mev) of a nitrogen nucleus (${}^{14}_7N$), given $m({}^{14}_7N) = 14.00307\mu$, $m_H = 1.007825 \mu$ and $m_n = 1.008665 \mu$ 2

23. (a) Deduce the relation connecting current density (J) and conducting (σ) of the conductor when an electric field is applied to it. Also define the term Current density.

Or 3

- (b) Using Kirchoff's law, the relation between the resistances of four arms of a wheatstone bridge, when the bridge is balanced.

24. (a) A wire of length 'L' is shown in the form of a Circular loop and a Current I is passed through it so as to produce a magnetic field B at the centre of Current loop. Later on the same wire is wound in the form of a circular coil of N identical turns and a Current I is passed through the coil. Find the value of the new magnetic field at the centre of the coil.

Or 3

- (b) What is the ratio of radii of circular paths when an electron and a proton enter at right angles to a uniform magnetic field 'B' with same (a) velocity (b) momentum (c) kinetic energy?

Given $m_p = 1838m_e$

25. Derive an expression for the magnetic Dipole moment of an electron revolving in an atom. Also find the value of Bohr magneton. 3

26. A source of emf E is used to establish a current I through a coil of self-inductance L . Show that the work done by the source to build up the current I is $\frac{1}{2}LI^2$. Hence find an expression for magnetic energy per unit volume in the coil. 3

27. A solenoid coil is connected to an a.c source of voltage $v = v_0 \sin \omega t$. Find the expression for the current flowing through a circuit. Also draw a phasor diagram for it. 3

28. An object is placed at a distance of 100cm from the combination of a convex lens of focal length 20cm and concave lens of focal length 100cm. Find the focal length and power of the combination. Also find the position of the image formed. 3
29. (a) Deduce lens maker's formula for a thin double convex lens
- Or** 3
- (b) Establish the conditions for constructive and destructive interference of light.
30. Using Bohr's quantization condition, prove that total energy of an electron in nth orbit of hydrogen atom is inversely proportional to square of principle quantum number. 3
31. Explain the important elements of a communication system. 3
32. (a) Define electric dipole moment. Write its SI unit. Derive the expression for the electric field at a point on the perpendicular bisector of an electric dipole.
- Or** 5
- (b) What is the effect of dielectric on capacitance of a capacitor? A dielectric slab of thickness 't' is kept between the plates of a parallel plate capacitor separated by a distance d ($t < d$). Derive an expression for the capacitance of a capacitor.
33. (a) Plot a graph between the angle of deviation and angle of incidence for a triangular prism. Derive the expression for the refractive index of the prism material of the prism in-terms of the angle of prism and angle of minimum deviation.
- Or** 5
- (b) Draw a labelled diagram of a compound microscope when the image is formed at infinity. Deduce an expression for its magnifying power. How can the magnifying power be increased.
34. Name the device which uses translator and can convert D.C into A.C. Explain with the help of a diagram its principle and working. 5

BIOLOGY – XI & XII

DESIGN OF QUESTION PAPER

Weightage to different forms of questions:

Sl.No.	Forms of Questions	Marks for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	SA-I	2	8	16
3.	SA-II	3	8	24
4.	LA-I	5	4	20
			Total	70

Weightage level of questions:

Sl.No	Level	Percentage	Marks
1.	Easy	20	14
2.	Average	60	42
3.	Difficult	20	14
		Total	70

Scheme of options:

1. There will be no overall option.
2. Internal choice shall be provided in 1(one) question of 2 marks and 2(two) questions of 3 marks and 2(two) questions of 5 marks for both part A & B.

