



# Silver Grove School

## SAMPLE PAPER -I (2025-26)

### Mathematics

### IX- A

**Time-3hrs.**

**Maximum Marks-80**

**Instructions:**

- The time given at the head of this Paper is the time allowed for writing the answers.
- Attempt all question from Section A and any four questions from Section B.
- All working, including rough work, must be clearly shown, and must be done on the same sheet as the rest of the answer.
- Omission of essential working will result in loss of marks.
- The intended marks for questions or parts questions are given in brackets [ ]

#### SECTION A [40 MARKS]

Q1 Choose the right option only. [15 marks]

1A If  $a^2 - 5a + 1 = 0$  then  $a + \frac{1}{a} = \dots$

(i) 5      (ii) 10      (iii) 15      (iv) 20

1B If  $x^2 + \frac{1}{x^2} = 2$  then value of  $x + \frac{1}{x} = \dots$

(I) 4      (ii) 2      (iii) 6      (iv) 0

1C If value of  $a+b+c = 0$  then value of  $a^3 + b^3 + c^3 - 3abc$  is .....

(I) 1      (ii) 10      (iii) 0      (iv) none of these

1D An altitude divide each other in ratio of

(i) 2:1      (ii) 1:2      (iii) 2:3      (iv) none of these

1E Sum of exterior angles of a polygon is

(i)  $360^\circ$       (ii)  $180^\circ$       (iii) vary as no of sides vary      (iv) Can not be calculated

1F If the number of sides in a regular polygon is 12, then what will be the measure of each of its exterior angles?

(I).  $30^\circ$       (ii)  $48^\circ$       (iii)  $40^\circ$       (iv)  $36^\circ$

1G. If the measure of each interior angle of a regular polygon is  $150^\circ$ , then the number of its diagonals will be

(i). 54      (ii). 27      (iii) 15      (iv). 12

1H If E, F, G and H are the mid-points of the sides of a parallelogram ABCD, respectively, then ar (EFGH) is equal to:

(I)  $1/2 \text{ ar}(ABCD)$  (ii).  $1/3 \text{ ar}(ABCD)$  (iii)  $2 \text{ ar}(ABCD)$  (iv).  $\text{ar}(ABCD)$

II A median of a triangle divides it into two

(I). Congruent triangles (ii). Isosceles triangles  
 (iii) Right triangles (iv) Equal area triangles

1J In a triangle ABC, E is the mid-point of median AD. Then:

(I).  $\text{ar}(\text{BED}) = 1/4 \text{ ar}(\text{ABC})$  (ii).  $\text{ar}(\text{BED}) = \text{ar}(\text{ABC})$   
 (iii).  $\text{ar}(\text{BED}) = 1/2 \text{ ar}(\text{ABC})$  (iv)  $\text{ar}(\text{BED}) = 2 \text{ ar}(\text{ABC})$

1K If a triangle and a parallelogram are on the same base and between same parallels, then the ratio of the area of the triangle to the area of the parallelogram will be:

(I). 1:2 (ii). 3:2 (iii) 1:4 (iv). 1:3

1 L The distance between the origin and the point: (-8, 6) (I) 10 units (II) 15 units (III) 20 units (IV) 25 units

1M Value of  $\tan 10^\circ \tan 15^\circ \tan 75^\circ \tan 80^\circ$  is

(I) 10 (II) 75 (III) 1 (IV) 15

1N If the median of the following observations, arranged in ascending order, is 20. Then what is the value of x. 3, 4, 7, 8, 10, 18,  $x + 2$ ,  $x + 4$ , 26, 28, 31, 36, 38 and 40.

(I) 15 (II) 17 (III) 19 (IV) 21

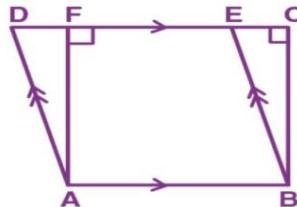
1 O. Total sum of angle of a polygon of 10 sides will be

(I)  $1260^\circ$  (II)  $1230^\circ$  (III)  $1200^\circ$  (IV) none

Q2 A.. In a polygon there are 5 right angle and the remaining angles are equal to  $195^\circ$  each. Find the number of sides in the polygon. [4]

.Q2.B. In the given figure, if area of triangle ADE is 60 cm<sup>2</sup>, state, given reason, the area of: [4]

(i) Parallelogram ABED (ii) Rectangle ABCF (iii) Triangle ABE



Q 2 C. Find the compound interest, on ₹2,400 for 2 years at 5 per cent per annum. [4]

Q3 A If  $a^2 + b^2 + c^2 = 50$  and  $ab + bc + ca = 47$ , find  $a + b + c$ . [4]

Q3 B factories the following [4]

I  $3x^2 + x - 10$

II Insert 5 irrational numbers between  $2\sqrt{5}$  and  $3\sqrt{3}$ .

