



# DELHI PUBLIC SCHOOL, BHILAI

Date : 19.02.2025

Class : IX

Name : \_\_\_\_\_

ANNUAL EXAMINATION 2024-25

SUBJECT : COMMUNICATIVE ENGLISH

Time : 3 Hrs.

Max. Marks : 80

Roll No. \_\_\_\_\_

## General Instructions:

- The question paper contains **Four sections** – SECTION A – READING SKILLS (20 MARKS), SECTION B – WRITING SKILLS (24 MARKS), SECTION C – GRAMMAR (10 MARKS), SECTION D – LITERATURE TEXTBOOK (26 MARKS)
- Attempt questions based on specific instructions for each part.
- All the questions of that particular section must be attempted in the correct order.

## SECTION – A : READING SKILLS (20 MARKS)

### 1. Read the passage given below:

1. Certain foods can rejuvenate and activate the body, inducing stable mental health and the advisory positions about the remarkable healing power of food – to recognize, isolate and increase the intake of foods that have large amount of disease fighting antioxidants, to identify the two kinds of fat; the beneficial Omega-3 and the Omega-6, in which foods are commonly cooked; to alienate allergies caused by foods that work against the human metabolism.
2. Even oxygen has certain toxic forms called oxides, which spark off lethal reactions that have been linked to sixty odd chronic diseases, one of which is ageing. Antioxidants minimize the effects of the oxidants. Plant foods, thankfully are packed with antioxidant agents. Scientists are now researching into an antioxidant “Status report” based on individual blood tests; if the antioxidants are funny low, specific food should be prescribed to boost the levels.
3. Fat comes in two types—Omega-3 which is found in marine life and Omega-6 which is concentrated in vegetable oils. The first is good, the other is plain rotten.
4. The best source of Omega-3 is preferably sea fish. But frying it in Omega-6 rich vegetable oil kills all its goodness. The third imperative in codifying food health is through identifying irritants.
5. While some foods cause obvious and easily identified allergies like rashes, others cause either delayed reactions or minor irritants which could, nonetheless, be a serious deterrent to general well-being. Obstinate amoebiosis, nagging depression and persistent headaches are the most obvious symptoms. Food plays a dramatic role in alerting and fine-tuning of brain cells to give them sharper concentration. An innocuous combination of red wine and cheese can trigger off migraine.
6. Ageing brains have low levels of thiamin, which is concentrated in wheat-germ and bran, nuts, meat and cereals. More good brain-food comes from liver, milk and almonds, which are rich in riboflavin and extremely good for memory. Carotene, available in deep green leafy vegetables and fruits, is also good for geriatric brains. So is a high iron diet: it can make old brains gallop hyperactively like young ones. Iron comes from greens; liver, shell-fish, red meat and soybeans. Sea-food, very high in iron, is an excellent diet supplement.
7. The New England Journal of Medicine reported in its May 1985 issue that 30 grams of fish a day could result in a dramatic drop in the chances of acquiring a cardiovascular disease.

Based on the understanding of the passage, answer the questions given below:

(1x10=10)

(a) According to para 1, what can certain foods do?

- (1) can rejuvenate and activate the body.
- (2) can decrease and deactivate the body.
- (3) can induce stable mental health.
- (4) can enhance fatigue.

(i) 3 and 4      (ii) 1 and 2      (iii) 1 and 3      (iv) 3 and 4

(b) Select the option that displays what the writer projects, with reference to the following.

The best source of Omega 3 is preferably sea-fish.

(i) doubt      (ii) caution      (iii) truth      (iv) convection

(c) Antioxidants minimize the

(i) effects of carotene	(ii) effects of oxidants
(iii) effects of metabolism	(iv) none of these

(d) Complete the following with a phrase from paragraph 5.

Opinion	Reason
-----	put in motion

(e) The most inappropriate reason for the dramatic role of food is

(i) alerts and fine tunes brain cells      (ii) weakens our body and lessens capacity to think  
 (iii) enhances immunity to fight diseases      (iv) strengthens body

Contd...2

(f) Complete the following analogy with a word/phrase from paragraph 5.  
 Clear : obvious :: \_\_\_\_\_ amalgamation

(g) What are oxides?

(h) State one point to justify the following.

Iron comes from greens, liver, shell-fish, red meat and soyabean.

(i) Which foods are necessary for geriatric brains? (any four)

(j) What is the finding of New Journal of Medicine report, May 1985 issue?

2. Read the following passage carefully.

**Families Spend ₹ 25K CR for PVT. Tuitions of Kids**

1. Indian families spend close to ₹ 25,000 crore a year on giving school kids private tuitions, an analysis of data from the education ministry and a recent NSO report indicates. This does not include coaching for entrance exams and is just the money spent on bringing children from the pre-primary to the higher secondary level up to speed on their school courses.
2. To put that in context, the amount is more than one-third the central government's total budget allocation of ₹ 59,845 crore to the department of school education and literacy.
3. Families of children in each of the primary, secondary and higher secondary levels spend over ₹ 6,000 crore on private tuitions while the annual spend in the upper primary (or middle school) category is a bit over ₹ 5,400 crore.
4. These numbers are arrived at by combining the results of a recently released National Statistical Office (NSO)'s survey on education for 2017-18 and the education ministry's data on the current number of students at various levels of schooling. The ministry's figures don't include pre-primary students, but even without them, the total adds up to ₹ 24,081 crore. The survey shows that the average spent on private coaching per student is highest at ₹ 2,516 at the higher secondary level, where a little over a quarter of students take such tuitions. The average annual spend per student is lower at ₹ 1,632 for the secondary level, but the proportion of students who take tuitions is the highest here at just over 30%. The per student average is ₹ 845 for upper primary and ₹ 502 for primary school. Private tutors are hired at even the pre-primary level, where the average expenditure per student is ₹ 300.

**DO IT YOURSELF?**

Money spent by students in non-technical courses on pvt coaching as percentage of state govt spend on education

State and proportion

**Highest (major states)**

W Bengal	29.1
Bihar	12.4
Delhi	10.1
Jharkhand	9.8
Odisha	8.5

6

**Lowest (major states)**

Andhra	0.4
Telangana	0.4
Karnataka	0.9
Chhattisgarh	1.0
Tamil Nadu	1.3

5. The data also shows that the overall cost incurred by parents for school education is about ₹ 1.9 lakh crore, of which nearly half goes to school fees while a little over 20% is spent on books. Private coaching accounts for 13% of the total cost of education.

On the basis of your understanding, answer the following questions : (1x10=10)

(a) An analysis of the data from education ministry and a recent NSO report indicates that
 

- (i) foreign families spend approximately ₹ 5,000 crore per year on giving school kids private tuitions.
- (ii) Indian families spend approximately ₹ 25,000 crore per year on giving school kids private tuitions.
- (iii) Indian families spend ₹ 2,000 per month on giving private tuitions to their wards.
- (iv) No amount is spent on private tuitions of kids.

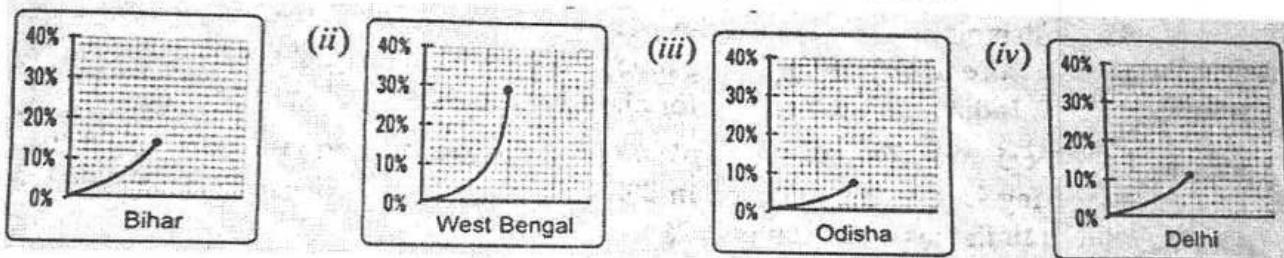
(b) Select the correct option to complete the following sentence.

The amount that is spent on the tuition of the kids is more than \_\_\_\_\_. (paragraph 2)

- (i) half of the central government's total budget
- (ii) one-fourth of the central government's total budget
- (iii) one-third of the central government's total budget
- (iv) two-third of the state government's total budget

(c) From paragraph 4, we can infer that the average spent on private coaching per student is \_\_\_\_\_.  
 (i) lowest at ₹ 1,212 (ii) highest at ₹ 2,516 (iii) highest at ₹ 5,126 (iv) lowest at ₹ 1,009

(d) Which graph represents the highest amount being spent by students in non-technical courses in private coaching as percentage of state government spend on education.



(e) The results of numbers are arrived at by  
 (i) results of recently released NSO's survey on education.  
 (ii) education ministry's data on the current number of students at various levels of schooling.  
 (iii) the data provided by parents of kids.  
 (iv) Both (i) and (ii)

(f) Complete the following analogy with a word or phrase from para 1.  
 ratio : proportion :: \_\_\_\_\_ : specify

(g) Give one reason why so much money is spent on children.  
 (h) What is the per student average from upper primary and primary school respectively?  
 (i) At what level are primary tutors hired?  
 (j) According to given data, how much percent of amount is spent on school fees and private coaching respectively.

### SECTION – B : WRITING SKILLS ( 24 MARKS)

3. Cultural Society of RJ Public School, Chandigarh has decided to organize a fancy dress show in which each participant will wear dress particular to his/her region. As secretary, write a notice, in about **50 words**, inviting names of those who want to participate. **(4 marks)**

4. Two friends Reena and Rohini are talking about regularity in studies. Using the inputs given below, construct a set of dialogues, with five exchanges, between them. The first set has been given as example. **(5 Marks)**

**Example:**

- stated studying every day
- good! makes learning easier

**Example:**

Reena : I have started studying a little every day.  
 Rohini : That's good! It makes learning easier.

**Hints :**

- not feel stressed
- makes work smaller easier to handle
- understand things better
- regular studying helps learn deeply
- not worried exam
- best part gives confidence
- time for hobbies relax
- good routine life balanced
- wish started earlier
- not too late on right path

5. You are Ishaan / Ishita of 26, Kala Niketan Society, Bangalore. You have taken up gardening as a new hobby. Write a letter to your friend sharing your experience of trying the new hobby and encouraging him/her to explore it too. (120 words) **(7 Marks)**

6. Walking is not just an exercise but also a pleasurable activity. Write a paragraph, of about 150 words, on the 'Benefits of Walking' and its effects on your health. You can use the given inputs and take help from your MCB Unit 7 : 'Sports'. **(8 Marks)**

simplest, most effective to maintain good health – done by all ages – improves cardiovascular health, strengthens muscles, helps maintain healthy weight – reduces stress – walk in natural surroundings calms mind – lower risk of diabetes and high blood pressure – a step towards healthier lifestyle

## SECTION – C: GRAMMAR (10 Marks)

7. Read the following conversation carefully and complete the given passage: (3)

Mother : Why are you looking so pale?

Daughter : I have not eaten anything since morning.

Mother : You should have told me this earlier.

The mother asked her daughter (a) \_\_\_\_\_. The daughter replied that (b) \_\_\_\_\_ since morning. The mother told her that she (c) \_\_\_\_\_ earlier.

8. Read the following paragraph. One word is missing in each line. Write the missing word along with the words which come before and after it. The first one has been done as example. (3)

	Before	Missing	After
The Rolling Stones are a famous English rock band.			
They are known many names	Eg. known	by	many
The band gave first performance	(a) -----	-----	-----
in London and quickly popular	(b) -----	-----	-----
There was a huge demand for them all Europe.	(c) -----	-----	-----

9. Fill in the blanks by choosing most appropriate options from the ones given below. (4)

It was an old tree. A seed had been carried (a) \_\_\_\_\_ the island by strong wind. It (b) \_\_\_\_\_ found shelter (c) \_\_\_\_\_ two rocks and had (d) \_\_\_\_\_ up to give shelter to a small family.

(a) (i) over	(ii) on	(iii) at	(iv) to
(b) (i) have	(ii) has	(iii) had	(iv) having
(c) (i) between	(ii) in	(iii) on	(iv) over
(d) (i) spring	(ii) sprang	(iii) sprung	(iv) springing

## SECTION – D: LITERATURE TEXTBOOK (26 Marks)

10. Read the following extracts and attempt ANY TWO of those given: (4+4=8)

(A) I am the dotted silver threads dropped from heaven  
By the gods. Nature then takes me, to adorn  
Her fields and valleys.

- (a) How does the rain describe its appearance?
- (b) Where does the rain come from?
- (c) What does Nature do?
- (d) Give the synonym of 'decorate'.

(B) I felt very dependent and helpless. We are well-off but what use is money when I cannot be independent?

- (a) Who is the speaker?
- (b) When did the speaker feel so dependent and helpless?
- (c) What does the speaker mean by 'being independent'?
- (d) Give the meaning of 'well-off'.

(C) Then a soldier.

Full of strange oaths, and bearded like the pard,  
Jealous in honour, sudden and quick in quarrel,  
Seeking the bubble reputation.

- (a) Which stage of life is that of a soldier?
- (b) Why does the soldier take risks?
- (c) What does the soldier seek?
- (d) Which figure of speech has been used in line 2?

11. Attempt ANY SIX of the following in about 30 – 40 words. (2x6=12)

- (a) Why was Mrs. Al Smith not interested in seeing the house?
- (b) What consequences did the poet have to face for not looking after her teeth?
- (c) In the story 'Bestseller', John A Pescud is a hypocrite. Do you agree? Give reasons for your answer.
- (d) Describe the birth of the 'Brook'. How does it flow?
- (e) Which road does the poet take and why?
- (f) Describe the dog, Duke, briefly.
- (g) How did the Corporal punish Private Quelch and why?

12. Attempt ANY ONE of the following in about 120 words. (6 Marks)

'The Bishop heals the tormented soul and shows him the path of God and righteousness.' Comment on this statement giving instances from the play 'The Bishop's candlesticks'. What values do you learn from this play?

OR

Parents should share their family problems frankly with their children. Justify this statement with reference to Harold and his parents.