Note:

1. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

Sample Question paper 2023
BIOLOGY – XII

Total marks : 70

Time : 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *All questions are compulsory. Marks are indicated against each question.*
- iii) *The question paper consists of two parts – Part A and Part B. Each part contain 15 questions.*
- iv) *Internal choice has been provided in some questions.*
- v) *Write the answers of Part A and Part B in separate answer books. Marks shall not be awarded if the answers of both the Parts are written in one book nor marks awarded if answers of Part A are written in the answer book of Part B and vice-versa.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

PART – A

1. The cell of endosperm have 24 chromosomes. What will be the number of chromosome in the gametes? **1**
(a) 6 (b) 8
(c) 12 (d) 24

2. Which of the following type of pollination will result in greater genetic variability? **1**
(a) Autogamy (b) Geitonogamy
(c) Mesogamy (d) Xenogamy

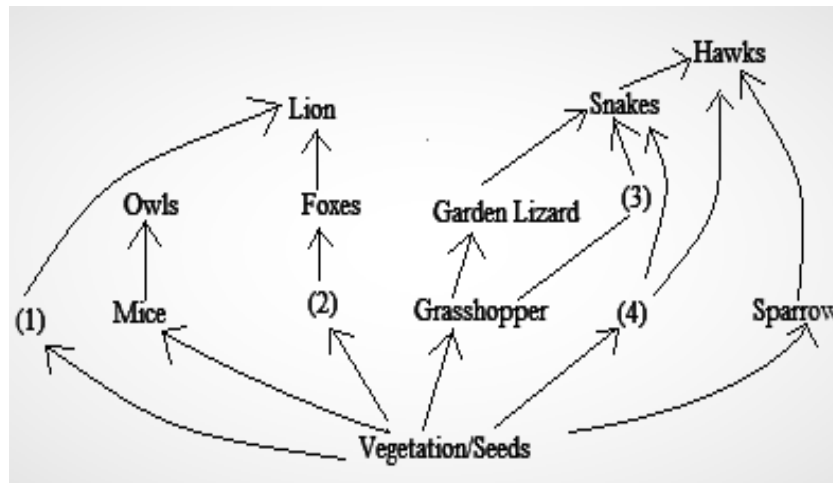
3. Which of the following are non-sense codons? **1**
(I) UAA
(II) UUA
(III) UAG
(IV) UGA

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

4. The sequence of coding strand of DNA in a transcription unit is 3'AATGCAGTCACG 5'. Its mRNA will be **1**
(a) 3'AAUGCAGUCACG 5'
(b) 5' AAUGCAGUCACG 3'
(c) 3' UUACGUCAGUGC 5'
(d) 5' UUACGUCAGUGC 3'

5. Identify the likely organism 1,2,3 and 4 in the food web shown below:

1



- | | | | | |
|-----|----------|----------|----------|----------|
| | 1 | 2 | 3 | 4 |
| (a) | Deer | Rabbit | Frog | Rat |
| (b) | Dog | Squirrel | Bat | Tortoise |
| (c) | Rat | Dog | Tortoise | Crow |
| (d) | Squirrel | Cat | Rat | Pigeon |

6. a. What is the function of an agitator in a bioreactor?

Or

2

b. Write two advantages of particle gene gun over micro-injection.

7. Why is the flow of energy at different levels in an ecosystem unidirectional and non-cyclic?

2

8. a. Observe the given food chain

Tree → Fructivorous bird → Predatory bird

Which ecological pyramid will be spindle shape in this case? Explain why.

2

9. a. John was able to successfully extract the gene of interest from a donor cell.

(i) How was he able to separate the DNA fragments?

(ii) How did he transfer the gene of interest into suspension medium for amplification?

1+1=2

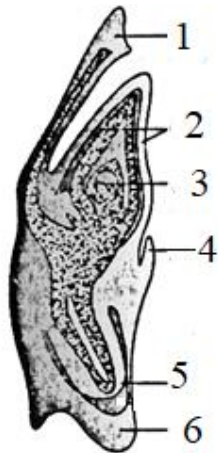
10. a. Draw a diagram of L.S of an angiosperm ovule and label the following parts.