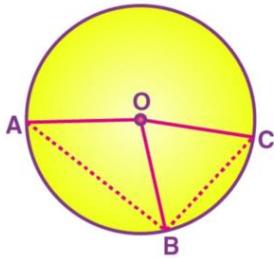
Q 3 C .A ladder 13 m long rests against a vertical wall. If the foot of the ladder is 5 m from the foot of the wall, find the distance of the other end of the ladder from the ground. [5]

SECTION B [ 40 MARKS]

(Attempt any four)

4 A. In the given figure, the lengths of arcs AB and BC are in the ratio 3:2. If  $\angle AOB = 960$ , find: [3]

(i)  $\angle BOC$       (ii)  $\angle ABC$



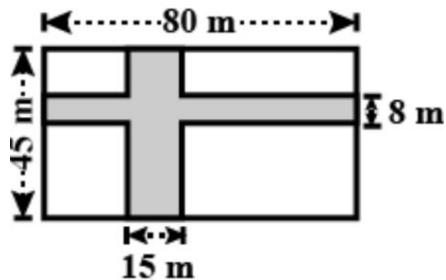
4B. Construct a frequency polygon for the following distribution: [3]

Class intervals	Frequency
0 – 4	4
4 – 8	7
8 – 12	10
12 – 16	15
16 – 20	11
20 – 24	6

4C. The diagonals of a rhombus are 16 cm and 12 cm, in length. Find the side of the rhombus in cm.

[4]

5 A. The diagram, given below, shows two paths drawn inside a rectangular field 80 m long and 45 m wide. The widths of the two paths are 8 m and 15 m as shown. Find the area of the shaded portion. [3]



5 B. Given:  $5\cos A - 12\sin A = 0$  evaluate:  $\frac{(\sin A + \cos A)}{(2\cos A - \sin A)}$  [3]

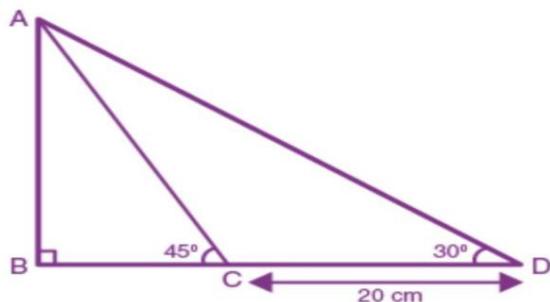
5C. Find the magnitude of angle A, if: [4]

(i)  $2\sin A \cos A - \cos A - 2\sin A + 1 = 0$

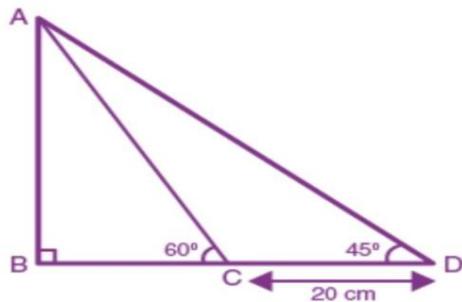
(ii)  $2\tan 3A \cos 3A - \tan 3A + 1 = 2\cos 3A$

6 A. Find AB and BC [3]

(i)



(iii)



6B. Find the slope and the y-intercept of the lines: [3]

(i)  $4x - 3y = 2$

(ii)  $3x + 2y = 6$

6C Solve the given equations graphically:  $3x - 2y = 4$  and  $5x - 2y = 0$

[4]

7 A. Find the co-ordinates of the points on the y-axis, which are at a distance of 10 units from the point  $(-8, 4)$

[3]

7B Evaluate: [3]

. Evaluate :

$$(I) \quad \frac{2\tan 57^\circ}{\cot 23^\circ} - \frac{\cot 70^\circ}{\tan 20^\circ} - \sqrt{2} \cos 45^\circ$$

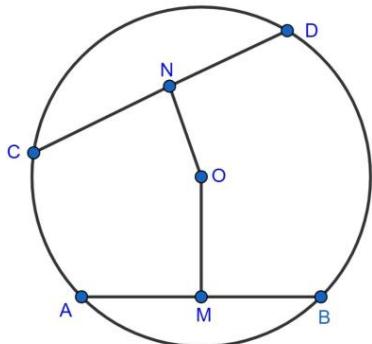
$$(II) \quad \frac{\cos 70^\circ}{\sin 20^\circ} - \frac{\cos 59^\circ}{\sin 31^\circ} - 8 \sin^2 30^\circ$$

7 C. In the given figure, O is the centre of the circle. AB and CD are two chords of the circle. OM is perpendicular to AB and ON is perpendicular to CD.  $AB = 24 \text{ cm}$ ,  $OM = 5 \text{ cm}$ ,  $ON = 12 \text{ cm}$ . Find the :

[4]

(i) radius of the circle.

(ii) length of chord CD.



8A. The ratio between exterior and interior angle of a regular polygon is 2:3 find the number of sides in a polygon. [3]

8B Give graphical solution of given a pair equation in two variables  $y = 2x + 1$  and  $x + 2y + 3 = 0$  [3]

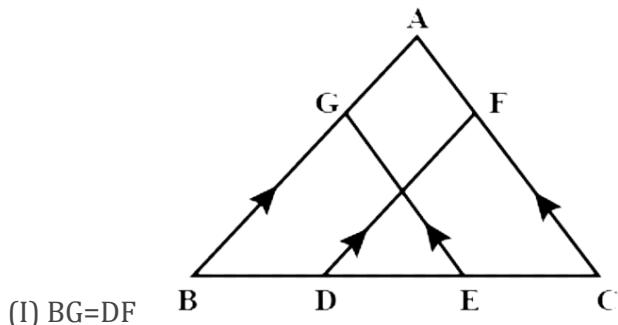
8C A In a parallelogram ABCD , point p lies in DC such that  $DP:PC = 3:2$  if area of triangle DPB is 30 sq cm, find the area of parallelogram ABCD [4]

9A. If  $X = 5 - 2\sqrt{6}$  then find the value of  $x^2 - 1/x^2$

[3]

9B In given figure :  $AB \parallel FD$ ,  $AC \parallel GF$  and  $BD = CE$  prove that

[3]



(I)  $BG = DF$

(II)  $CF = EG$

9C If 75 persons can sleep in a room 25 m by 9.6 m. If each person requires  $16 \text{ m}^3$  of air; find the height of the room.