## सामान्य निर्देश :

- इस प्रश्न-पत्र में चार खंड हैं – 'क', 'ख', 'ग' और 'घ'
- खंड 'क' में अपठित गद्यांश से प्रश्न पूछे गए हैं, जिनका उत्तर दिए गए निर्देशों का पालन करते हुए दीजिए।
- खंड 'ख' में व्यावहारिक व्याकरण से प्रश्न पूछे गए हैं, आंतरिक विकल्प भी दिए गए हैं।
- खंड 'ग' पाठ्यपुस्तक पर आधारित है, निर्देशानुसार उत्तर दीजिए।
- खंड 'घ' रचनात्मक लेखन पर आधारित है, आंतरिक विकल्प भी दिए गए हैं।
- प्रश्न-पत्र में कुल 17 प्रश्न हैं, सभी प्रश्न अनिवार्य हैं।
- यथासंभव सभी खंडों के प्रश्नों के उत्तर क्रमशः लिखिए।

खण्ड – 'क' (अपठित बोध)

## प्रश्न 1. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए – (1+1+1+2+2=7)

महात्माओं और विद्वानों का सबसे बड़ा लक्षण है – आवाज़ को ध्यान से सुनना। यह आवाज़ कुछ भी हो सकती है। कौओं की कर्कश आवाज़ से लेकर नदियों की कलकल तक। मार्टिन लूथर किंग के भाषण से लेकर किसी पागल के बड़बड़ाने तक। सच यह है कि हम सुनना चाहते ही नहीं। बस बोलना चाहते हैं। हमें लगता है कि इससे लोग हमें बेहतर तरीके से समझेंगे।

हमें पता ही नहीं चलता और अधिक बोलने की कला हमें अनसुना करने की कला में पारंगत कर देती है। एक मनोवैज्ञानिक ने अपने अध्ययन में पाया कि जिन घरों के अभिभावक ज्यादा बोलते हैं, वहाँ बच्चों में सही-गलत से जुड़ा स्वाभाविक ज्ञान कम विकसित हो पाता है; क्योंकि ज्यादा बोलना बातों को विरोधाभासी तरीके से सामने रखता है और सामने वाला बस शब्दों के जाल में फँसकर रह जाता है। बात औपचारिक हो या अनौपचारिक, दोनों स्थितियों में हम दूसरे की न सुन, बस हावी होने की कोशिश करते हैं। खुद ज्यादा बोलने और दूसरों को अनसुना करने से ज़ाहिर होता है कि हम अपने बारे में ज्यादा सोचते हैं और दूसरों के बारे में कम। ज्यादा बोलने वालों के दुश्मनों की संख्या ज्यादा होती है।

अमेरिका के सर्वाधिक चर्चित राष्ट्रपति रुज़वेल्ट अपने माली तक के साथ कुछ समय बिताते और इस दौरान उसकी बातें ज्यादा सुनने की कोशिश करते। वह कहते थे कि लोगों को अनसुना करना अपनी लोकप्रियता के साथ खिलवाड़ करने जैसा है। इसका लाभ यह मिला कि ज्यादातर अमेरिकी नागरिक उनके सुख में सुखी होते हैं और दुःख में दुःखी।

(1) महात्माओं और विद्वानों का सबसे बड़ा लक्षण है –

(क) दूसरों को उपदेश देना	(ख) परोपकार करना
(ग) आवाज़ को ध्यान से सुनना	(घ) किसी की बात पर ध्यान न देना

(2) निम्नलिखित कथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़िए। उसके बाद दिए गए विकल्पों में से

कोई एक सही विकल्प चुनकर लिखिए –

कथन (A) : हम सुनना चाहते ही नहीं, बस बोलना चाहते हैं।

कारण (R) : इससे हमें यह लगता है कि लोग हमें बेहतर तरीके से समझ सकेंगे।

(क) कथन (A) तथा कारण (R) दोनों सही हैं और कारण (R), कथन (A) की सही व्याख्या करता है।

(ख) कथन (A) तथा कारण (R) दोनों गलत हैं।

(ग) कथन (A) गलत है, किंतु कारण (R) सही है।

(घ) कथन (A) सही है, किंतु कारण (R) उसकी गलत व्याख्या करता है।

(3) अधिक बोलना इस बात का सूचक है कि –

(क) हम अपने बारे में अधिक सोचते हैं	(ख) हम दूसरों के बारे में कम सोचते हैं
(ग) हम अपने दुश्मनों की संख्या बढ़ा रहे हैं	(घ) उपर्युक्त सभी

(4) किन बच्चों का सही-गलत का स्वाभाविक ज्ञान कम विकसित होता है ?

(5) लोगों की बातें सुनने का अमेरिकी राष्ट्रपति रुज़वेल्ट को क्या लाभ मिला ?

## प्रश्न 2. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए – (1+1+1+2+2=7)

आज से लगभग छः सौ साल पूर्व संत कबीर ने सांप्रदायिकता की जिस समस्या की ओर ध्यान दिलाया था, वह आज भी प्रसुप्त ज्वालामुखी की भाँति भयंकर बनकर देश के वातावरण को विदग्ध करती रहती है। देश का यह बड़ा दुर्भाग्य है कि जहाँ जाति, धर्म, भाषागत ईर्ष्या, द्वेष, वैर-विरोध की भावना समय-असमय भयंकर ज्वालामुखी के रूप में भड़क उठती है। दस-बीस हताहत होते हैं, लाखों-करोड़ों की संपत्ति नष्ट हो जाती है। भय, त्रास और अशांति का प्रकोप होता है। विकास की गति अवरुद्ध हो जाती है।

कबीर हिंदू-मुसलमान में, जाति-जाति में शारीरिक दृष्टि से कोई भेद नहीं मानते थे। वे मानते थे कि भेद केवल विचारों और भावों का है। इन विचारों और भावों के भेद को बल धार्मिक कट्टरता और सांप्रदायिकता से मिलता है। हृदय की चरमानुभूति की दशा में राम और रहीम में कोई अंतर नहीं। अंतर केवल उन माध्यमों में है, जिनके द्वारा वहाँ तक पहुँचने का प्रयत्न किया जाता है। इसलिए कबीर साहब ने उन माध्यमों-पूजा, नमाज, व्रत, रोज़ा आदि के दिखावे का विरोध किया। समाज में एकरूपता तभी संभव है, जब जाति, वर्ण, वर्ग भेद न्यून-से-न्यून हों। संतों ने मंदिर-मस्जिद, जाति-पाँति के भेद में विश्वास नहीं रखा। सदाचार ही संतों के लिए महत्वपूर्ण है। कबीर ने समाज में व्याप्त बाह्यांडबरों का कड़ा विरोध किया और समाज में एकता, समानता और धर्मनिरपेक्षता की भावनाओं का प्रचार-प्रसार किया।

- (1) गद्यांश में किस समस्या को ज्वालामुखी कहा गया है ?
 

(क) अनेकता की समस्या को	(ख) सांप्रदायिकता की समस्या को
(ग) शारीरिक विकलांगता की समस्या को	(घ) बेरोज़गारी की समस्या को
- (2) मनुष्य के विचारों और भावों के भेद के परिणामस्वरूप किसे बल मिलता है ?
 

(क) भाषागत विभिन्नता को	(ख) ईर्ष्या-द्वेष की भावना को
(ग) धार्मिक सद्भावना को	(घ) धार्मिक कट्टरता को
- (3) निम्नलिखित कथन तथा निष्कर्ष को ध्यानपूर्वक पढ़िए। उसके बाद दिए गए विकल्पों में से कोई एक सही विकल्प चुनकर लिखिए –  
**कथन :** कबीर ने राम और रहीम में कोई अंतर नहीं माना।  
**निष्कर्ष :** कबीर ने सभी धार्मिक कट्टरताओं को समाप्त करने का प्रयास किया है।
 

(क) कथन सही है, लेकिन निष्कर्ष गलत है।	(ख) कथन और निष्कर्ष दोनों सही हैं।
(ग) कथन गलत है और निष्कर्ष सही है।	(घ) कथन और निष्कर्ष दोनों गलत हैं।
- (4) 'संतों ने मंदिर-मस्जिद, जाति-पाँति के भेद में विश्वास नहीं रखा।' प्रस्तुत पंक्ति के माध्यम से संत मनुष्य जाति के किस गुण में विश्वास रखते हैं?
 

(5) समाज में व्याप्त जाति-वर्ण से संबंधित भेदभाव कम होने पर क्या संभव है ?
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### खण्ड – 'ख' (व्यावहारिक व्याकरण)

प्रश्न 3. निर्देशानुसार 'शब्द और पद' पर आधारित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर दीजिए – (1x2=2)

- (क) ध्वनियों के सार्थक समूह को क्या कहते हैं ?
- (ख) संज्ञा के स्थान पर प्रयुक्त होने वाले शब्द क्या कहलाते हैं ?
- (ग) कोई शब्द पद कब बन जाता है ?

प्रश्न 4. निर्देशानुसार 'अनुस्वार-अनुनासिक' पर आधारित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर दीजिए – (1x2=2)

- (क) 'मृदङ्ग' का अनुस्वारयुक्त मानकरूप क्या होगा ?
- (ख) 'धुआ' में उचित स्थान पर अनुनासिक का प्रयोग कर सार्थक शब्द बनाइए।
- (ग) अनुनासिक का सही प्रयोग किस शब्द में हुआ है ?

इन्हें, बिंदु, चिंतन, भ्रांति

प्रश्न 5. निर्देशानुसार 'उपसर्ग-प्रत्यय' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए – (1x4=4)

- (क) 'भ्रांत' में उपसर्ग लगाकर एक सार्थक शब्द बनाइए।
- (ख) 'आलोकित' में किस प्रत्यय का प्रयोग हुआ है ?
- (ग) 'उन्नत' में कौन-सा उपसर्ग लगा है ?
- (घ) 'दुर' उपसर्ग लगाकर एक सार्थक शब्द बनाइए।
- (ड) 'मंद' प्रत्यय लगाकर एक सार्थक शब्द बनाइए।

प्रश्न 6. निर्देशानुसार 'स्वर संधि' पर आधारित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर दीजिए – (1x3=3)

- (क) 'देव्यागमन' किस स्वर संधि का उदाहरण है ?
- (ख) 'तथैव' का संधि-विच्छेद कीजिए।
- (ग) 'प्रति + उत्तर' में संधि करने पर क्या शब्द बनेगा ?
- (घ) 'धावक' का संधि-विच्छेद कीजिए।

प्रश्न 7. निर्देशानुसार 'विराम-चिह्न' पर आधारित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर दीजिए – (1x2=2)

- (क) लिखते समय छूटे हुए अंश को लिखने के लिए किस विराम-चिह्न का प्रयोग किया जाता है ?
- (ख) भाइयों शांत हो जाओ – उचित विराम-चिह्न का प्रयोग करके वाक्य पुनः लिखिए।
- (ग) थोड़ा-सा ठहरने के लिए जिस विराम-चिह्न का प्रयोग किया जाता है, उसे क्या कहते हैं ?

(4) रामन् नोबेल पुरस्कार प्राप्त करने कहाँ गए –  
 (क) लंदन (ख) न्यूयार्क (ग) मास्को (घ) स्टॉकहोम

(5) निम्नलिखित कथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़कर उचित विकल्प का चयन कीजिए –

**कथन (A) :** अंतरराष्ट्रीय प्रसिद्धि के बाद भी उन्होंने अपने दक्षिण भारतीय पहनावे को नहीं छोड़ा।  
**कारण (R) :** उन्होंने अपनी भारतीय पहचान को हमेशा अक्षुण्ण रखा।

(क) कथन (A) तथा कारण (R) दोनों गलत हैं।  
 (ख) कथन (A) सही है लेकिन कारण (R) दोनों गलत है।  
 (ग) कथन (A) गलत है, किंतु कारण (R) सही है।  
 (घ) कथन (A) और कारण (R) दोनों सही हैं तथा कारण (R) कथन (A) की सही व्याख्या करता है।

**प्रश्न 12.** पठित गद्य पाठों पर आधारित निम्नलिखित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25–30 शब्दों में दीजिए – (2x3=6)

(क) बुढ़िया के दुख को देखकर लेखक को अपने पड़ोस की संप्रांत महिला की याद क्यों आ गई ?  
 (ख) एवरेस्ट की चोटी पर पहुँचकर बचेन्द्रीपाल ने क्या किया ?  
 (ग) लेखक ने अतिथि को जाने का संकेत किन-किन उपायों से किया ?  
 (घ) महादेव भाई के किन गुणों ने उन्हें सबका लाड़ला बना दिया ?

**प्रश्न 13.** पूरक पाठ्यपुस्तक पर आधारित निम्नलिखित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लगभग 50–60 शब्दों में दीजिए – (4x2=8)

(क) लेखक को किताबें पढ़ने और सहेजने का शौक कैसे लगा ?  
 (ख) गिल्लू लघुजीव होते हुए भी काफी समझदार था। 'गिल्लू' पाठ से प्राप्त संकेत के आधार पर स्पष्ट कीजिए।  
 (ग) त्रिपुरा 'बहुधार्मिक समाज' का उदाहरण कैसे बन गया ?

#### खण्ड – 'घ' (रचनात्मक लेखन)

**प्रश्न 14.** निम्नलिखित में से किसी एक विषय पर दिए गए संकेत-बिन्दुओं के आधार पर लगभग 120 शब्दों में अनुच्छेद लिखिए – (5x1=5)

(1) एकता की शक्ति	(2) स्वास्थ्य की रक्षा	(3) विज्ञापनों से भरी दुनिया
<ul style="list-style-type: none"> <li>• एकता का अर्थ</li> <li>• एकता की शक्ति का महत्व</li> <li>• एकता की शक्ति के उदाहरण</li> <li>• उपसंहार</li> </ul>	<ul style="list-style-type: none"> <li>• स्वस्थ रहने की आवश्यकता</li> <li>• पोषक भोजन</li> <li>• लाभकारी सुझाव</li> <li>• उपसंहार</li> </ul>	<ul style="list-style-type: none"> <li>• विज्ञापन का युग</li> <li>• विज्ञापन का प्रभाव</li> <li>• विज्ञापन के लाभ व हानियाँ</li> <li>• उपसंहार</li> </ul>

**प्रश्न 15.** आप 66/सी, कबीर नगर, रायपुर के अमित/अमिता हैं। वृक्षारोपण का महत्व बताते हुए अपने मित्र को लगभग 100 शब्दों में पत्र लिखिए। (5)

#### अथवा

आप दिल्ली पब्लिक स्कूल, भिलाई के छात्रावास में रहने वाले दीपक/दीपिका हैं। अपनी पढ़ाई की जानकारी देते हुए अपनी माताजी को लगभग 100 शब्दों में पत्र लिखिए।

**प्रश्न 16.** चित्र में दिखाई दे रहे दृश्य/घटना का वर्णन अपनी कल्पनाशक्ति के आधार पर लगभग 100 शब्दों में कीजिए – (5)



**प्रश्न 17.** 'जल संरक्षण' के संबंध में पिता-पुत्र के मध्य होने वाले संवाद को लगभग 100 शब्दों में लिखिए। (5)

#### अथवा

कक्षा में अनुपस्थित रहने वाले छात्र एवं शिक्षक के मध्य होने वाले संवाद को लगभग 100 शब्दों में लिखिए।

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प्रश्न 8. निर्देशानुसार 'अर्थ की दृष्टि से वाक्य-भेद' पर आधारित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर दीजिए – (1x3=3)

- (क) जिन वाक्यों में एक कार्य का सिद्ध होना दूसरे कार्य पर निर्भर होता है, उन वाक्यों को क्या कहते हैं?
- (ख) 'छात्र परीक्षा' नहीं देंगे।' (वाक्य-भेद बताइए)
- (ग) 'विनय का पत्र आया है।' (वाक्य-भेद बताइए)
- (घ) 'मोहन आपके साथ रहता है।' (प्रश्नवाचक वाक्य में रूपांतरण कीजिए।)

खण्ड – 'ग' (पाठ्यपुस्तक पर आधारित प्रश्न)

प्रश्न 9. निम्नलिखित पद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर के लिए सही विकल्प का चयन कीजिए – (1x5=5)

- (1) M.K
- (2) Com. Eng
- (3) Maths
- (4) So. Sci
- (5) Sci
- (6) Sanskrit
- (7) Hindi
- (8) A.I.