- | | |
|------------------|-----------------|
| (i) Nucellus | (ii) Integument |
| (iii) embryo sac | (iv) Micropyle |
| (v) Hilum | (vi) Funicle |

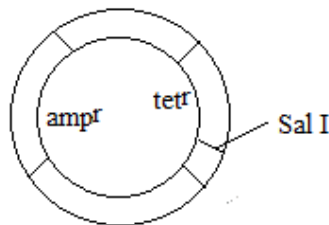
Or

3

b. Label the diagram



11. a. In the given figure



A foreign gene was inserted using Sal I as restriction endonuclease and transformed cells were grown in medium containing ampicillin and tetracyclin respectively. In which medium the transferred cell will grow and why?

Or **3**

b. Among the endonucleases, why restriction endonucleases are called molecular scissors?

12. List any three advantages of sexual incompatibility. **3**

13. What are Okazaki fragments? Which enzyme join them? **2+1=3**

14. a. Explain Tryptophan Operon with the help of a diagram.

Or **5**

b. Explain the different stages of lytic cycle.

15. a. The conflict between wildlife and man existed since human evolution but with the evolution of modern man, the intensity of conflict has increased. Justify your answer with suitable example. **5**

Or

b. What is in-situ conservation? Explain the different strategies of in-situ conservation. **(1+4=5)**

PART - B

1. Match the following and choose the correct option: 1

Column I

1. Chorionic villi
2. Trophoblast
3. Implantation
4. Inner cell mass

Column II

- a) Group of cells that would differentiate to embryo
- b) Embedding of blastocyst in endometrium
- c) Finger-like projections on the trophoblast
- d) Outer layer of blastocyst attached to endometrium

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

2. If a man with homozygous blood group B marries a woman with heterozygous blood group A, what percentage of their children will inherit their father's blood group. 1

- (a) 25% (b) 50%
(c) 75% (d) 100%

3. The gland that is largest in children but shrinks with onset of puberty is 1
(a) thymus (b) hypothalamus
(c) pituitary (d) adrenal gland

4. Assertion (A) : Bottled juices bought from market are clearer as compared to those made at home.

Reason (R) : Pectinase and proteases are clarifying enzymes.

Choose the correct option. 1

- (a) Both A and R are correct and R is the correct explanation of A.
(b) Both A and R are correct but R is not the correct explanation of A.
(c) A is correct but R is wrong.
(d) Both A and R are wrong.

5. Which of the following alcoholic drinks are produced without distillation? 1
(a) Wine and whisky (b) Whisky and rum
(c) Rum and Brandy (d) Wine and beer

6. a. Why does the failure of testes to descend into scrotal sac lead to sterility? 2

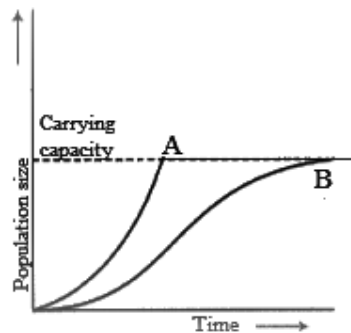
Or

- b. Would you suggest MTP (Medical termination of Pregnancy) to a woman who is 5 months pregnant? Why?

7. Why is colour blindness more common in male than in female? 2

8. Why is an HIV virus called retrovirus? 2

9. Is biotechnology important in agriculture? Comment. 2
10. a. Write the significance of crossing over. 3
Or
- b. Write the difference between divergent evolution and convergent evolution with examples.
11. a. Name and explain the role of enzymes in the process of baking bread. 3
Or
- b. What are cry protein? Why does this toxic protein secreted by *Bacillus thuringiensis* kill the insect but not the bacteria itself? (1+2=3)
12. What causes SCID (Severe combined immuno deficiency)? Explain the steps involved in the treatment of SCID. 1+2=3
- 13.