[4]

10 A. Prove that the points  $A(-5, 4)$ ,  $B(-1, -2)$  and  $C(5, 2)$  are the vertices of an isosceles right-angled triangle.

[3]

10 B. The median of observations  $10, 11, 13, 17, x + 5, 20, 22, 24$  and  $53$ -(arranged in ascending order) is  $18$ ; find the value of  $x$ .

[3]

10 C Find the value of  $m$  and  $n$ : if:

[4]

$$(i) \frac{3+\sqrt{2}}{3-\sqrt{2}} = m+n\sqrt{2}$$

**Specimen Paper**

ENGLISH LANGUAGE

English Paper - 1

Class - 9

Maximum Marks:80

Time allowed: Two hour (inclusive of reading time)

**ALL QUESTIONS ARE COMPULSORY.**

The marks intended for questions are given in brackets [ ].

Question-1 Write a composition (300-350 words) on any of the following: [20]

- (a) Write an original short story in which a poor tailor wins an award which changes his/her life.
- (b) Narrate an incident when impatience and haste caused a lot of embarrassment to you.
- (c) 'Social networking has a bad effect on teenagers.' Express your views for or against this statement.
- (d) If you were asked to choose between - money and a peaceful life - what would you choose and why?
- (e) Study the picture given below. Write a story or an account of what the picture suggests to you. Your composition may be about the subject of the picture or may take suggestions from it.

Picture

Question 2 Select any one of the following. (10)

A. : Some taps in your locality are left open all day, resulting in a tremendous waste of water. Write a letter to the Municipal Commissioner of your town/city complaining about the problem. Suggest ways in which this waste of water can be prevented.

B. Your grandfather has recently celebrated his ninetieth birthday. Write a letter congratulating him for the way he has lived his life.

Question 3. Attempt both the question

A. Your school is hosting an Inter - School Singing Competition on patriotic songs. Write a notice for your school notice board inviting students from classes IX to XII to submit their names if interested. Give necessary details.(5)

B. Write an e-mail to the principal of your neighbouring principal requesting him/her to send his/her music teacher to judge the Singing Competition. (5)

Question 4

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

Father was standing in the small courtyard, wearing a dhoti and a banian, the dress which, for its very homeliness. Swaminathan detested to see him in; it indicated that he did not intend going out in the near future.

"Where are you going?"

"Nowhere."

"Where were you yesterday at this time?"

"Here."

"You are lying. You were not here yesterday. And you are not going out now."

"That is right," Mother added, just appearing from somewhere, "there is no limit to his loafing in the sun. He will die of sunstroke if he keeps on like this."

Father would have gone on forever without Mother's encouragement. But now her words spurred him to action. Swaminathan was asked to follow him to his 'room' in his father's dressing-room.

"How many days is it since you have touched your books?" Father asked as he blew off the fine layer of dust on Swaminathan's books, and cleared the web that an industrious spider was weaving between a corner of the table and the pile of books.

Swaminathan viewed this question as a gross breach of promise.

"Should I read even when I have no school?"

"Do you think you have passed the B.A.?" Father asked.

"I mean, Father, when the school is closed, when there is no examination, even then should I read?"

"What a question! You must read."

"But Father, you said before the examinations that I needn't read after they were over. Even Rajam does not read." As he uttered the last sentence, he tried to believe it; he clearly remembered Rajan's complaining bitterly of a home tutor who came and pestered him for two hours a day thrice a week.

Father was apparently deaf to Swaminathan's remarks. He stood over Swaminathan and set him to dust his books and clean his table. Swaminathan vigorously started blowing off the dust from the book covers. He caught the spider carefully, and took it to the window to throw it out. He held it outside the window and watched it for a while. It was swinging from a strand that gleamed in a hundred delicate tints.

"Look sharp! Do you want a whole day to throw out the spider?" Father asked. Swaminathan suddenly realized that he might have the spider as his pet and that it would be a criminal waste to throw it out. He secretly slipped it into his pocket and, after shaking an empty hand outside the window, returned to his duty at the desk.

"Look at the way you have kept your English text! Are you not ashamed of yourself?" Swaminathan picked up the oily red-bound Fourth Reader, opened it, and banged together the covers in order to shake off the dust, and then "Get a piece of cloth, boy. That is not the way to clean things. Get a piece of cloth, Swami," Father said, half kindly and half impatiently.

Swaminathan looked about and complained, "I can't find any here, father."

"Run and see."

This was a welcome suggestion. Swaminathan hurried out. He first went to his grandmother.

"Granny, get me a piece of cloth, quick."