इन नए बसते इलाकों में  
जहाँ रोज़ बन रहे हैं नए-नए मकान  
मैं अकसर रास्ता भूल जाता हूँ  
धोखा दे जाते हैं पुराने निशान  
खोजता हूँ ताकता पीपल का पेड़  
खोजता हूँ ढहा हुआ घर  
और ज़मीन का खाली टुकड़ा जहाँ से बाएँ  
मुड़ना था मुझे  
फिर दो मकान बाद बिना रंगवाले लोहे के फाटक का  
घर था इकमंजिला  
और मैं हर बार एक घर पीछे  
चल देता हूँ  
या दो घर आगे ठकमकाता

- (1) रोज़ नए-नए मकान कहाँ बन रहे हैं –  
(क) गाँव में (ख) शहर में (ग) पुराने इलाकों में (घ) नए बसते इलाकों में
- (2) कवि के साथ नए इलाके में अकसर क्या होता है ?  
(क) उसे पुराने मित्र मिल जाते हैं (ख) वह रास्ता भूल जाता है  
(ग) उसे कुछ कुत्ते मिल जाते हैं (घ) वह गिर पड़ता है
- (3) कवि को कौन धोखा दे जाता है ?  
(क) उसका भाई (ख) उसका मित्र (ग) उसका नौकर (घ) पुराने निशान
- (4) कवि क्या खोजता है ?  
(क) पीपल का पेड़ (ख) ढहा हुआ घर (ग) ज़मीन का खाली टुकड़ा (घ) ये सभी
- (5) इकमंजिला मकान कैसा था ?  
(क) बहुत ऊँचा (ख) टूटा-फूटा  
(ग) बिना रंगवाले लोहे के फाटक का (घ) लकड़ी के फाटक का

प्रश्न 10. पठित पद्य पाठों पर आधारित निम्नलिखित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25-30 शब्दों में दीजिए – (2x3=6)

- (क) 'खुशबू रखते हैं हाथ' कविता हमारे समाज की किस समस्या को उजागर करती है ?
- (ख) 'अग्निपथ' कविता के अनुसार व्यक्ति को जीवन के मार्ग पर कैसे आगे बढ़ना चाहिए।
- (ग) 'गीत-अगीत' कविता का प्रतिपाद्य लिखिए।
- (घ) जलहीन कमल की रक्षा सूर्य भी क्यों नहीं कर पाता ?

प्रश्न 11. निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर के लिए सही विकल्प का चयन कीजिए – (1x5=5)

भारतीय संस्कृति से रामन् को हमेशा ही गहरा लगाव रहा। उन्होंने अपनी भारतीय पहचान को हमेशा अक्षुण्ण रखा। अंतरराष्ट्रीय प्रसिद्धि के बाद भी उन्होंने अपने दक्षिण भारतीय पहनावे को नहीं छोड़ा। वे कट्टर शाकाहारी थे और मदिरा से सख्त परहेज़ रखते थे। जब वे नोबेल पुरस्कार प्राप्त करने स्टॉकहोम गए तो वहाँ उन्होंने अल्कोहल पर रामन् प्रभाव का प्रदर्शन किया। बाद में आयोजित पार्टी में जब उन्होंने शराब पीने से इनकार किया तो एक आयोजक ने परिहास में उनसे कहा कि रामन् ने जब अल्कोहल पर रामन् प्रभाव का प्रदर्शन करने से परहेज़ क्यों ?

- (1) रामन को किससे लगाव था ?  
(क) पश्चिमी संस्कृति से (ख) भारतीय संस्कृति से (ग) संगीत से (घ) साहित्य से
- (2) रामन् ने कौन-सा पहनावा नहीं छोड़ा ?  
(क) विदेशी पहनावा (ख) राजस्थानी पहनावा  
(ग) दक्षिण भारतीय पहनावा (घ) उत्तर भारतीय पहनावा
- (3) कौन-सी विशेषता रामन् की नहीं है ?  
(क) वे कट्टर शाकाहारी थे (ख) मदिरा-पान करते थे  
(ग) दक्षिण भारतीय पहनावा पहनते थे। (घ) मदिरा से सख्त परहेज़ रखते थे।



## सामान्यनिर्देशः

(i) अस्मिन् प्रश्नपत्रे चत्वारः खण्डः सन्ति ।

‘क’ खण्डः	— अपठित-अवबोधनम्	— 10 अङ्काः
‘ख’ खण्डः	— रचनात्मक-कार्यम्	— 15 अङ्काः
‘ग’ खण्डः	— अनुप्रयुक्तव्याकरणम्	— 25 अङ्काः
‘घ’ खण्डः	— पठित-अवबोधनम्	— 30 अङ्काः

(ii) प्रश्नपत्रेऽस्मिन् 19 प्रश्नाः सन्ति ।

(iii) प्रश्नानाम् उत्तराणि संस्कृतभाषायामेव लेखनीयानि ।

(iv) प्रश्नानाम् उत्तराणि क्रमानुसारं लेखनीयानि ।

‘क’ खण्डः – अपठित-अवबोधनम् – 10 अङ्काः

## प्रश्न 01. अधोलिखितं गद्यांशं पठित्वा प्रदत्तप्रश्नान् उत्तरत –

(10)

भारतवर्षस्य उत्तरप्रदेशे प्रयागस्य विशिष्टं स्थानम् अस्ति । अत्र भगवान् ब्रह्मदेवः यज्ञं अकरोत् । यज्ञकरणात् अस्य नाम प्रयागः अभवत् । प्रयागे गङ्गा-यमुना-सरस्वतीनां नदीनां सङ्गमः भवति । सङ्गमस्य अपरं नाम त्रिवेणी अपि अस्ति । प्रतिवर्षम् अत्र कुम्भमेलायाः आयोजनं भवति । इयं मेला विश्वस्य महत्तमा मेला अस्ति । अस्मिन् अवसरे देश-देशान्तरेभ्यः सन्तः संन्यासिनः कल्पवासिनः भक्ताः च आगच्छन्ति । ते त्रिवेणीतटे स्नानं कृत्वा निजभाग्यस्य प्रशंसां कुर्वन्ति । विश्रामावस्थायां भगवतः हनुमतः अत्र प्रसिद्धं मन्दिरम् अपि अस्ति । सन्तजनानां प्रवचनं रात्रिन्दिवं भवति । अस्मिन् वर्षे दिव्य-भव्य-नव्य-महाकुम्भमेलायाः आयोजनं 144 वर्षानन्तरम् अभवत् । इदं अलौकिकं दिव्यं च क्षणम् आसीत् ।

## (I) एकपदेन उत्तरत – ( केवलं प्रश्नद्वयम् ) (1x2=2)

(i) उत्तरप्रदेशे कस्य विशिष्टं स्थानम् अस्ति ?  
(ii) कः यज्ञम् अकरोत् ?  
(iii) सङ्गमस्य अपरं नाम किम् अस्ति ?

## (II) पूर्णवाक्येन उत्तरत – ( केवलं प्रश्नद्वयम् ) (2x2=4)

(i) प्रयागे कासां नदीनां सङ्गमः भवति ।  
(ii) कुम्भमेलायां के के आगच्छन्ति ?  
(iii) अत्र केषां प्रवचनं भवति ?

## (III) अस्य अनुच्छेदस्य कृते समुचितं शीर्षकं संस्कृतेन लिखत – (1x1=1)

## (IV) भाषिककार्यम् – ( केवलं प्रश्नत्रयम् ) (1x3=3)

(i) ‘विशिष्टं स्थानम्’ इत्यत्र विशेषण-पदं किम् अस्ति ?  
(ii) ‘अकरोत्’ इति क्रियायाः कर्तृपदं किम् ?  
(क) प्रयागः (ख) ब्रह्मदेवः (ग) मेला (घ) सन्तः  
(iii) ‘देवालयः’ इत्यस्य पदस्य पर्यायपदं अनुच्छेदे किम् आगतम् ?  
(क) मन्दिरम् (ख) आयोजनम् (ग) अलौकिकम् (घ) प्रवचनम्  
(iv) ‘लौकिकम्’ अस्य विलोमपदम् अनुच्छेदे किम् ?  
(क) दिव्यं (ख) अलौकिकम् (ग) क्षणम् (घ) रात्रिन्दिवं

‘ख’ खण्डः रचनात्मकं कार्यम् – 15 अङ्काः

## प्रश्न 02. भवान् गौरवः अस्ति । भवतः मित्रम् मयंकः नवमी-कक्षायां प्रविष्टः । स्वमित्रं संस्कृतं पठितुं प्रेरयितुम् लिखिते अस्मिन् पत्रे शब्दसूचीसहायतया रिक्तस्थानानि पूर्णपत्रं लिखत – (½ x10=5) प्रिय मयंक !

(i) .....

अत्र (ii) ..... तत्रास्तु । तव पत्रात् ज्ञातं यत् त्वं नवमी-कक्षायां संस्कृतं पठितुम् इच्छसि । एतत् ज्ञात्वा अहं अति प्रसन्नः (iii) ..... यतः संस्कृतं (iv) ..... वयं स्वदेशस्य गौरवम् अनुभवितुम् शक्नुमः । इयं भाषा विश्वस्य सर्वासु भाषासु (v) ..... वैज्ञानिकी च अस्ति । किं त्वम् जानासि यत् (vi) ..... वेदाः रामायणं महाभारतम् उपनिषदः पञ्चन्त्रहितोपदेशादयः (vii) ..... संस्कृते एव लिखिताः सन्ति । अतः त्वं सर्वे: (viii) ..... सह संस्कृतमपि परिश्रमेण पठ । अवकाशदिनेषु मम (ix) ..... आगच्छ । मातापितृभ्यां मम प्रणामाः ।

भवतः अभिन्नं मित्रम्

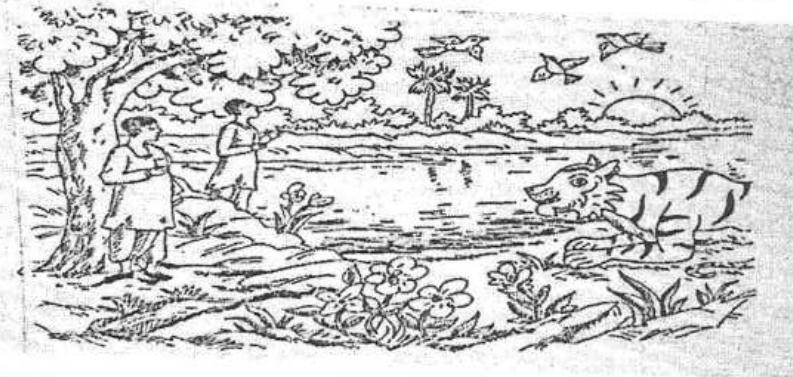
(x) .....

मञ्जूषा –	कुशलं	नमोनमः	अभवम्	चत्वारः	ग्रन्थाः
	विषयैः	गौरवः	प्राचीनतमा	पठित्वा	गृहम्

Contd...2

प्रश्न 03. मञ्जूषायां प्रदत्तशब्दानां सहायतया चित्रं दृष्ट्वा पञ्चवाक्यानि संस्कृतेन लिखत –

(1x5=5)



मञ्जूषा –

वृक्षाः	पुष्पाणि	सूर्यः	वहति	पवनः	खगाः	उदेति	आकाशे	उत्पत्तन्ति
विकसन्ति	भ्रमणम्	कुर्वन्ति	जनाः	शीतलं	जलम्	नदी	सिंहः	पशवः

अथवा

प्रदत्त-मञ्जूषा-पद-सहायतया 'जन्तुशाला-दृश्यम्' इति विषयस्य उपरि पञ्चवाक्यानि संस्कृतेन लिखत –

मञ्जूषा –

हरीतिमा	पक्षिणः	जनाः	पुष्पेषु	भ्रमराः	अनेके
पशवः	जन्तुशालायाम्	तडागः	मीनाः	तरन्ति	गुञ्जन्ति

प्रश्न 04. अधोलिखितं संवादं मञ्जूषायां प्रदत्तपदानां सहायतया पूरयत –

(½x10=5)

दिव्या – त्वम् (i) ..... विद्यालयं किमर्थम् न आगच्छः ?

रम्या – ह्यः मम (ii) ..... रूपणा आसीत् ।

दिव्या – तव माता केन रोगेण (iii) ..... आसीत् ।

रम्या – सा (iv) ..... पीडिता आसीत् ।

दिव्या – अधुना सा (v) ..... अस्ति न वा ?

रम्या – (vi) ..... तु सा स्वस्था अस्ति ।

दिव्या – (vii) ..... श्वः विद्यालयम् आगमिष्यसि न वा ?