In the given graph are shown two population curves 'A' and 'B', answer the following questions. 1 ½ + 1 ½ = 3

- (a) What is the carrying capacity in respect of curve B?
 (b) What are reasons that could have led to curve B?
14. a. Discuss the changes that take place in a woman after she conceive, from embryo formation till implantation. Write about the role of different hormones. 5
Or
- b. A large number of couples these days are infertile. Discuss the different ways by which these couples can be assisted to have children.
15. a. Demonstrate the law of independent assortment in a dihybrid cross involving two heterozygous parents with the help of a punnet square. Write the phenotypic ratio of this cross. 5
Or
- b. What is speciation? Discuss in detail the mechanism involved in speciation. (1+4=5)

Mathematics – XI & XII

Design of the Question Paper

Weightage to different forms of questions

Sl.No.	Forms of questions	Marks for each question	No. of questions	Total marks
1.	MCQ	1	10	10
2.	SA – I	2	9	18
3.	SA – II	4	8	32
4.	LA	5	4	20
Total:			31	80

Weightage level of questions

Sl.No.	Level	Percentage	Marks
1.	Easy	30	24
2.	Average	50	40
3.	Difficult	20	16
Total:		100	80

Scheme of options:

- i. Internal choice shall be provided in 4(four) questions of 4 marks.
- ii. Internal choice shall be provided in 4(four) questions of 5 marks.
- iii. Minimum 10% of the marks will be of Higher Order Thinking Skills (HOTS)/ Competency Based Questions.

Sample Question Paper 2023
MATHEMATICS - XII

Full marks: 80

Time: 3 hours

General instructions:

- i) *Approximately 15 minutes is allotted to read the question paper and revise the answers.*
- ii) *The question paper consists of 22 questions. All questions are compulsory.*
- iii) *Marks are indicated against each question.*
- iv) *Internal choice has been provided in some questions.*
- v) *Use of simple calculators (non-scientific and non-programmable) only is permitted.*

N.B: *Check that all pages of the question paper is complete as indicated on the top left side.*

Section – A

1. Choose the correct answer from the given alternatives:

(a) Let $f: Z \rightarrow Z$ given by $f(x) = x^3$, then the given function is **1**

- (i) injective
- (ii) surjective
- (iii) many one
- (iv) into

(b) The principal value of $\cos^{-1}\left(\frac{-1}{2}\right)$ is **1**

- (i) $\frac{-\pi}{3}$
- (ii) $\frac{\pi}{3}$
- (iii) $\frac{-2\pi}{3}$
- (iv) $\frac{2\pi}{3}$

(c) A square matrix A is invertible if and only if **1**

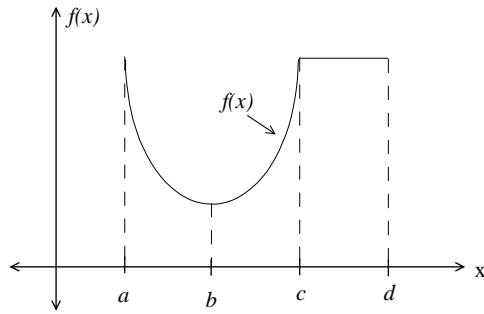
- (i) A is singular matrix
- (ii) A is non singular matrix
- (iii) A is a Symmetric matrix
- (iv) A is a Skew Symmetric matrix

(d) If $y = \sqrt{e^{\sqrt{x}}}$, then the value of $\frac{dy}{dx}$ is **1**

- (i) $\frac{1}{2\sqrt{e^{\sqrt{x}}}}$
- (ii) $\frac{\sqrt{e^{\sqrt{x}}}}{\sqrt{e^{\sqrt{x}}}}$
- (iii) $\frac{\sqrt{e^{\sqrt{x}}}}{2\sqrt{e^{\sqrt{x}}}}$
- (iv) $\frac{\sqrt{e^{\sqrt{x}}}}{4\sqrt{xe^{\sqrt{x}}}}$

(e) A graph of $f(x)$ is given below

1



- (a) In the interval (a, c) , $f(x)$ is increasing function.
 (b) In the interval (a, c) , $f(x)$ is neither increasing nor decreasing function.
 (c) In the interval (c, d) , $f(x)$ is a constant function.

Which of the statement above is/are correct?