(a) For each word given below choose the correct meaning (as used in the passage) from the options provided:

(i) detested. (1)

1. detention

2. detained

3. hateful

4. hated

(ii) pestered: (1)

1. tiny insect

2. botheration

3. annoyed

4. annoyance

(iii) violently: (1)

1. cruelly

2. with great energy

3. loudly

4. with a lot of noise

(b)

(ii) How did mother encourage father?(2)

(ii) What did the dust on Swami's books indicate?(1)

(iii) In what way was Rajam situation similar to that of Swami's?(2)

(iv) What attracted Swami to the spider?(2)

(v) What does Swami do with the spider?(2)

(c ) In not more than 50 words describe how Swami dealt with the spider?(8)

Question 5

Example: (0) launched

Chandi Prasad Bhatt.....0....(launch) a public campaign, ... 1.... (know) as the 'Chipko Movement, to protect the trees against the axe. In this movement, village women...2.... (play) an active role. They took up their positions with each...3....(hug) a tree by enveloping the trunk in their arms. This ... 4...(do) to warn the contractors that if they wanted...5... (cut) down a tree, they would have to attack the protestors first. Bhatt himself....6....(surprise) at the success of the movement and at the protectors' positive participation to prevent the felling of trees. This unusual movement was successful as it ...7....(base) on the principle of non-violence and....8....(focus) on the sentimental feelings of the local inhabitants who treated trees as their family members.

**(b) fill in the blanks with suitable word.**

(i) They protested.....the new rules.

(ii) The release of the film has been held.....due to controversy.

(iii) We are hoping.....a victory in the finals.

- (iv) She is too miserly to part ..... any money.
- (v) Please fill..... the form neatly.
- (vi) Don't put your elbows.....the table.
- (vii) He took the child..... his hand and helped him up.
- (viii) Do you play any other sports..... basketball?

(c) Choose the correct option to join the following sentences without using and, but or so. [4]

- (i) The train arrived. All the vendors began shouting.
  - 1. Before the train arrived, all the vendors began shouting
  - 2. Unless the train arrived, all the vendors began shouting
  - 3. When the train arrived, all the vendors began shouting.
  - 4. While the train arrived , all the vendors begin shouting

(ii) I fell ill. I was absent for a week

- 1. Though I fell ill, I was absent for a week. 2 Since I fell ill, I was absent for a week.
- 3. While I fell ill, I was absent for a week.
- 4. I was absent for a week because I fell ill.

(iii) The handwriting was illegible. The teacher had to correct the paper.

- 1. As the handwriting was illegible, the teacher had to correct the paper.
- 2. Provided the handwriting was illegible, the teacher had to correct the paper.
- 3. Unless the handwriting was illegible, the teacher had to correct the paper.
- 4. Until the handwriting was eligible, the teacher had to correct the paper.

(iv) The rain stopped The children resumed play.

- 1. After the rain stopped, the children resumed play.
- 2. Before the rain stopped, the children resumed play.
- 3. Unless the rain stopped, the children resumed play.
- 4. While the rain stopped, the children resumed play.

(d) Read each sentence with its instructions. Choose the correct answer from the options provided beneath each:

(i) He came to the party.

(Add Question tag)

- 1. Isn't it?
- 2. Didn't he?
- 3. Wasn't it?
- 4. Wasn't he?

(ii) The teacher said, "Akhtar, why were you absent yesterday?"

(Begin: The teacher asked Akhtar...)

1. The teacher asked Akhtar why he was absent yesterday.
2. The teacher asked Akhtar why were you absent yesterday.
3. The teacher asked Akhtar why are you absent yesterday.
4. The teacher asked Akhtar why he was absent the previous day.

(iii) In spite of the water logging the traffic was heavy.

(Begin: Despite...)

1. Despite the water logging the traffic was heavy.
2. Despite of the water logging the traffic was heavy.
3. Despite the traffic being heavy there was water logging.
4. Despite of water logging there was heavy traffic.

(iv) As soon as the whistle blew, the game stopped.

(Begin: No sooner...)

1. No sooner did the whistle blow, the game stopped.
2. No sooner than the whistle blew, the game stopped.
3. No sooner did the whistle blew, than the game stopped.
4. No sooner did the whistle blow, than the game stopped.

(v) Mother was too angry to argue with the shop keeper.

(Remove 'too').

1. Mother was too angry so that she could not argue with the shop keeper.
2. Mother was so angry to argue with the shop keeper.
3. Mother was so angry that she could not argue with the shop keeper.
4. Mother was so angry not to argue with the shop keeper.

(vi) Everybody put up their hands.

(Begin: There was nobody...)

1. There was nobody who put up their hands.
2. There was nobody who did not put up their hands.
3. There was nobody whom put up their hands.
4. There was nobody who should put up their hands.

(vii) We celebrated grandfather's hundredth birthday.

(Begin: Grandfather...)

1. Grandfather's hundredth birthday was celebrated by us.
2. Grandfather celebrated his hundredth birthday.
3. Grandfather was celebrated on his hundredth birthday.
4. Grandfather's celebration was on his hundredth birthday.

(viii) Kaushik has the best handwriting in the class.

(Begin: No one...)

1. No one has the better handwriting than Kaushik in the class.
2. No one has the better handwriting in the class than Kaushik.
3. No one in the class has better handwriting than Kaushik.
4. No one's handwriting in the class is better than Kaushik.

Class 9 ICSE specimen paper-

Set -A

PARTI

Attempt all questions from this Part (16 marks)

1. The Chairman of the Drafting Committee was

- a) Lala Lajpat Rai
- b) Pt. Jawaharlal Nehru
- c) Kanhaiya Lal Munshi
- d) Dr. B. R. Ambedkar

2. By the Citizenship (Amendment) Act government of India has granted dual citizenship to all persons of Indian origin who migrated after 26 January 1950.