रम्या – अहम् (viii) ..... विद्यालयम् अवश्यम् आगमिष्यामि ।

दिव्या – अधुना (ix) ..... चलामि ।

रम्या – (x) ..... , पुनः मिलिष्यावः ।

मञ्जूषा –

अहम्	ज्वरेण	ह्यः	त्वम्	पीडिता
श्वः	स्वस्था	माता	अधुना	उत्तमम्

अथवा

मञ्जूषायाः पद-सहायतया रिक्तस्थानानि पूरयित्वा कथापूर्ति कुरुत –

(½x10=5)

श्रीरामः (i) ..... आसीत् । सः राज्ञः (ii) ..... पुत्रः आसीत् । पितुः आज्ञां पालयितुं सः (iii) ..... वर्षाणि यावत् वने निवासम् (iv) ..... । तेन सह तस्य पत्नी (v) ..... भ्राता लक्षणः चापि (vi) ..... अगच्छताम् । वने (vii) ..... सीताम् अहरत् । श्रीरामः रावणं (viii) ..... सीताम् आनयत् । सः लंकाराज्यम् (ix) ..... अयच्छत् । रामायणे श्रीरामस्य (x) ..... वर्णिता अस्ति ।

मञ्जूषा –

जीवनकथा	रावणः	विभीषणाय	मर्यादापुरुषोत्तमः	चतुर्दश
दशरथस्य	अकरोत्	सीता	वनम्	मारयित्वा

'ग' खण्डः रचनात्मकं कार्यम् – 25 अङ्काः

प्रश्न 05. अधोलिखितानां वर्णानाम् उच्चारणस्थानानि लिखत – ( केवलं प्रश्नचतुष्टयम् ) (½x 4=2)

(i) ई (ii) ट् (iii) द् (iv) श् (v) ग्

प्रश्न 06. निम्नलिखितवाक्येषु रेखाङ्कितपदानां स्थिं विच्छेदं वा कुरुत – ( केवलं प्रश्नचतुष्टयम् ) (1x4=4)

(i) घनाः नव + अम्बुभिः भूरिविलम्बिनः भवन्ति ।

(ii) सैनिकः राजोचितं प्रणम्य वदति ।

(iii) एकः + चन्द्रः तमः हन्ति ।

(iv) तत् + उपदेशात् मुनिः सिद्धिम् अवाप्तवान् ।

(v) महाराज! आनीतोऽयं कुविन्दः ।

प्रश्न 07. प्रदत्तविकल्पेभ्यः उचितविभक्तिपदं चित्वा रिक्तस्थानानि पूरयत – (केवलं प्रश्नचतुष्टयम् ) (1x4=4)

(i) कृष्णः ..... प्रति गच्छति ।  
 (क) ग्रामम् (ख) ग्रामयोः (ग) ग्रामः (घ) ग्रामेण  
 (ii) ..... बहिः नदी वहति ।  
 (क) नगरम् (ख) नगरात् (ग) नगरस्य (घ) नगरे  
 (iii) ..... अधः मुनिः तपस्यां करोति ।  
 (क) वृक्षम् (ख) वृक्षेण (ग) वृक्षस्य (घ) वृक्षः  
 (iv) पिता ..... विश्वसिति ।  
 (क) पुत्रे (ख) पुत्राय (ग) पुत्रस्य (घ) पुत्रात्  
 (v) ..... नमः ।  
 (क) गणेशेन (ख) गणेशाय (ग) गणेशात् (घ) गणेश

प्रश्न 08. प्रदत्तविकल्पेभ्यः उचितशब्दरूपं चित्वा रिक्तस्थानानि पूरयत – ( केवलं प्रश्नचतुष्टयम् ) (1x4=4)

(i) ..... पाठं पठन्ति ।  
 (क) बालिकाः (ख) बालिके (ग) बालिक्या (घ) बालिकायाः  
 (ii) ..... अम्यासान् लिखन्ति ।  
 (क) बालकौ (ख) बालकः (ग) बालकाः (घ) बालकैः  
 (iii) तत्र..... आश्रमः अस्ति ।  
 (क) साधू (ख) साधूनाम् (ग) साधौ (घ) साधवः  
 (iv) ..... कन्दुकेन क्रीडामि ।  
 (क) अहम् (ख) आवाम् (ग) वयम् (घ) माम्  
 (v) ..... फलानि पतन्ति ।  
 (क) वृक्षः (ख) वृक्षात् (ग) वृक्षौ (घ) वृक्षैः

प्रश्न 09. प्रदत्तविकल्पेभ्यः उचितधातुरूपं चित्वा रिक्तस्थानानि पूरयत – ( केवलं प्रश्नचतुष्टयम् ) (1x4=4)

(i) पुत्रः पितरं ..... ।  
 (क) नमति (ख) नमतः (ग) नमन्ति (घ) नमसि  
 (ii) सर्वे निरामयाः ..... ।  
 (क) अस्तु (ख) स्ताम् (ग) सन्तु (घ) एधि  
 (iii) अहं रायपुरं ..... ।  
 (क) गमिष्यामि (ख) गमिष्यावः (ग) गमिष्यसि (घ) गमिष्यतः  
 (iv) त्वं कार्यं ..... ।  
 (क) अकरोत् (ख) अकुरुताम् (ग) अकरोः (घ) अकुर्वन्  
 (v) सीता अवश्यं सफलतां ..... ।  
 (क) लप्स्यते (ख) लप्स्यसे (ग) लप्स्येथे (घ) लप्स्यन्ते

प्रश्न 10. अधोलिखितवाक्येषु रेखाङ्कितपदानां प्रकृति-प्रत्ययविभागं संयोजनं वा विकल्पेभ्यः चिनुत –(केवलं प्रश्नत्रयम्) (1x3=3)

(i) साध्वी शुश्रूषां कृत्वा भिक्षामादाय आयाति ।  
 (क) कृ + कृत्वाम् (ख) कृ + कृत्वा (ग) क्री + त्वा (घ) क्रिया + कृत्वा  
 (ii) लक्ष्मीधरः द्वारपालेन सह प्र + विश + ल्यप् वदति ।  
 (क) प्रविश्य (ख) प्रवेशय (ग) प्रावीश (घ) प्रविशल्याप्  
 (iii) जनकः अष्टावक्राय किञ्चिद् दातुम् इच्छति ।  
 (क) दा + कृत्वा (ख) दा + तुमुन् (ग) दा + शत् (घ) दा + तमुनम्  
 (iv) पठ + शत् बालकः लिखति ।  
 (क) पठन् (ख) पठती (ग) पठ (घ) पठामः

प्रश्न 11. मञ्जूषातः उचितम् अव्ययपदं चित्वा रिक्तस्थानानि पूरयत – ( केवलं प्रश्नचतुष्टयम् ) (½ x4=2)

(i) अत्र ..... छात्राः सन्ति ?  
 (ii) रामः श्यामः ..... पठतः ।  
 (iii) अहं ..... वाराणसीं गमिष्यामि ।  
 (iv) अहं पठामि त्वम् ..... पठ ।  
 (v) यथा राजा ..... प्रजा ।

मञ्जूषा –	च	श्वः	कति	तथा	अपि
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प्रश्न 12. अधोलिखितवाक्येषु सङ्ख्यानां कृते उचितं संस्कृतपदं लिखत – ( केवलं प्रश्नचतुष्टयम् ) ( $\frac{1}{2} \times 4 = 2$ )

(i) (5) फलानि वृक्षात् अपतन्। (ii) (3) महिलाः पूजां कुर्वन्ति।  
 (iii) तत्र (75) दर्शकाः सन्ति। (iv) कक्षायां (40) छात्राः पठन्ति।  
 (v) अत्र (11) छात्राः क्रीडन्ति।

'घ' खण्डः पठित-अवबोधनम् – 30 अङ्काः

प्रश्न 13. अधोलिखितं गद्यांशं पठित्वा प्रदत्तप्रश्नान् उत्तरत – (5)

आसीत् पुरा कोऽपि महातपा नाम वनवासी मुनिः। एकदा यदा स तरुच्छायोपविष्टः आसीत् तदा तस्योपरि एका बलाका विष्टाम् उदसृजत्। स च क्रुद्धस्तां व्यलोकयत्। दृष्टमात्रा एव बलाका भस्मसाद् अभूत्। ततश्च सः मुनिः तपः प्रभावाद् अहङ्कारम् उपगतः।

(I) एकपदेन उत्तरत – ( केवलं प्रश्नद्वयम् ) ( $\frac{1}{2} \times 2 = 1$ )

(i) वनवासी कः आसीत् ?  
 (ii) मुनेः नाम किम् आसीत् ?  
 (iii) बलाका किम् उदसृजत् ?

(II) पूर्णवाक्येन उत्तरत – ( केवलं प्रश्नद्वयम् ) (1x2=2)

(i) मुनिः कुत्र उपविष्टः आसीत् ?  
 (ii) मुनिः कस्मात् प्रभावात् अहङ्कारम् उपगतः ?  
 (iii) का भस्मसाद् अभूत् ?

(III) भाषिककार्यम् – ( केवलं प्रश्नद्वयम् ) (1x2=2)

(i) 'वनवासी मुनिः' इति अत्र विशेषणपदं किम् ?  
 (ii) 'प्राचीनकाले' इति पदस्य किं पर्यायपदं गद्यांशे आगतम् ?  
 (iii) 'प्रसन्नः' इति पदस्य किं विलोमपदं गद्यांशे आगतम् ?

प्रश्न 14. अधोलिखितं श्लोकं पठित्वा प्रदत्तप्रश्नान् उत्तरत – (5)

छायामन्यस्य कुर्वन्ति तिष्ठन्ति स्वयमातपे।

फलान्यपि परार्थाय वृक्षाः सत्पुरुषा इव।।

(I) एकपदेन उत्तरत – ( केवलं प्रश्नद्वयम् ) ( $\frac{1}{2} \times 2 = 1$ )

(i) के छायां कुर्वन्ति ?  
 (ii) वृक्षाः कुत्र तिष्ठन्ति ?  
 (iii) के सत्पुरुषाः इव भवन्ति ?

(II) पूर्णवाक्येन उत्तरत – ( केवलं प्रश्नद्वयम् ) (1x2=2)

(i) वृक्षाः किं कुर्वन्ति ?  
 (ii) वृक्षाः किमर्थं फलन्ति ?  
 (iii) के स्वयं आतपे तिष्ठन्ति ?

(III) भाषिककार्यम् – ( केवलं प्रश्नद्वयम् ) (1x2=2)

(i) 'तरवः' इति पदस्य कः पर्यायः श्लोके आगतः ?  
 (ii) 'दुर्जनाः' इति पदस्य कः विलोमः श्लोके आगतः ?  
 (iii) श्लोके 'वृक्षाः' इति कर्तृपदस्य क्रियापदं किम् ?

प्रश्न 15. अधोलिखितं नाट्यांशं पठित्वा प्रदत्तप्रश्नान् उत्तरत – (5)

मन्त्री – यथा आज्ञापयति देवः। (निष्क्रम्य पुनः नगरपालेन सह प्रविश्य)

नगरपालः – महाराज! मन्त्रिवरस्य आदेशेन अहं समस्ते नगरे भ्रान्त्वा कमपि निरक्षरं मूर्खं वा जनम् न अपश्यम्।  
 कुत्र वासयितव्यः पण्डितवर्यः ?

भोजराजः – (क्षणं विचार्य) भो नगरपाल! त्वं भूयः नगरं याहि। यः नागरिकः काव्यं कर्तुं न जानाति सः  
 निष्कास्यताम्।

(I) एकपदेन उत्तरत – ( केवलं प्रश्नद्वयम् ) ( $\frac{1}{2} \times 2 = 1$ )

(i) "यथा आज्ञापयति देवः" इति कः वदति ?  
 (ii) मन्त्री केन सह पुनः प्रविशति ?  
 (iii) नगरपालः कस्य आदेशेन नगरे भ्रमति ?

(II) पूर्णवाक्येन उत्तरत – ( केवलं प्रश्नद्वयम् ) (1x2=2)

(i) भोजराजः क्षणं विचार्य किं वदति ?  
 (ii) नगरपालः कीदृशं जनम् न अपश्यत् ?  
 (iii) मन्त्री किं वदति ?

(III) भाषिककार्यम् – ( केवलं प्रश्नद्वयम् ) (1x2=2)

(i) 'समस्त नगरे' इत्यत्र विशेष्यपदम् किम् ?  
 (ii) 'प्रविश्य' इति पदस्य कः विलोमः नाट्यांशे आगतः ?  
 (iii) 'अपश्यम्' इति क्रियापदस्य कर्तृपदं किम् ?

प्रश्न 16. रेखांकितपदानि आधृत्य प्रश्ननिर्माणं कुरुत ( केवल पञ्च प्रश्नाः )

(1x5=5)

- (i) नकुलस्य मुखं पादाः च रक्तेन विलिप्ताः ।
- (ii) वैनतेयः अगच्छन् एकं पदं न गच्छति ।
- (iii) प्रतापः शिलायाम् उपविष्टः आसीत् ।
- (iv) विद्यया सदगुणाः भान्ति ।
- (v) आरुणः पुत्रः श्वेतकेतुः आसीत् ।
- (vi) अष्टावक्रः पण्डितान् अजयत् ।

प्रश्न 17. अधोलिखितस्य श्लोकस्य अन्वयं मञ्जूषायाः उचितपदैः पूरयत –

(½x4=2)

गौरवं प्राप्यते दानात् न तु वित्तस्य सञ्चयात् ।

स्थितिरुच्चैः पयोदानां पयोधीनामधः स्थितिः ॥

अन्वयः – दानात् (i) ..... प्राप्यते । वित्तस्य (ii) ..... न तु (एव प्राप्यते) पयोदानाम् स्थितिः  
 (iii) ..... (भवति) (iv) ..... स्थितिः अधः (एव भवति) ।

मञ्जूषात् –	पयोधीनाम्	गौरवं	उच्चैः	सञ्चयात्
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अथवा

उचित-भावार्थं चित्त्वा लिखत –

(1x2=2)

- (i) ज्ञानविघ्नोऽहङ्कारः ।  
 (क) ज्ञानात् अहङ्कारः बाधकः जायते ।  
 (ख) ज्ञानप्राप्तौ अहङ्कारः बाधकः भवति ।  
 (ग) अहङ्कारे ज्ञानं विघ्नं करोति ।
- (ii) स जातो येन जातेन याति वंशः समुन्नतिम् ।  
 (क) यस्य जन्ममात्रेण वंशः समुन्नतिम् याति ।  
 (ख) यस्य जन्मनः पश्चात् वंशः समुन्नतिं याति ।  
 (ग) यस्य गुणैः कर्मणे च वंशः सर्वविधाम् उन्नतिं करोति ।

प्रश्न 18. अधोलिखितवाक्येषु रेखांकितपदानां प्रसङ्गानुसारं उचितम् अर्थं चिनुत – ( केवलं प्रश्नचतुष्टयम् )

(1x4=4)

- (i) क्षिप्रम् अक्रियमाणस्य कालः पिबति तद्रसम् ।  
 (क) क्षिप्रा (ख) शीघ्रम् (ग) क्षत्रियः (घ) क्षमा
- (ii) ऐश्वर्यस्य विभूषणं सुजनता ।  
 (क) जनता (ख) सम्पन्नता (ग) सज्जनता (घ) सुलिलिता
- (iii) प्रतापः अरण्ये शिलायाम् उपविष्टः आसीत् ।  
 (क) वने (ख) जले (ग) समतले (घ) पर्वते
- (iv) महीरुहाः धन्याः सन्ति ।  
 (क) पर्वतः (ख) वृक्षाः (ग) शाखाः (घ) पुष्पाणि
- (v) इदं निशम्य अष्टावक्रः प्रत्यवदत् ।  
 (क) श्रुत्वा (ख) ज्ञात्वा (ग) पठित्वा (घ) हसित्वा

प्रश्न 19. मञ्जूषापदसहायतया कथापूर्ति कुरुत –

(½x8=4)

बालः अष्टावक्रः मित्रैः सह क्रीडित्वा गृहम् (i) ..... । सः (ii) ..... अपृच्छत् – हे मातः!  
 मम पिता कुत्र अस्ति ? (iii) ..... अवदत – हे पुत्र! तव पिता राजर्षः (iv) ..... सभायां विद्वदभिः  
 (v) ..... शास्त्रार्थाय गतः आसीत् । सः अधुना यावत् न आगतः । अहम् अपि (vi) ..... अस्मि ।  
 अष्टावक्रः मात्रा अनुमतिं स्वीकृत्य जनकस्य सभाम् अगच्छत् । सः (vii) ..... शास्त्रार्थं कृत्वा पण्डितान्  
 (viii) ..... ।

मञ्जूषा –	अजयत्	आगच्छत्	माता	तत्र
	चिन्तातुरा	जनकस्य	सह	मातरम्



# DELHI PUBLIC SCHOOL, BHILAI

Date : 05.03.2025

Class : IX

Name : \_\_\_\_\_

ANNUAL EXAMINATION 2024-25

SUBJECT : MATHEMATICS

Time : 3 Hrs.