- (i) Only (a) (ii) Only (b)
 (iii) Only (b) and (c) (iv) Only (a) and (c)

(f) The value of $\int \frac{1 - \sin x}{\cos^2 x} dx$ is equal to

1

- (i) $\tan x - \sec x + C$ (ii) $\cot x - \operatorname{cosec} x + C$
 (iii) $\sec^2 x - \tan x + C$ (iv) $\cos ec^2 x - \cot x + C$

(g) Let vector $\vec{a} = \hat{i} + \hat{j} - 2\hat{k}$, then its direction cosines are

1

- (i) $(1, 1, -2)$ (ii) $\left(\frac{1}{\sqrt{3}}, \frac{1}{\sqrt{3}}, \frac{-2}{\sqrt{3}}\right)$
 (iii) $\left(\frac{1}{\sqrt{6}}, \frac{1}{\sqrt{6}}, \frac{-2}{\sqrt{6}}\right)$ (iv) $(1, -2, 1)$

(h) If \vec{a} is a non zero vector of magnitude α and λ is a non zero scalar, then $\lambda \vec{a}$ is a unit vector if

1

- (i) $\lambda = 1$ (ii) $\lambda = -1$
 (iii) $a = |\lambda|$ (iv) $a = \frac{1}{|\lambda|}$

(i) If the Cartesian equation of the line is $\frac{x-5}{3} = \frac{y+4}{7} = \frac{z-6}{2}$. Then its vector form is

1

- (i) $\vec{r} = (x\hat{i} + y\hat{j} + z\hat{k}) + \lambda(-5\hat{i} + 4\hat{j} + 6\hat{k})$
 (ii) $\vec{r} = (5\hat{i} - 4\hat{j} + 6\hat{k}) + \lambda(3\hat{i} + 7\hat{j} + 2\hat{k})$
 (iii) $\vec{r} = (3\hat{i} + 7\hat{j} + 2\hat{k}) + \lambda(5\hat{i} + 4\hat{j} + 6\hat{k})$
 (iv) $\vec{r} = (-5\hat{i} + 4\hat{j} - 6\hat{k}) + \lambda(3\hat{i} + 7\hat{j} + 2\hat{k})$

- (j) If $P(A) = 0.8$, $P(B) = 0.5$ and $P(B/A) = 0.4$, then the value of $P(A/B)$ is **1**
 (i) 0.32 (ii) 0.64
 (iii) 0.98 (iv) 0.40

Section – B

2. Find the value of $\tan^{-1}(1) + \cos^{-1}\left(\frac{-1}{2}\right) + \sin^{-1}\left(\frac{-1}{2}\right)$. **2**
3. If $A = \begin{bmatrix} -2 & 3 \\ 1 & 2 \end{bmatrix}$ and $B = \begin{bmatrix} -1 & 0 \\ 1 & 2 \end{bmatrix}$, then find $(A + 2B)$. **2**
4. Find $\frac{dy}{dx}$ if $x = \cos\theta - \cos 2\theta$, $y = \sin\theta - \sin 2\theta$. **2**
5. Construct two functions which satisfies $\lim_{x \rightarrow 0} f(x) = 1$ with condition that $f(x)$ does not include a trigonometric functions. **2**
6. Integrate: $\frac{\sin^{-1}x}{\sqrt{1-x^2}}$. **2**
7. Integrate: $\int e^x \left(\frac{1}{x} - \frac{1}{x^2} \right) dx$. **2**
8. Solve $\frac{dy}{dx} = \sqrt{4-y^2}$. **2**
9. Find the area of the triangle with vertices $A(1, 1, 2)$, $B(2, 3, 5)$ and $C(1, 5, 5)$. **2**
10. Evaluate $P(A \cup B)$, if $2P(A) = P(B) = \frac{5}{13}$ and $P(A|B) = \frac{2}{5}$. **2**

Section – C

11. Consider a function $f : A \rightarrow B$ defined by $f(x) = \frac{x-1}{x-2}$ where $A = \mathbb{R} - \{2\}$ and $B = \mathbb{R} - \{1\}$. **(2+1+1)=4**
- a). Show that f is one-one.
- b). Find the domain of f .
- c). Find the range of f .