- a) 2003
- b) 2004
- c) 2005
- d) 2006

3. All persons of 18 years and above have the right to vote is

- a) single citizenship
- b) Right to freedom
- c) Universal adult franchise
- d) Right against exploitation

4. The Directive Principles are not found in any other constitution except those of

- b) India and England

  - a) India and America
  - c) India and Ireland
  - d) India and Pakistan

5. With reference to the functions of the Election Commission which one of the following is

incorrect?

(a) Registration and Recognitions of the Political Parties.

(b) Allotment of funds for election

(c) Fixing date and conducting election

(d) Ensuring free and fair elections

6. Which one of the following is the basis of Panchayat Raj?

(a) Community cooperation and development

(b) Cultivating political awareness in the rural masses

(c) People's participation in the government

(d) Democratic decentralisation

7. Which of the system of governance in the Panchayati Raj setup?

(a) Single-tier structure of local self-government at the village level.

(b) Two-tier system of local self-government at the village and block levels.

(c) Three-tier structure of local self-government, at the village, block and district level

(d) Four-tier system of local self-government at the village, block, district and State

8. Which of the following insights about the Harappan Civilisation was provided by the citadel;

(a) There were public buildings for specific purposes

(b) There was ceremonial bathing.

(c) There was overseas trade

(d) The people were literate

9. Which of the following were officers in the Provincial Government in the Mauryan Empire?

(a) Purohit, Senapati, Sannidhata, Samaharta

(b) Mahamatra, Prashika, Rajuka, Yukta

(c) shika, Rajuka, Yukta

(d) BaliBhaga

10. Which of the following port-kingdom pair is incorrect?

- (a) Puhar: Chola
- (b) Saliyur : Panda
- (c) Uraiyyur : Chola
- (d) Bandar: Chera

11. The Prayaga Prashasti was composed by.

- (a) Fa-hien, Chandragupta II
- (b) Harisena, Samudragupta
- (c) Harisena, Chandragupta I
- (d) Fa-hien, Chandragupta

12. The main shrine in the Brihadeshwara Temple was called

- (a) Gopuram
- (b) Garbhagriha
- (c) Lingam
- (d) Mandapa

13. Which is the chronological order of the dynasties of the Delhi-Sultanate?

- (i) Khilji (ii) Slave (iii) Lodhi (iv) Sayyid (v) Tughluq
- (a) (ii); (i); (iv); (v); (iii)
- (b) (ii); (iii); (v); (iv); (i)
- (c) (i); (iii); (ii); (iv); (v)
- (d) (ii); (i); (v) : (iv) ; (iii)

14. Who is regarded as the founder of the slave-dynasty?

- (a)Alauddin Khilji
- (b)Muhammad Ghori
- (c) Qutubuddin Aibak
- (d)Muhammad Bin Tughlaq

15. Which of the following are the features of Renaissance?

- (a) Glorification of Human Form
- (b) Humanism
- (c) Spirit of Enquiry
- (d) All of the above

16. Which amongst the following is not a cause for the origin of the Industrial Revolution in England?

- (a) Availability of Labour
- (b) Congenial Atmosphere
- (c) Decrease in the Demand for Goods
- (d) Use of Steam

Question 2

Answer the following questions: [14 marks]

- (a) State three types of village assemblies during the Chola period.
- (b) What are Megaliths?
- (c) Name any two ports of the Sangam Age.
- (d) State any two architectural features of Qutub Minar.
- (e) Define the term Industrial Revolution.
- (f) What was known as the Directive principles of state policy.
- (g) Mention any two reasons to state that the decline of Feudalism led to the rise of the Renaissance.

PART- II (50 Marks)

SECTION -A

Attempt any two questions from this Section

Question 3

There are differences of opinion regarding the significance of both the Directive Principles and

Fundamental Rights. In this context explain the following:

(a) State any three differences between the Fundamental Rights and Directive Principles of State Policy.

(b) How do the Directive Principles complement Fundamental Rights?

(c) What is the importance of Directive Principles?

Question 4

In the light of this statement, answer the following questions:

Elections play a very significant role in our Indian Democracy.

(a) State the composition of the Election Commission.

(b) Under what circumstances can a By-election' be held?

(c) Explain the terms General Election' and Mid- term Election'.

Question 5

With reference to urban local self-government, explain the following:

(a) Distinguish between Municipal Corporation and Municipal Council.

(b) Functions of the Municipal Council.

(c) Obligatory or Compulsory functions of Municipal Corporation.

SECTION -B

Attempt any three questions from this Section

Question 6

With reference to the Harappan civilisation, describe the following:

(a) Special features of the houses of the people.

(b) Three significant features of the Great Bath.

(c) Reasons for the decline of this civilisation.

Question 7

With reference to the Bhakti Movement, Sufism and Christianity, answer the

following questions:

- (a) Mention the teachings of Kabir as mentioned in the Bijak.
- (b) State the significance of Sufism on Indian Society.
- (c) State any two contributions of St. Francis Xavier in the advancement of Christianity in India.