Max. Marks : 80

Roll No. \_\_\_\_\_

**General Instructions :**

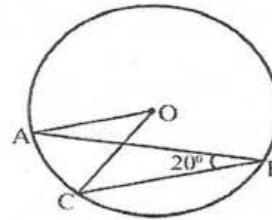
1. This Question Paper has 5 sections : A, B, C, D and E.
2. Section A has 20 MCQs carrying 01 mark each.
3. Section B has 5 questions carrying 02 marks each.
4. Section C has 6 questions carrying 03 marks each.
5. Section D has 4 questions carrying 05 marks each.
6. Section E has 3 case based Integrated units of 1, 1 and 2 marks respectively.
7. All questions are compulsory. However, an internal choice in 2 questions of 5 marks, 2 questions of 3 marks and 2 questions of 2 marks has been provided. An internal choice has been provided in the 2 marks questions of Section E.
8. Draw neat figures wherever required.

**Section – A****(This section consists of 20 questions of 1 mark each)**

Q.1 The product of a non-zero rational number with an irrational number is:  
(A) irrational number    (B) rational number    (C) whole number    (D) natural number

Q.2 Two complementary angles are such that two times the measure of one is equal to three times the measure of the other. The measure of the smaller angle, is:  
(A)  $45^\circ$     (B)  $30^\circ$     (C)  $36^\circ$     (D) none of these

Q.3 In the given figure O is the centre of the circle, if  $\angle ABC = 20^\circ$ , then  $\angle AOC$  is equal to:



(A)  $30^\circ$     (B)  $60^\circ$     (C)  $90^\circ$     (D)  $40^\circ$

Q.4 If the sides of a triangle are 16cm, 30cm and 34 cm then its area is:  
(A)  $225 \text{ cm}^2$     (B)  $240 \text{ cm}^2$     (C)  $450 \text{ cm}^2$     (D)  $350 \text{ cm}^2$

Q.5 If  $x + \frac{1}{x} = 5$ , then  $x^2 + \frac{1}{x^2} =$   
(A) 25    (B) 10    (C) 23    (D) 27

Q.6 If (4,19) is a solution of the equation  $y=ax+3$ , then  $a =$   
(A) 3    (B) 4    (C) 5    (D) 6

Q.7 The figure formed by joining the mid-points of the adjacent sides of a rectangle is a:  
(A) square    (B) rhombus    (C) trapezium    (D) none of these

Q.8 If the ratio of volumes of two spheres is 1:8, then the ratio of their surface areas is:  
(A) 1:2    (B) 1:4    (C) 1:8    (D) 1:16

Q.9 The chord of a circle is equal to its radius. The angle subtended by this chord at the minor arc of the circle, is:  
(A)  $60^\circ$     (B)  $75^\circ$     (C)  $120^\circ$     (D)  $150^\circ$

Q.10 Two straight lines AB and CD cut each other at O. If  $\angle BOD = 63^\circ$ , then  $\angle BOC =$   
(A)  $107^\circ$     (B)  $77^\circ$     (C)  $117^\circ$     (D)  $127^\circ$

Q.11 In triangles ABC and PQR three equality relations between their corresponding parts are  $AB=QP$ ,  $\angle B=\angle P$  and  $BC=PR$ . State which of the congruence condition applies:  
(A) SAS    (B) ASA    (C) SSS    (D) RHS

Q.12 The value of  $(256)^{0.16} \times (256)^{0.9}$  is:  
(A) 8    (B) 4    (C) 16    (D) 32

Q.13 In a parallelogram ABCD, if  $\angle DAB=75^\circ$  and  $\angle DBC=60^\circ$ , then  $\angle BDC=$   
(A)  $75^\circ$     (B)  $60^\circ$     (C)  $45^\circ$     (D)  $55^\circ$

Q.14 Which of the following needs a proof?  
 (A) Axiom      (B) Theorem      (C) Postulate      (D) Definition

Q.15 Two adjacent angles on a straight line are in the ratio 5:4, then the measure of these angles are:  
 (A)  $100^\circ$  and  $80^\circ$       (B)  $120^\circ$  and  $60^\circ$       (C)  $110^\circ$  and  $70^\circ$       (D)  $130^\circ$  and  $50^\circ$

Q.16 If  $x=2$  is a zero of the polynomial  $2x^2 + 3x - k$ , then the value of  $k$  is:  
 (A) -4      (B) 0      (C) 8      (D) 14

Q.17 A metallic sphere of radius 12cm is melted and cast into a cone whose base radius is 16cm. The height of the cone is:  
 (A) 27cm      (B) 18cm      (C) 37cm      (D) 47cm

Q.18 In an isosceles triangle, if the vertex angle is twice the sum of the base angles, then the measure of vertex angle is:  
 (A)  $120^\circ$       (B)  $60^\circ$       (C)  $45^\circ$       (D)  $90^\circ$

**Direction :**

In question numbers 19 and 20, a statement of assertion (A) is followed by a statement of Reason (R). Choose the correct option.

(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
 (B) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).  
 (C) Assertion (A) is true but Reason (R) is false.  
 (D) Assertion (A) is false and Reason (R) is true.

Q.19 **Assertion (A) :** All the interior angles of a quadrilateral are acute angles.  
**Reason (R) :** The sum of all the interior angles of a quadrilateral is  $360^\circ$ .

Q.20 **Assertion (A) :** A circle of radius 3 cm can be drawn through two points A, B such that  $AB = 6$  cm.  
**Reason (R) :** Through three collinear points, a circle can be drawn.

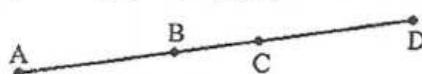
**Section – B**  
 (This section consists of 5 questions of 2 marks each)

Q.21 Factorise:  $6x^2 + 17x + 5$  by splitting the middle term.

**OR**

Without actually calculating the cubes, find the value of:  $(-12)^3 + (7)^3 + (5)^3$ .

Q.22 In the given figure, if  $AC = BD$ , then prove that  $AB = CD$ .

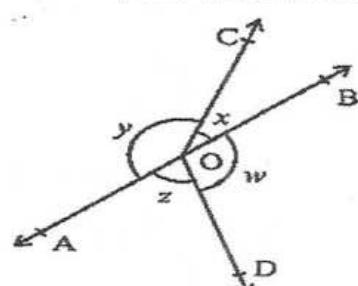


Q.23 Curved surface area of a cone is  $308 \text{ cm}^2$  and its slant height is 14 cm.  
 Find (i) radius of the base and (ii) total surface area of the cone.

**OR**

The diameter of the moon is approximately one fourth of the diameter of the earth. Find the ratio of their surface areas.

Q.24 In the given figure, if  $x + y = w + z$ , then prove that  $AOB$  is a line.



Q.25 The following table gives the life times of 400 neon lamps:

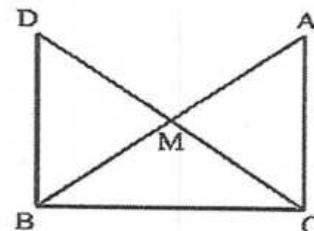
Life Time (in hours)	300-400	400-500	500-600	600-700
No. of lamps	14	56	60	86

Represent the given information with the help of a histogram.

**Section – C**  
(This section consists of 6 questions of 3 marks each)

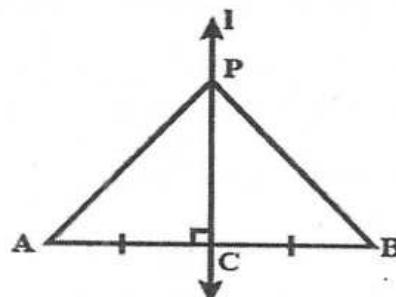
Q.26 Find three different irrational numbers between the rational numbers  $\frac{5}{7}$  and  $\frac{9}{11}$ .

Q.27 In right triangle ABC, right angled at C, M is the mid-point of hypotenuse AB. C is joined to M and produced to a point D such that  $DM = CM$ . Point D is joined to point B as shown in the figure. Show that: (i)  $\Delta AMC \cong \Delta BMD$  (ii)  $\angle DBC$  is a right angle.



OR

AB is a line segment and line  $l$  is its perpendicular bisector such that point P lies on  $l$ , then show that P is equidistant from A and B.



Q.28 If the non-parallel sides of a trapezium are equal, prove that it is cyclic.

OR

If two equal chords of a circle intersect within the circle, prove that the line joining the point of intersection to the centre makes equal angles with the chords.

Q.29 Sides of a triangle are in the ratio of 12 : 17 : 25 and its perimeter is 540cm. Find its area.

Q.30 Verify that:  $x^3 + y^3 + z^3 = \frac{1}{2}(x + y + z)[(x - y)^2 + (y - z)^2 + (z - x)^2]$ .

Q.31 Write three solutions for the equation:  $2x + y = 7$ .

**Section – D**  
(This section consists of 4 questions of 5 marks each)

Q.32 Simplify:  $\frac{1}{2+\sqrt{3}} + \frac{2}{\sqrt{5}-\sqrt{3}} - \frac{1}{2-\sqrt{5}}$ .

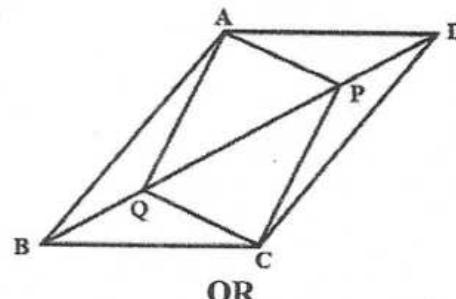
OR

If both a and b are rational numbers, find the values of a and b:  $\frac{5+2\sqrt{3}}{7+4\sqrt{3}} = a + b\sqrt{3}$ .

Q.33 What length of tarpaulin 3m wide will be required to make conical tent of height 8m and base radius 6m? Assume that the extra length of material that will be required for stitching margins and wastage in cutting is approximately 20cm (Use  $\pi = 3.14$ ).

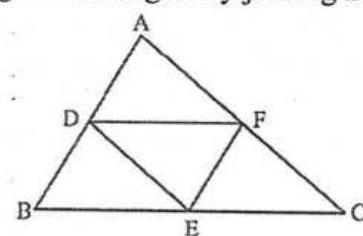
Q.34 Factorise: (i)  $2x^2 + y^2 + 8z^2 - 2\sqrt{2}xy + 4\sqrt{2}yz - 8xz$ .  
(ii)  $27 - 125a^3 - 135a + 225a^2$ .

Q.35 In parallelogram ABCD, two points P and Q are taken on diagonal BD such that  $DP = BQ$  as shown in the figure. Show that: (i)  $\Delta APD \cong \Delta CQB$  (ii)  $AP = CQ$  (iii)  $\Delta AQB \cong \Delta CPD$  (iv)  $AQ = CP$  (v) APCQ is a parallelogram.



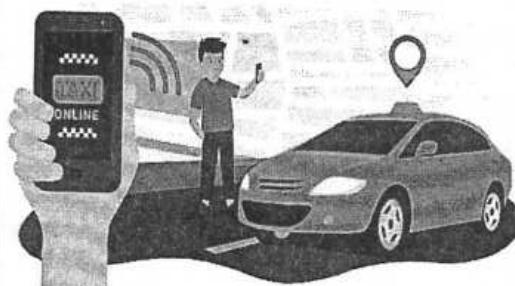
OR

In  $\Delta ABC$ , D, E and F are respectively the mid-points of sides AB, BC and CA as shown in the figure. Show that  $\Delta ABC$  is divided into four congruent triangles by joining D, E and F.



**Section – E**  
 (This section consists of 3 Case Study Questions of 4 marks each)

Q.36



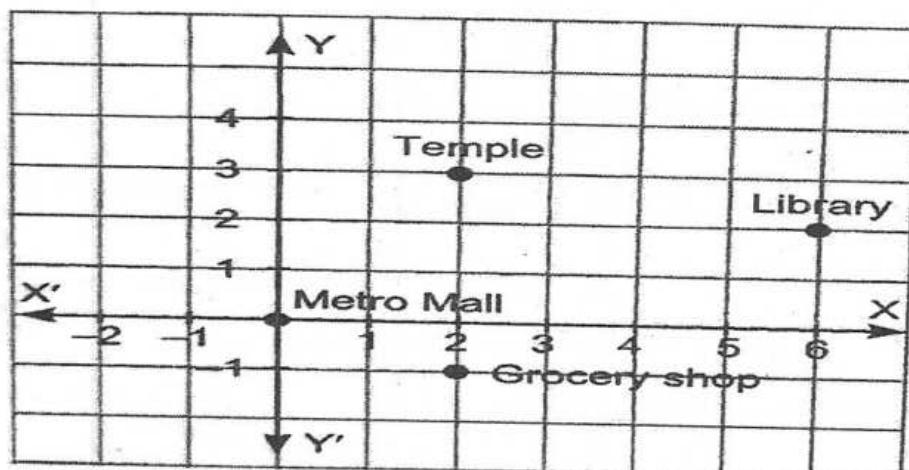
Rohan, a student of Class: - IX books an ola cab for travelling the tourist places of Jaipur city. The taxi fare for the first km is ₹ 8 and for the subsequent distance is ₹ 5 per km.