12. a. If $F(x) = \begin{bmatrix} \cos x & -\sin x & 0 \\ \sin x & \cos x & 0 \\ 0 & 0 & 1 \end{bmatrix}$, show that $F(x) F(y) = F(x + y)$.

Or **4**

b. Show that the matrix $A = \begin{bmatrix} 3 & 1 \\ -1 & 2 \end{bmatrix}$ satisfying the equation $A^2 - 5A + 7I = O$,

using this equation find A^{-1} .

13. A vehicle is going from Dimapur to Mon. The speed of the vehicle in km/hr is always found to be four times square of the time taken. What is the rate of change of speed of the vehicle with respect to time when the speed is 50 km/hr? **4**

14. a. Evaluate $\int \frac{2}{(1-x)(1+x^2)} dx$.

Or **4**

b. Evaluate $\int_{-1}^2 |x^3 - x| dx$.

15. Solve the differential equation $xdy - ydx = \sqrt{x^2 + y^2} dx$. **4**

16. a. If $\vec{a} = 2\hat{i} + 2\hat{j} + 3\hat{k}$, $\vec{b} = -\hat{i} + 2\hat{j} + \hat{k}$ and $\vec{c} = 3\hat{i} + \hat{j}$ are such that $\vec{a} + \lambda\vec{b}$ is perpendicular to \vec{c} , then find the value of λ .

Or **4**

b. Find the coordinates of the foot of the perpendicular drawn from the origin to the plane $x + y + z = 1$.

17. Solve graphically: Minimise $Z = x + 2y$ subject to $2x + y \geq 3$, $x + 2y \geq 6$; $x, y \geq 0$. **4**

18. a. Probability of solving specific problem independently by A and B are $\frac{1}{2}$ and $\frac{1}{3}$ respectively. If both try to solve the problem independently, find the probability that:

- (i) the problem is solved
- (ii) exactly one of them solves the problem.

Or **4**

b. An insurance company insured 2000 scooter drivers, 4000 car drivers and 6000 truck drivers. The probability of an accidents are 0.01, 0.03 and 0.15 respectively. One of the insured persons meets with an accident. What is the probability that he is a scooter driver?

Section – D

19. a. If $A = \begin{bmatrix} 0 & -\tan \frac{\alpha}{2} \\ \tan \frac{\alpha}{2} & 0 \end{bmatrix}$ and I is the identity matrix of order 2, show that

$$I + A = (I - A) \begin{bmatrix} \cos \alpha & -\sin \alpha \\ \sin \alpha & \cos \alpha \end{bmatrix}.$$

Or

5

- b. Solve the following system of equation by matrix method

$$x - y + z = 4$$

$$2x + y - 3z = 0.$$

$$x + y + z = 2$$

20. a. Show that the right circular cone of least curved surface and given volume has an altitude equal to $\sqrt{2}$ times the radius of the base.

Or

5

- b. A wire of length 28m is to be cut into two pieces. One of the pieces is to be made into a square and the other into a circle. What should be the length of the two pieces so that the combined area of the square and the circle is minimum?

21. a. Find the area bounded by the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ and the ordinates $x = 0$ and $x = ae$, where $b^2 = a^2(1 - e^2)$ and $e < 1$.

Or

5

- b. Find the area of the region bounded by the ellipse $\frac{x^2}{16} + \frac{y^2}{9} = 1$.

22. a. Find the shortest distance between the lines whose vector equations are

$$\vec{r} = (\hat{i} + 2\hat{j} + 3\hat{k}) + \lambda(\hat{i} - 3\hat{j} + 2\hat{k}) \text{ and}$$

$$\vec{r} = (4\hat{i} - 5\hat{j} + 6\hat{k}) + \mu(2\hat{i} + 3\hat{j} + \hat{k})$$

Or

5

- b. Find the vector equation of the plane passing through the intersection of the planes $\vec{r} \cdot (2\hat{i} + 2\hat{j} - 3\hat{k}) = 7$, $\vec{r} \cdot (2\hat{i} + 5\hat{j} + 3\hat{k}) = 9$ and through the point (2, 1, 3).