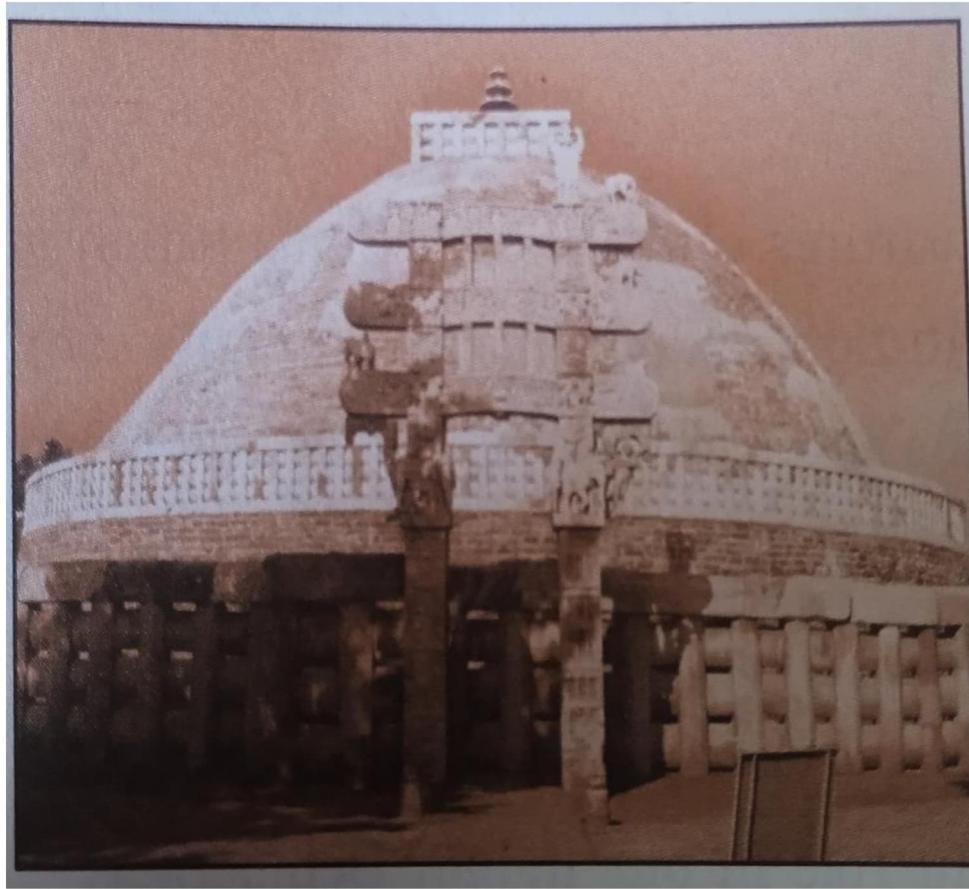
Question 8

With reference to the Gupta Age, explain the following ;

- (a) Allahabad pillar inscription.
- (b) Nalanda University
- (c) Military genius of Chandragupta Maurya

Question 9

Study the Picture given below and answer the following questions:



(a) Identify the structure given in the picture.

Name the place and the state where it is located.

(b) Name the dynasty and the king who built it. In which century was it built?

(c) Mention any two architectural features of the structure.

Question 10

With reference to the Renaissance period, discuss the following:

(a) Any two causes of renaissance.

(b) Major explorers during renaissance.

(c) Contribution of Galileo and William Shakespeare.

**SPECIMEN PAPER- 1(2025-26)**

**GEOGRAPHY**

**CLASS IX - ICSE**

**MARKS: 80. TIME: 2HRS**

**NOTE: This question paper consists of two sections A and B. Part A is compulsory. You can attempt any five questions from Part B.**

**SECTION A (30)**

**Q1. Answer the following questions: (10)**

- a) Which line of longitude is known as Prime Meridian? State its importance.
- b) What is 'seismic focus' and 'epicenter' with respect to an earthquake.
- c) Explain the following terms: i) exfoliation  
ii) oxidation
- d) What is a leap year?
- e) What are Isobars?
- f) Highlight the difference between Convection and Advection.
- g) Why is Radio-active pollution considered the most dangerous of all other pollutions?
- h) What are No smoking ~~no~~ zones?
- i) What are landforms? Give examples.
- j) Mention two effects of the inclination of Earth's Axis.

**Q2. On the given physical map of the world mark and label the following:**

- a) Gulf of Mexico
- b) Caspian sea
- c) River Volga
- d) Hudson Bay
- e) Atlas mountains
- f) Great Dividing Range
- g) River Hwangho
- h) South China sea
- i) Plateau of Tibet
- j) Temperate grassland of North America

**Q3. Multiple choice questions**

**A) Which of the following is not a local wind:**

- i) Hurricanes      ii) Chinook
- iii) Mistral.      iv) Loo

**B) When did the Bhopal Gas tragedy occur:**

- i) 3rd December 1994
- ii) 3rd December 1984
- iii) 4th December 1984
- iv) 4th December 1994

**C) Which layer of the Earth is composed mainly of nickel and iron?**

- i) Crust
- ii) Mantle
- iii) Core
- iv) Lithosphere

**D) Weathering is the process of:**

- i) Transportation of sediments
- ii) Deposition of sediments
- iii) Breaking down of rocks in situ
- iv) Formation of igneous rocks.

**E) Given below are two statements Assertion (A) and Reason (R). Read the statements and choose the correct option:**

**Assertion (A): Igneous rocks are called primary rocks.**

**Reason (R): All other rocks are formed from igneous rocks.**

- i) Both A and R are true and R is the correct explanation of A
- ii) Both A and R are true but R is not the correct explanation of A
- iii) A is true but R is false
- iv) A is false but R is true

**F) Process of expansion of minerals on coming in contact with rainwater is called:**

- i) oxidation.
- ii) carbonation
- iii) hydration
- iv) solution

**G) On 21st of March what will be the length of the day at 45° north if it is 12 hours at the equator.**

- i) 15 hours
- ii) 13 hours
- iii) 14 hours
- iv) 12 hours

**H) Which of the following is the temperate grasslands of South America**

- i) Prairies
- ii) Veld
- iii) Downs
- iv) Pampas

**I) which of the following layer of atmosphere is responsible for radio communication:**

- i) troposphere
- ii) stratosphere
- iii) mesosphere
- iv) ionosphere

**J) Xerophytic plants survive in:**

- i) Equatorial region
- ii) Monsoon region
- iii) Desert region
- iv) Temperate Grassland

## **SECTION B (50)**

**Attempt any five questions from the following section.**

**Q4.a) Give reasons.: (2)**

- i) Latitudes are also called parallels of latitude.