- Consider the distance covered as  $x$  km and the total fare as ₹  $y$ , write a linear equation for this information.
- If the distance covered is 11km, then find the total fare.
- Compare the above equation with  $ax + by + c = 0$  and find the value of  $(a + b + c)$ .

**OR**

If the total fare is ₹ 93, then find the total distance.

Q.37



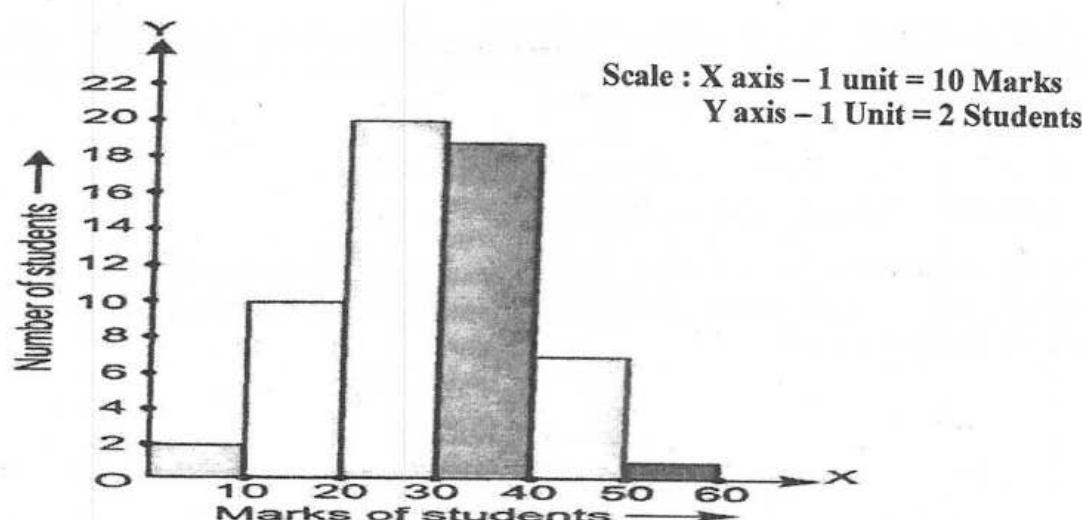
With reference to the above graph answer the following questions.

- What are the coordinates of the temple?
- What is the abscissa point of the library?
- What is the distance between temple and the grocery shop?

**OR**

What is the distance between library and Y axis.

Q.38



A mathematics teacher in a school asks the class monitor of class 9 to collect the marks of all students in mathematics periodic test. He collected the marks and prepare a mark list as per the instruction given by the teacher. After preparing the frequency distribution table he draws histogram, as shown in the above figure.

- What is the width of the class?
- What is the total number of students in the class?
- How many students scored 50% and above marks?

**OR**

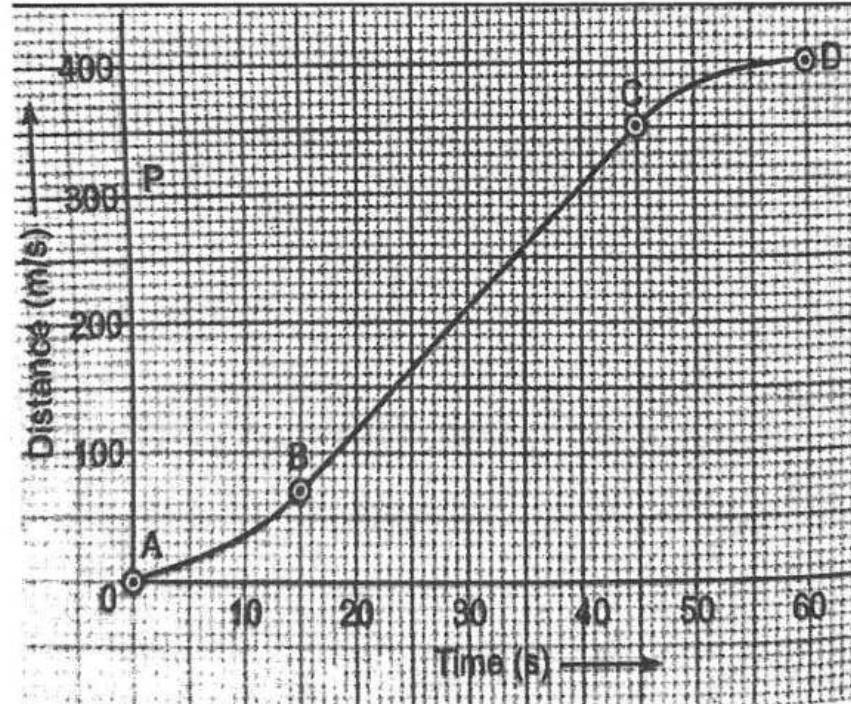
How many students scored less than 50% marks?



**General Instructions:**

- There are **39** questions in this question paper.
- The question paper comprises **THREE SECTIONS : A, B and C**.
- All three sections and questions are compulsory.
- 1 mark (MCQs and Assertion – Reason questions) ; 2 marks ; 3 marks and 5 marks questions along with **3 case-based** questions each of 4 marks (1 in each section) are given.
- There is no overall choice in Question Paper, however internal choice is provided in some questions.
- In MCQs correct option and answer/statement both should be written.
- For the questions based on assertion and reasoning question two statements are given one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (A), (B), (C) and (D) as given below and the statement related to the option must be written.

**Section – A (Physics : 27 Marks)**



(a) Describe her motion from B to C.  
 (b) Calculate her average speed from A to D.

05. (a) What will be the kinetic energy of a body when its mass is made four times and the velocity is doubled?  
 (b) Two bodies of same mass start from rest and move with velocities of  $V$  and  $2V$  respectively. Find the ratio of their kinetic energies. (02)

06. (a) Explain how bats use ultrasound to catch a prey.  
 (b) Derive a relation between the frequency, wavelength and velocity of the wave. (02)

07. (a) What is the use of velocity – time graph for an object moving with uniform velocity?  
 (b) Write any one difference between speed and velocity.  
 (c) A body is moving along a circular path of radius R. With the help of diagram find displacement of the body when it completes half a revolution. (03)

08. (a) Why are the ceilings of concert halls curved?  
 (b) Write any two factors affecting the speed of sound.  
 (c) A human heart, on the average is found to beat 75 times a minute. Calculate its frequency. (03)

09. (a) When is the work done by a force is positive? Give one example.  
 (b) A man carrying a bag of total mass 25 kg climbs up to a height of 10 m in 50 s. Calculate the power delivered by him to the bag. [Given  $g = 9.8 \text{ m s}^{-2}$ ] (03)

10. (a) Identical packets are dropped from two aeroplanes, one above the equator and the other above the north pole, both at height h. Assuming all conditions are identical, will these packets take the same time to reach the earth's surface? Justify your answer.  
 (b) Write any two differences between 'g' and 'G'.  
 (c) The weight of the boy on the surface of the earth is 294 N. Find his mass. [Given  $g = 9.8 \text{ m s}^{-2}$ ] (05)

**OR**

(i) State Archimedes' Principle.  
 (ii) Explain, why a truck or a motor bus has much wider tyres.  
 (iii) Gravitational force on the surface of the moon is only  $1/6$  as strong as gravitational force on the earth. What is the weight in newton of a 20kg object on the moon and on the earth?

11. **Read the given passage and answer the questions based on the passage and related studied concepts. (Case Based Question)**

Amiya and Jennet were enjoying evening walk on the roadside. A man was walking ahead of them. He was eating banana. He threw the peel on the path. Jennet could not see it. When she unknowingly placed her foot on the peel, she slipped. Amiya was careful, she could hold unbalanced Jennet and saved her from injury. She stopped the man and told him that he did a blunder by throwing banana peel on roadside, but the man just laughed and went away.

(a) State Newton's third law of motion. (01)  
 (b) Why Jennet slipped when she placed her foot on the banana peel? (01)  
 (c) How do action and reaction forces act on when a person walks on ground? (02)

**OR**

Explain, why is it difficult to hold a hose, which ejects a large amount of water at a high velocity?

**Section – B (Chemistry : 25 Marks)**

12. Gases can be converted to liquid by  
 (A) decreasing temperature, decreasing pressure (B) decreasing temperature, increasing pressure  
 (C) increasing temperature, decreasing pressure (D) increasing temperature, increasing pressure (01)

13. The kinetic energy of inter particles is maximum in  
 (A) wood (B) ghee (C) table (D) oxygen (01)

14. Blood and sea water are  
 (A) mixtures (B) compound  
 (C) blood is a mixture, sea water is a compound (D) blood is a compound, sea water is a mixture (01)

15. What is the Latin name of sodium?  
 (A) Kalium (B) Plumbium (C) Natrium (D) Niobium (01)

16. What is the maximum number of electrons that can be present in the first shell of atom?  
 (A) 1 (B) 2 (C) 4 (D) 8 (01)

17. Which of the following is a chemical change?  
 (A) Decaying of wood (B) Cutting of paper  
 (C) Sawing of wood (D) Hammering of nail into a piece of wood (01)

18. The symbol for sodium is  $^{23}_{11}Na$ . What can be concluded about sodium from the symbol?  
 (A) It contains 11 neutrons (B) It contains 12 protons  
 (C) It contains 12 neutrons (D) It contains 34 electrons (01)

19. **Assertion (A) :** The atomic masses of some elements are in fractions and not a whole number.  
**Reason (R) :** The fractional atomic masses of some elements are due to the existence of their isotopes having different masses. (01)

20. Calculate the molecular mass of (a)  $HCl$  (b)  $NH_3$  (02)

21. (a) Give reason why ice floats on water?  
(b) Define latent heat of vapourisation. (03)

22. What is a colloid? Write down the properties of a colloid. (Any four points) (03)

**OR**

Define: (a) Pure Substance (b) Suspension (c) Saturated Solution

23. Read the given passage and answer the questions based on the passage and related studies concepts.  
(Case Based Questions)

Atoms and molecules are the building blocks of matter. An atom is the smallest unit of an element that retains its chemical properties, while a molecule is a group of two or more atoms held together by chemical bonds. The electrons in an atom occupy specific energy levels and the outermost shell is known as the valence shell.

(a) What is a group of two or more atoms linked together by chemical bonds called? (01)  
(b) What is an atomic mass unit? (01)  
(c) Define cation and anion. (02)

**OR**

(c) Which postulate of Dalton's atomic theory can explain the law of definite proportions?

24. (a) Explain Bohr Model of atom with energy level diagram of an atom.

(b) If bromine atom is available in the form, of say, two isotopes  $^{79}_{35} Br$  (49.7%) and  $^{81}_{35} Br$  (50.3%)  
Calculate the average atomic mass of bromine atom. (05)

**OR**

(a) Write the distribution of electron in carbon atom with electron dot symbol.  
(b) Composition of the nuclei of two atomic species X and Y are given as under:

	X	Y
Proton	= 6	6
Neutrons	= 6	8

Give the mass numbers of X and Y. What is the relation between the two species?

### Section – C (Biology : 28 Marks)

25. Amoeba acquires its food through a process called –  
(A) Exocytosis (B) Endocytosis (C) Plasmolysis (D) Osmosis (01)

26. What will happen to the cells of boiled potato when they are kept in water?  
(A) The cells will Swell (B) The cells will Shrink  
(C) No effect on the size of cells (D) Size of cells will increase and then decrease (01)

27. Which organelle in the cells is called as 'Suicide bag'?  
(A) Lysosome (B) Lysozyme  
(C) Golgi bodies (D) Endoplasmic reticulum (01)

28. Which of the following statements is wrong?  
(A) Ribosomes are present in both prokaryotes and eukaryotes.  
(B) Ribosomes are present in eukaryotes but are absent in Prokaryotes.  
(C) Cell membrane is made of protein and lipid.  
(D) Mitochondria is powerhouse of the cell. (01)

29. Contractile Proteins are found in –  
(A) Bones (B) Cartilage (C) blood (D) Muscles (01)

30. In dead tissues of plants, there is extra deposition of \_\_\_\_\_ in the cell wall.  
(A) Lignin (B) Cellulose (C) Cutin (D) Glucose (01)

31. Which of the following is a micronutrient required by plant?  
(A) Magnesium (B) Sulphur (C) Iron (D) Calcium (01)

32. Assertion (A) : Apis dorsata is the variety commonly used for commercial honey production.  
 Reason (R) : The value of quality of honey depends upon pasturage. (01)

33. Assertion (A) : Plant cells, Fungi and Bacteria can tolerate very dilute solution.  
 Reason (R) : They have cell wall to protect cells from bursting. (01)

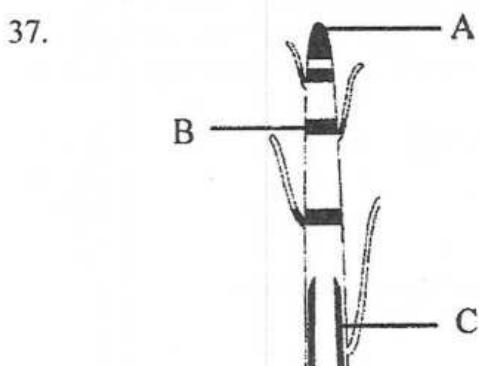
34. Why bacteria is called a prokaryote? Give two reasons. (02)

35. Which cell organelle is involved in detoxification of drugs and poisons? What is the other function of this cell organelle? (02)

OR

Describe the structure of plastids. What is its role in plant cells?

36. Differentiate between striated, unstriated and cardiac muscles on the basis of their structure and location in the body. (03)



What type of plant tissue is shown in the diagram? Label A, B and C and write which one is responsible for thickness of stem ? (03)

38. What is a connective tissue in animals? Write its two characteristics. Differentiate between –  
 (i) Bone and cartilage  
 (ii) Tendon and ligament  
 (iii) Areolar and Adipose tissues (05)

OR

What are the different permanent tissues in plants? Write briefly about the three types of simple permanent tissues with their examples.