- ii) The lines of longitudes are of the same length.
- b) State two effects Earth's rotation. (2)
  - c) Name them. (3)
- i) Shape of the Earth
- ii) The 180° longitude that marks the beginning of a new day on the earth surface
- iii) The phenomenon of equal hours of day and night all over the Earth
- d) Draw a neat and well labelled diagram to show the Bedford Level Experiment. (3)

**Q5.a) Describe the Core of the earth. Why is the inner core in a solid state ?**

(2)

- b) Distinguish between Igneous and Sedimentary rocks. (2)
- c) Give technical terms for the following statements: (3)
  - i) Plateau surrounded by hills & mountains from all sides
  - ii) Boundary between the core and the Mantle.
  - iii) The phenomenon of old rocks being transformed into new one.
- d) Draw a neat and labeled diagram to show layers of Earth's interior
  - or
  - Fold mountains. (3)

**Q6. a) What is weathering ? Name the three types of weathering. (2)**

**b) On the basis of frequency, name the three types of volcanoes. Describe any one of them. (2)**

**c) Name them : (3)**

- i) The point of origin of seismic waves.
- ii) the instrument used for measuring the intensity of an earthquake.
- iii) Harbour waves generated by oceanic earthquakes.

**d) Draw a neat and labeled diagram to show: (3)**

Structure of a Volcano

Or

Meander

**Q7.a) State 4 factors that affect the movement of ocean currents. (2)**

**b) What are tides ? How are they caused? (2)**

**c) Mention three differences between Spring and Neap tides. (3)**

**d) Draw a neat and labeled diagram to show how Neap tides occur. (3)**

**Q8.a)'Higher the latitude, lower is the temperature.' Give reason for this statement.**

(2)

**b) Mention the chief characteristics of troposphere.(2)**

**c) Identify the layers of atmosphere from the clues given below: (3)**

**i) All weather changes occur in this layer.**

**ii) Presence of meteoric dust particles and wispy clouds.**

iii) Hottest layer of the atmosphere.

d) Draw a well labelled diagram to show the gaseous composition of the atmosphere. (3)

**Q9.a) What is atmospheric pressure? Name two factors that affect atmospheric pressure.(2)**

b) How are cyclones named differently in different parts of the world? (2)

c) Give reasons for the following statements. (3) i) Doldrums is a low pressure belt .

ii) The winds are directed to the right in the Northern and to their left in the southern hemisphere.

iii) land breezes blow at night while the sea breezes blow during the daytime.

d) Identify the type of winds according to the description.(3)

i) These winds blow from high pressure to low pressure belts in the same direction throughout the year.

ii) These winds vary both in speed and direction and are related to pressure systems.

iii) The effect of these winds is restricted to a smaller area for a short period of time.

**Q10.a) Distinguish between Absolute and Relative Humidity.(2)**

b) Condensation is the reverse process of evaporation. Explain.(2)

c) Explain the terms: (3)

i) Dew point

ii) Condensation Nuclei.

iii) Evaporation

d) Draw a neat and well labelled diagram to show Relief/ Orographic Rainfall. (3)

**Q11. a) what is carpooling? Mention two advantages of carpooling. (2)**

b) Explain the terms:. (2)

i) Quantitative pollutants

ii) Primary pollutants

c) Name them: (3)

i) Two waterborne diseases.

ii) Two sources of soil pollution.

iii) Two gases released due to burning of garbage.

d) Name them: (3)

i) The leakage of this gas was the cause of the Bhopal gas tragedy.

ii) Increasing concentration of toxic substances along the food chain.

iii) The holistic system of farming for increased crop production in an eco friendly environment.

**Q12. a) Why are the tropical deserts found along the Western margins of the continent ? (2)**

**b) Name the tropical deserts of Africa. Mention the main occupation of the people living in the deserts. (2)**

**c) Name the temperate grasslands of the world. (3)**

**d) Give reasons for the following:**

- i) Tundra region has no vegetation.**
- ii) Equatorial rainforests are called the 'lungs of the world'.**
- iii) The trees of the Mediterranean region have long roots and thick bark.**

**(3)**



→ School  
er (Set A)  
Applications

June 2015

**MM100**

**SECTION A**

Attempt all questions from this Section

Question 1.

(20 Marks)

Choose the correct answers to the questions from the given options.

( Do not copy the question, write the correct answers only.)

(i) Why is over-irrigation considered harmful to soil?

(a) It increases the soils fertility.

(b) It reduces soil temperature

(c) It leads to water logging and salinity.

(d) It helps replenish groundwater.

(ii) If the government wants to maintain secrecy in a national defence project, which form of public enterprise should it choose?

(a) Government Company

(b) Departmental Undertaking

(c) Public Corporation

(d) Private Company

(iii) Communication is said to be effective only when the sender and receiver agree on the message.