39. Case based study questions. Read the following paragraph and write answers –

Manure contains large quantities of organic matter and also supplies small quantities of nutrients to the soil. Manure is prepared by the decomposition of animal excreta and plant waste. It helps in enriching soil with nutrients and organic matter and increases soil fertility. The bulk of organic matter in manure helps in improving soil structure.

(a) Which process converts animal excreta and plant waste into manure? (01)  
 (b) How manure is more advantageous than chemical fertilizers? (01)  
 (c) What is composting? How a vermi-compost formed? (02)

OR

How green manure is made ? Explain with example.

**General Instructions:**

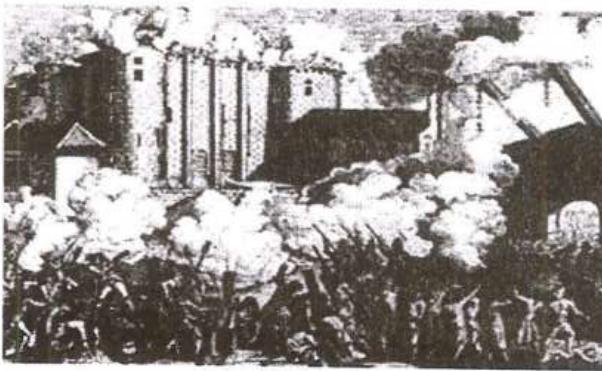
- Attempt all questions.
- Answer 1 mark questions as directed.
- Very Short Answer Type Questions carry 2 marks each. Answer to each question should not exceed 40 words.
- Short Answer Type Questions carry 3 marks each. Answer to each question should not exceed 60 words.
- Long answer type questions carry 5 marks each. Answer to each question should not exceed 120 words.
- Case based questions with three sub questions carry 4 marks each.
- Map based questions carry 5 marks with two parts, History (2 marks) and Geography (3 marks).
- There is no overall choice in the question paper. However, an internal choice has been provided in a few questions. Only one of the choices in such questions has to be attempted.
- In addition to these, separate instructions can be there for some questions, wherever necessary.

**SECTION – A : HISTORY & CIVICS (40 MARKS)**  
**MCQs (1x12=12)**

- Consider the following statements and choose the right one –
  - from 1930 to 1938, the Nazis terrorised and segregated the Jews.
  - Jungvolk is the Nazi Youth group for children below 14 years of age.
  - The Soviet Red Army inflicted a humiliating defeat on Germany at Berlin.
  - In 1942, a Tripartite pact was signed between Germany, Italy and Japan.(1)
- Which of the following is not a function of the Lok Sabha in the Indian Parliament?
  - Passing of Money bills.
  - Electing alone the President of India
  - Expressing confidence or No-Confidence in Council of Ministers.
  - Approving the Annual Budget(1)
- Consider the statements given below and choose the correct answer.
 

**Statement 1 :** Political Parties are essential for the functioning of a democratic system.

**Statement 2 :** A single political party can control the government without any opposition in democracy.

  - Statement 1 is correct and Statement 2 is incorrect.
  - Statement 1 is incorrect and Statement 2 is correct.
  - Both 1 and 2 are incorrect.
  - Both 1 and 2 are correct.(1)
- Assertion (A) :** The Lok Sabha is more powerful than Rajya Sabha in many respects.  
**Reason(R) :** The Lok Sabha controls the council of Ministers and the Prime Minister must enjoy the support of the majority in the Lok Sabha.
 (1)
  - Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
  - Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).
  - Assertion (A) is true but Reason (R) is false.
  - Assertion (A) is false but Reason (R) is true.
- Which of the following is not a characteristic of a democratic government ?
  - People have the right to elect their representatives.
  - The Government is accountable to the people.
  - The Government has unlimited powers.
  - The citizens have fundamental rights.(1)
- Identify the key event depicted in the image and choose the correct answer.
 
  - Signing of the Declaration of the Rights of Man.
  - Storming of the Bastille.
  - Execution of King Louis XVI.
  - Establishment of the Directory.(1)

7. Consider the statement given below and choose the correct answer :

**Statement 1 :** The Declaration of the right of man and of the citizen was adopted during French Revolution.

**Statement 2 :** The declaration emphasized the importance of Monarchy and the privileges of the nobility.

(1)

(A) Statement 1 is correct and Statement 2 is incorrect.  
(B) Statement 1 is incorrect and Statement 2 is correct.  
(C) Both 1 and 2 are incorrect.  
(D) Both 1 and 2 are correct.

8. Choose the correct option to fill in the blank.

Currently in the Lok Sabha \_\_\_\_\_ seats are reserved for the Scheduled tribe.

(A) 47 (B) 37 (C) 57 (D) 67

(1)

9. Arrange the following events from the Russian Revolution in Chronological Order –

i. Abdication of Tsar Nicholas II.  
ii. Establishment of the provisional government.  
iii. Bolshevik Seizure of power.  
iv. Formation of Petrograd Soviet.

**Options:**

(A) i, ii, iv, iii (B) iv, ii, i, iii (C) i, iv, ii, iii (D) ii, i, iv, iii (1)

10. Identify the executive with the help of the following information:

- He is the head of the government.
- He does not have a fixed tenure.
- He chains and takes most of the decisions in the cabinet meetings.
- He also has the power to dismiss ministers.

(A) The President (B) The Prime Minister  
(C) The Speaker of Lok Sabha (D) Council of States. (1)

11. Choose the correct option to fill in the blank.

In India, the body responsible for conducting free and fair elections is \_\_\_\_\_.

(A) The Supreme Court (B) The Parliament  
(C) The Cabinet (D) The Election Commission (1)

12. Which of the following is not a feature of the Indian Constitution?

(A) It is the longest written constitution in the world.  
(B) It is a unitary system of government.  
(C) It has a federal structure.  
(D) It has a parliamentary system of government. (1)

#### VERY SHORT ANSWER QUESTION (2x3=6)

13. Explain any two constitutional provisions that make India a secular state. (2)

14. The Treaty of Versailles was harsh and humiliating. Justify the statement. (2)

**OR**

‘Politically the Weimar was a fragile Republic.’ Explain the statement.

15. Why do we need rights in a democracy? (2)

#### SHORT ANSWER-BASED QUESTIONS (3x2=6)

16. Describe the economic condition of Russia before 1905. (3)

17. Elections in China do not represent people’s verdict. Explain the statement. (3)

#### LONG ANSWER-BASED QUESTIONS (5x2=10)

18. What were the main changes brought about by the Bolsheviks immediately after the October Revolution? (5)

**OR**

What were the effects of the Great Economic depression of 1929 – 32 on Germany?

Contd...3

19. What is a preamble? Explain any three guiding principles enshrined in the preamble to the Indian Constitution? (2+3=5)

OR

What do you mean by constitutional amendments ? State its significance in a democratic country like India.

**CASE-BASED QUESTIONS (4x1=4)**

20. Read the source given below and answer the following questions that follow: (4)

The year 1904 was a particularly bad one for Russian workers. Prices of essential goods rose so quickly that real wages declined by 20 percent. The membership of workers' associations rose dramatically.

During 1905 Revolution, the Tsar allowed the creation of an elected consultative parliament or Duma. After 1905, most committees and unions worked unofficially, since they were declared illegal. Several restrictions were placed on political activity.

(a) Why was the year 1904 considered particularly a bad one for the Russian Workers? (1)  
 (b) What was the reason of decline in real wages for Russian Workers? (1)  
 (c) Which incident took place in 1905 in Russia and what was the name of consultative parliament of Russia? (1+1=2)

**MAP SKILL-BASED QUESTION (1x 2=2)**

21. Two places A and B have been marked on the given outline map of Europe. Identify them and write their correct names in your answer sheet. (1+1=2)



**SECTION – B : GEOGRAPHY (20 MARKS)**

22. Which of the following latitude passes almost through the centre of India ?  
 (A) Arctic Circle (B) Standard Meridian  
 (C) Tropic of Cancer (D) Tropic of Capricorn (1)

23. **Assertion (A) :** The Eastern plains along the Bay of Bengal are wide and level.  
**Reason (R) :** Large rivers, such as the Mahanadi, the Godavari, the Krishna and the Kaveri have formed extensive deltas on the eastern coast. (1)

(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
 (B) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).  
 (C) Assertion (A) is true but Reason (R) is false.  
 (D) Assertion (A) is false but Reason (R) is true.

24. India does not share its land boundary with which of the following country ?  
 (A) Nepal (B) Myanmar (C) Pakistan (D) Maldives (1)

25. Name the largest inhabited riverine island in the world. In which river is it located ? (1+1)

26. Rivers have been of fundamental importance throughout the human history. State some economic benefits of rivers. (3)

27. What do you understand by "break" in monsoon? Why is the monsoon considered a unifying bond? (2+3)

OR

Describe the regional variations in the climatic conditions of India with the help of suitable examples. (1+1+1+1=5)

28. Read the source given below and answer the questions that follow : (4)

The adolescent population constitutes one-fifth of total population of India. Nutrition requirements of adolescents are higher than those of normal child or adult. Poor nutrition can lead to deficiency and stunted growth. But in India, the diet available to adolescents is inadequate in all nutrients. A large number of adolescent girls suffer from anaemia. The adolescent girls have to be sensitised to the problems they confront.

The NPP 2000 provides a policy framework for imparting free and compulsory school education up to 14 year of age, reducing infant mortality rate to below 30 per 1000 live births, achieving universal immunisation of children against all vaccine preventable diseases, promoting delayed marriage for girls and making family welfare a people-centred programme.

(a) The children of which age group are considered adolescents? (1)  
 (b) What can poor nutrition lead to? (1)  
 (c) What are the main provisions of the NPP 2000? (2)

29. On the given political map of India, locate and label the following places/features. (Any three) (1+1+1=3)

(i) K<sub>2</sub>  
 (ii) Lake Chilika  
 (iii) One Area receiving less than 20 cm of rainfall  
 (iv) The state having highest density of population

### SECTION – C : ECONOMICS (20 MARKS)

30. Identify the type of unemployment with the help of following information:  
 (a) In this kind of unemployment, people who are visibly employed but are not actually employed.  
 (b) Such employment does not contribute to the output of an economy.  
 (c) It is actually associated with family members engaged in agricultural activity. (1)

31. **Assertion (A) :** Poverty line is an imaginary line used by any country to determine its poverty.  
**Reason (R) :** It varies time to time, place to place and country to country. (1)

(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
 (B) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).  
 (C) Assertion (A) is true and Reason (R) is wrong.  
 (D) Assertion (A) is false and Reason (R) is correct.

32. Prime Minister Rozgar Yojana (PMRY) was started in 1993. The aim of the programme is :  
 (I) to treat self employment opportunities.  
 (II) To help educated unemployed youth in rural areas and small towns.  
 (III) to help in setting up small business and industries.  
 (IV) to promote higher education  
 (A) Only I (B) III and IV (C) I, II and III (D) Only II (1)

33. Study the picture carefully and choose the title that closely relates to the given picture :



(A) Buffer Stock  
 (B) Food Corporation of India  
 (C) Minimum Support Price  
 (D) Ration Shop (1)

34. Consider the statements given below and choose the correct answer.

**Statement I :** In poor families all suffer, but some suffer more than others.

**Statement II :** In some cases women, elderly people and female infants are denied equal access to resources available to the family.

**Option :**

(1)

- (A) Statement I is correct and Statement II is incorrect.
- (B) Statement I is incorrect and Statement II is correct.
- (C) Both Statement I and II are incorrect.
- (D) Both Statement I and II are correct.

35. What is the main goal of the following programme?

- (a) Sarva Shiksha Abhiyan
- (b) Mid-day Meal Scheme
- (c) Bridge Course.

(1+1+1=3)

**OR**

Describe the role of health in Human Capital formation. Explain the two investments that can improve the quality of human capital.

36. How is food security affected during a calamity?

(3)

37. Read the source given below and answer the questions that follows :

(4)

While determining the poverty line in India a minimum level of food requirement, clothing foot wear, fuel and light, educational and medical requirement etc. are determined for subsistence.

These physical quantities are multiplied by their prices in rupees. The present formulae for food requirement for estimating the poverty line is based on the desired calorie requirement. Food items such as cereals, pulses, vegetables milk, oil, sugar etc. together provide these needed calories. The calorie needs vary depending on age, sex and the type of work that a person does. The accepted average calorie requirement in India is 2400 calories per person per day in rural areas and 2100 calories per person per day in urban areas.

Since people living in rural areas engage themselves in more physical work, calorie requirement in rural areas are considered to be higher than in urban areas. The poverty line is estimated periodically by conducting Sample Surveys. These surveys are carried out by the National Sample Survey Organisation (NSSO).

Answer the following questions :

(a) What criteria determines the minimum level of subsistence?

(1)

(b) Which organisation conducts the surveys periodically?

(1)

(c) Mention the reasons for the following"

(i) The calorie requirement in rural areas are more. Why?

(ii) The income requirement in urban areas are high. Why?

(1+1=2)

38. What has our government done to provide food security to the poor? Also discuss any two schemes launched by the government to ensure food security of India.

(3+2=5)

**OR**

What is food security? Name the most devastating famine that occurred in India. Explain the role of co-operatives in providing food and related items in food security.

(1+1+3=5)

**DELHI PUBLIC SCHOOL, BHILAI**

Date : 18.02.2025

**ANNUAL EXAMINATION 2024-25**

Time : 2 Hours

Class : IX

SUBJECT : ARTIFICIAL INTELLIGENCE (CODE : 417)

Max. Marks : 50

Name : \_\_\_\_\_

Roll No. \_\_\_\_\_

**General Instructions:**

1. Please read the instructions carefully.
2. This Question Paper consists of 22 questions in two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. All questions of a particular section must be attempted in the correct order.

<b>Q.1</b>	<b>Answer any 4 out of the given 6 questions on Employability Skills (1x4=4 marks)</b>
i.	Who initiates the process of communication? (A) Feedback (B) Sender (C) Receiver (D) Communication Channel
ii.	Which of the following enhances the impact of verbal communication? (A) Hand movement (B) Touch (C) Voice modulation (D) Hand Shake
iii.	Which of the following will influence the personality of a person? (A) Nature (B) Physical factors (C) Weather (D) All of the above
iv.	Which of the following is a collection of related web pages that can be accessed by a unique web address or URL? (A) Web server (B) Homepage (C) Website (D) Web address
v.	Which of the following is/are characteristic(s) of an entrepreneur? (A) Risk Taking Ability (B) Hard working (C) Good communication skills (D) All of the above
vi.	From which word the environment word is derived? (A) French word "Environia" (B) Latin word "Environ" (C) Arabic word "Envior" (D) Sanskrit word "Envior"

<b>Q.2</b>	<b>Answer any 5 out of the given 6 questions. (1x5= 5 marks)</b>
i.	What is the cycle of AI projects' primary objective? (A) To create complex AI models quickly. (B) To simplify the process of converting problems from the actual world into code. (C) To provide a structured framework for managing AI projects. (D) To reduce the cost of developing AI based remedies.
ii.	What is the initial stage of AI project cycle? (A) Outlining the technology specifications for AI model. (B) Converting the real world problem into an AI job with precise definitions. (C) Compiling and preparing the data required for AI model's training. (D) Selecting the AI algorithm that works best for the given job.
iii.	Which of the following may be produced from the confusion matrix? (A) Execution time and memory usage. (B) Recall, accuracy, precision and F1 score. (C) Learning rate and batch size. (D) Data acquisition and data cleaning.
iv.	What is the primary purpose of confusion matrix while evaluating the AI model? (A) To measure the execution time of the model. (B) To identify the best algorithm for the model (C) To measure the performance of an AI model using the test data (D) To optimize the hyper parameters of the model
v.	..... refers to the techniques and tools used to visualize data through complex statistical methods. (A) Data Acquisition (B) Data Exploration (C) Modelling (D) Evaluation
vi.	What is the PRIMARY concern regarding bias in AI systems?. (A) It can be computationally expensive to address. (B) It can lead to unfair or unjust treatment of individuals (C) It can slow down the development of AI models. (D) It can make AI models less accurate.

<b>Q.3</b>	<b>Answer any 5 out of the given 6 questions. (1x5= 5 marks)</b>
i.	Which of the following is not an example of data? (A) Audio (B) Video (C) Text (D) Hardware
ii.	The ..... illustrates the progressive transformation of raw data into actionable wisdom. (A) Data (B) Data Literacy (C) Data Pyramid (D) Information

iii.	The data pyramid begins with ..... (A) Top Level      (B) Raw data      (C) Information      (D) Knowledge	1
iv.	Data literacy enhances ..... abilities in individuals based on evidence. (A) Programming      (B) Understanding (C) Decision making      (D) Information	1
v.	Designing an ..... metric for data literacy program involves creating a structured framework. (A) Mathematics      (B) Logical      (C) Skill      (D) Evaluation	1
vi.	..... is about hunting the valuable information in different places, checking if it's good quality, and making sense of what we find? (A) Data discovery      (B) Data investigation (C) Data quality      (D) Data literacy	1
<b>Q.4</b>	<b>Answer any 4 out of the given 5 questions.</b>	
i.	..... are repeating designs or sequences that can be observed in numbers, shapes, images, languages or objects in our surroundings. (A) Patterns      (B) Iterations      (C) Sequences      (D) Statistics	1
ii.	Which of the following statements is not true? (A) Mathematics helps in study of mathematics. (B) With the use of mathematics you can solve the puzzles. (C) Mathematics helps to identify an order/ arrangement in the list of images or numbers. (D) The patterns only exist in mathematics	1
iii.	..... measures the amount of uncertainty of an event. (A) Probability      (B) Calculus      (C) Series      (D) Pattern	1
iv.	..... also helps in drawing conclusion from data. (A) Statistics      (B) Information      (C) Probability      (D) Sequence	1
v.	The ..... probability of an event occurring is somewhere between impossible and certain. (A) Possibility      (B) Existence      (C) Probability      (D) Outcome	1
<b>Q.5</b>	<b>Answer any 2 out of the given 3 questions.</b>	
i.	Name the type of Generative AI used for artistic image creation based on learned features from famous paintings. (A) Autoencoders      (B) GANs      (C) VAEs      (D) RNNs	1
ii.	Name the type of Generative AI used for creating new sentences that mimic the style of Shakespeare or generating dialogue for a chatbot. (A) Real Data      (B) GANs      (C) VAEs      (D) RNNs	1
iii.	..... Can be used to generate large volume of content quickly and efficiently. (A) Supervised learning      (B) Unsupervised (C) Generative AI      (D) Deep fake	1
<b>Q.6</b>	<b>Answer any 4 out of the given 5 questions.</b>	
i.	Which of the following is a data type that has two built-in values True or False? (A) String      (B) Boolean      (C) Integers      (D) Float	1
ii.	Which of the following conditional statements is used to test multiple conditions? (A) if      (B) if....elif....else      (C) if...else      (D) All of these	1
iii.	What will be the output of the following code? If(True): print("Hello") else: print("Hi") (A) Hello      (B) Hello Hi      (C) Hi      (D) Nothing	1
iv.	If LI=[‘O’,’R’,’A’,’N’,’G’,’E’] then what will be the output of following statement print(LI) (A) ‘ORANGE’ (C) ‘O’,’R’,’A’,’N’,’G’,’E’ (B) [‘O’, ,’R’,’A’,’N’,’G’,’E’] (D) None of the above	1
v.	Consider the following code A=[“Orange”] B=[“Education”] C=A+B print(c) Which of the following will be output? (A) [‘Orange’,’Education’] (C) Orange Education      (B) [‘Orange Education’] (D) Orange+Education	1

**SECTION B : SUBJECTIVE TYPE QUESTIONS**

Answer any 3 out of the given 5 questions (7 to 11) on Employability Skills. (2x3=6 marks)  
 Answer each question in 20 – 30 words.

Q.7	Name <u>any two</u> ways that can be used to improve relationships.	2
Q.8	Name the <u>four</u> components of the Internet.	2
Q.9	What do you mean by “gathering the resources”?	2
Q.10	Define Green jobs. Give Example.	2
Q.11	Define the term communication.	2

Answer any 4 out of the given 6 questions (12 to 17) in 20 – 30 words each. (2x4 =8 marks)

Q.12	How do you calculate Probability?	2
Q.13	Give an example of a situation where record keeping would be useful data collection method.	2
Q.14	How many stages are there in AI Project Cycle? Write their names.	2
Q.15	Name different modes of working in Python?	2
Q.16	What are tokens in Python? Name a few of them.	2
Q.17	What is Generative AI?	2

Answer any 3 out of the given 5 questions (18 to 22) in 50 – 80 words each. (4x3=12 marks)

Q.18	Input three numbers and print the largest of three numbers using if statement.	4
Q.19	Why is Data Privacy important?	4
Q.20	What are the possible ways to express probability?	4
Q.21	What are the <u>three</u> benefits of using Generative AI?	4
Q.22	What are the differences between Modelling and Evaluation stages of the AI Project life cycle?	4

**DELHI PUBLIC SCHOOL, BHILAI****Date : 05.02.2025****Class : IX****ANNUAL EXAMINATION 2024-25****SUBJECT : GENERAL KNOWLEDGE****Time : 50 Minutes****Max. Marks : 50**

Name of the student: \_\_\_\_\_ Class/Sec. \_\_\_\_\_ Roll No. \_\_\_\_\_

Invigilator's Signature \_\_\_\_\_ Marks obtained : \_\_\_\_\_ /50

**General Instructions:**

- All the questions are compulsory.
- There are 50 questions of 1 mark each.
- Answer all the questions by writing the correct option number in the space provided.

01.	What is the unit of gravitational constant (G)? (A) $Nm^2 kg^{-2}$ (B) $Nm^2 kg^{-1}$ (C) $Nm kg^{-2}$ (D) $Nm^{-2} kg^2$				
02.	A body of mass 10 kg is moving with a velocity of 2 m/s. What is its kinetic energy? (A) 20 J.      (B) 40 J.      (C) 100 J.      (D) 200 J.				
03.	What is the chemical formula for baking soda? (A) $NaHCO_3$ (B) $Na_2CO_3$ (C) $NH_4Cl$ (D) $CaCO_3$				
04.	Which of the following elements is a noble gas? (A) Carbon      (B) Oxygen      (C) Neon      (D) Nitrogen				
05.	What is the process by which plants make their own food? (A) Respiration      (B) Photosynthesis      (C) Decomposition      (D) Fermentation				
06.	Which part of the human brain controls movement? (A) Cerebrum      (B) Cerebellum      (C) Brainstem      (D) Spinal cord				
07.	Which gas is responsible for the greenhouse effect? (A) Oxygen      (B) Carbon dioxide      (C) Nitrogen      (D) Hydrogen				
08.	What is the unit of electric current? (A) Volt      (B) Ampere      (C) Ohm      (D) Watt				
09.	A ball is thrown vertically upward with a speed of 20 m/s. How long will it take to reach the maximum height? $[g=10\text{m/s}^2]$ (A) 2 s.      (B) 3 s.      (C) 4 s.      (D) 5 s				
10.	What happens to the resistance of a conductor when its temperature increases? (A) Increases      (B) Decreases      (C) Remains constant      (D) Becomes zero				
11.	The SI unit of power is: (A) Joule      (B) Newton      (C) Watt      (D) Pascal				
12.	Which of the following does not contain neutron? (A) Protium      (B) Deuterium      (C) Tritium      (D) Helium				
13.	Which acid is found in vinegar? (A) Hydrochloric acid      (B) Sulfuric acid      (C) Acetic acid      (D) Citric acid				
14.	What is the pH of pure water at $25^\circ\text{C}$ ? (A) 1      (B) 5      (C) 7      (D) 9				
15.	Which organ in the human body produces insulin? (A) Liver      (B) Pancreas      (C) Kidney      (D) Stomach				
16.	Which of the following is a communicable disease? (A) Diabetes      (B) Cancer      (C) Tuberculosis      (D) Hypertension				
17.	What is the functional unit of the kidney? (A) Alveoli      (B) Nephron      (C) Axon      (D) Villus				
18.	A car starts from rest and accelerates uniformly at $2\text{ m/s}^2$ . What will be its velocity after 5 seconds? (A) 5 m/s.      (B) 10 m/s.      (C) 15 m/s.      (D) 20 m/s				
19.	The value of acceleration due to gravity (g) is- (A) Same everywhere on Earth      (B) Maximum at the equator (C) Maximum at the poles      (D) Zero at the poles				
20.	The phenomenon of splitting of white light into its constituent colors is called: (A) Reflection      (B) Refraction      (C) Dispersion      (D) Diffraction				
21.	Which of the following can travel through a vacuum? (A) Sound waves      (B) Radio waves      (C) Water waves.      (D) Seismic waves				
22.	What is the resistance of a conductor if a 5 A current flows through it when connected to a 10 V battery? (A) $0.5\ \Omega$ (B) $2\ \Omega$ (C) $5\ \Omega$ (D) $10\ \Omega$				

23.	The strength of a magnetic field inside a solenoid can be increased by: (A) Increasing the number of turns. (B) Decreasing the current. (C) Using a plastic core. (D) Increasing the length of the solenoid			
24.	What is the mode of heat transfer in solids? (A) Conduction (B) Convection (C) Radiation (D) Evaporation			
25.	How many electrons are present in its outer most shell of sodium atom? (A) 1 (B) 2 (C) 3 (D) 4			
26.	Which of the following reactions represents a decomposition reaction? (A) $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$ (B) $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$ (C) $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$ (D) $2\text{KClO}_3 \rightarrow 2\text{KCl} + 3\text{O}_2$			
27.	Which of the following is the most reactive metal? (A) Sodium (B) Potassium (C) Calcium (D) Magnesium			
28.	What is the pH of a solution that is neutral? (A) 5 (B) 7 (C) 9 (D) 14			
29.	Which of the following metals is the best conductor of electricity? (A) Gold (B) Silver (C) Copper (D) Aluminium			
30.	Which of the following is a saturated hydrocarbon? (A) Methane (B) Ethene (C) Ethyne (D) Benzene			
31.	At what temperature does water boil at standard atmospheric pressure? (A) $0^\circ\text{C}$ (B) $50^\circ\text{C}$ (C) $100^\circ\text{C}$ (D) $212^\circ\text{C}$			
32.	Which method is used to separate a mixture of oil and water? (A) Filtration (B) Distillation (C) Chromatography (D) Separating funnel			
33.	What type of bond is present in $\text{NaCl}$ ? (A) Covalent bond (B) Ionic bond (C) Metallic bond (D) Hydrogen bond			
34.	Which of the following is an example of a solute in a saltwater solution? (A) Water (B) Salt (C) Sand (D) Alcohol			
35.	Which part of the human brain controls balance and coordination? (A) Cerebrum (B) Cerebellum (C) Medulla oblongata (D) Hypothalamus			
36.	Which type of reproduction results in genetically identical offspring? (A) Sexual reproduction (B) Asexual reproduction (C) Cross-pollination (D) Self-pollination			
37.	What is the powerhouse of the cell? (A) Ribosome (B) Mitochondria (C) Golgi apparatus (D) Endoplasmic reticulum			
38.	In which part of the digestive system is bile stored? (A) Liver (B) Stomach (C) Gall bladder (D) Pancreas			
39.	Which gas is primarily responsible for global warming? (A) Oxygen (B) Carbon dioxide (C) Nitrogen (D) Hydrogen			
40.	Which of the following determines the sex of a child in humans? (A) Father's chromosome. (B) Mother's chromosome (C) Both parents' chromosomes equally (D) Random mutation			
41.	Which process in plants is responsible for the release of oxygen? (A) Transpiration (B) Photosynthesis (C) Respiration (D) Germination			
42.	Which of the following is caused by a deficiency of Vitamin C? (A) Rickets (B) Scurvy (C) Night blindness (D) Beriberi			
43.	Who proposed the theory of natural selection? (A) Lamarck (B) Darwin (C) Mendel (D) Wallace			
44.	Malaria is caused by: (A) Virus (B) Bacteria (C) Protozoa (D) Fungus			
45.	What is the primary function of the mitochondria in a cell – (A) Protein synthesis (B) Cell division. (C) Energy production (D) Storage of genetic information			
46.	Who was the first emperor of the Maurya Dynasty? (A) Ashoka (B) Chandragupta Maurya (C) Bindusara (D) Samudragupta			
47.	The largest desert in the world is: (A) Kalahari Desert (B) Thar Desert (C) Sahara Desert (D) Gobi Desert			
48.	The famous dance form 'Bharatanatyam' is associated with which state of India? (A) Tamil Nadu (B) Karnataka (C) Kerala (D) Andhra Pradesh			
49.	The Tropic of Cancer passes through how many Indian states? (A) 5 (B) 8 (C) 9 (D) 7			
50.	The Great Barrier Reef is located in which country? (A) Australia (B) USA (C) South Africa (D) Indonesia			