(a) True

(b) False

(iv) If the Marketing Department sets unrealistic sales targets, which department will face the most pressure to deliver?

- (a) Purchasing Department.
- (b) General Administration Department.
- (c) Production Department.
- (d) Finance Department.

(v) Debtor's Ledger consists of accounts of customer to whom goods are sold.

- (a) on credit
- (b) on debit
- (c) Either (a) or (b)
- (d) none of these

(vi) Which of the following statements is wrong regarding industry?

- (i) Extractive industries are those industries which are concerned with the discovery and extraction of natural resources.
- (ii) Genetic industries are those industries which are concerned with reproducing and multiplying plants and animals.
- (iii) Manufacturing industries are those industries which are concerned with providing commercial services.
- (iv) Industries which employ complex technology and long production cycles are called heavy industries.

- (a) (i) is wrong
- (b) (i), (ii), (iv) are wrong
- (c) Only (iii) is wrong
- (d) None of them

(vii) Which of the following has the power of the government and the considerable amount of operating flexibility of public enterprise?

(a) Department undertaking

(b) Government companies

(c) Statutory Corporations

(d) All of the above

(viii) Communication has become all the more essential due to

(a) Rapid changes in science and technology lead to obsolescence of technology and science.

(b) Business firms have grown tremendously in scale of operations.

(c) Trade Union Movement

(d) All of these

(ix) Why are joint stock companies better suited for large-scale production than partnerships?

(a) Joint ownership of property.

(b) Larger capital resources and professional management.

(c) Direct involvement of shareholders in management.

(d) Fewer legal requirements for incorporation.

(x) Which of the following is not a consequence of non-registration?

(a) An unregistered partnership firm cannot enforce its claims against a third party in a court of law

(b) It can sue any of its partners.

(c) Partners of an unregistered firm cannot sue the firm to enforce their claims.

(d) Partners of an unregistered firm cannot file a suit against each other.

(xi) A manager refuses to pass on critical information to subordinates to maintain their superior status. Which barrier is an example of?

(a) Semantic barrier

(b) Physical barrier

(c) Status barrier

(d) Personal barrier

(xii) Assertion (A): The accounting equation is Assets Liabilities Capital

Reasoning (R): This equation represents the ownership fundamental relationship between a company's resources, debts and

(a) A is true but R is false.

(c) Both A and R are true and R explains A

(b) A is false but R is true

(d) Both A and R are true but R does not explain A.

(xiii) Organisations are engaged in buying and selling of goods.

- (a) Banking and Finance Companies
- (c) Transport Organisations
- (b) Trading Organisations
- (d) Manufacturing Organisations

(xiv) atmosphereic gas is used by plants to make their food by photosynthesis.

- (a) Oxygen
- (b) Nitrogen
- (c) Carbon dioxide
- (d) Argon

(xv) In what scenario would a ledger be more helpful than a trial balance?

- (a) Identifying errors in debit and credit totals
- (b) Checking the details of a specific account
- (c) Verifying the classification of accounts
- (d) Ensuring double-entry principles are followed

(xvi) When the message is confidential, which one methods is desirable?

- (a) Telephone
- (b) Face to face conversation
- (c) Non-verbal communication
- (d) None

(xvii) Which of the following has the power of the government and the considerable amount of operating flexibility of public enterprise?

- (a) Department undertaking
- (c) Government companies
- (b) Statutory Corporations
- (d) All of the above

(xviii) Which of the following statement is incorrect?

- (a) Each partner is liable to an unlimited extent for the firm's obligations towards outsiders.
- (b) A partnership can be formed only for the purpose of carrying on a business.
- (c) Each partner is liable for acts performed by other partners on behalf of the firm.
- (d) An association of persons who jointly own a house without carrying on a business can be considered as partnership.

(xix) If a country's water table continues to deplete, what long-term impact might this have on its agricultural economy?

- (a) Increased reliance on groundwater
- (b) Expansion of rain-fed agriculture
- (c) Shift towards drought-resistant crops and water-saving techniques
- (d) Reduction in the demand for agricultural products

(xx) A city plans to set up solar panels in areas with long sunlight hours, Which feature of solar energy makes it suitable for this?

- (a) It is a non-renewable resource
- (b) It produces greenhouse gases
- (c) It is pollution-free and renewable
- (d) It requires extensive land use

Question 2.[10]

(1) Distinguish Between

(a) Primary Sector and Secondary Sector

(b) Body language and Sign Language

(ii) Justify the following sentences for or against and give a reason:

(a) The activities and operations of energy department provide support and assistance to all other departments

(b) Trial balance is a proof of arithmetic accuracy, not accounting accuracy.

(c) Trade is the nucleus of commerce.

Question 3. Answer the following questions:

(i) In what situation is a fax better than a letter?

[10]

(in) State the golden rules of Debit and Credit

(Competency Focused) (Analysis)

(in) What are the obstacles to trade?

(iv) What do you understand by the term Net profit?

(v) Name and give examples of any two types of primary industries.

SECTION B

(Answer any four questions from this Section.)

Question 4.

(1) Aradhya and Harpreet want to start a business that provides eco-friendly packaging solutions. They are unsure whether to choose a sole proprietorship or a partnership structure. What challenges might Aradhya and Harpreet face if they opt for a partnership firm instead of a sole proprietorship?[5]

(ii) How is a partnership different from a Joint Stock Company? Discuss with reference to liability and management. [5]

(in) Discuss the functions of General administration and Legal department in a commercial organisation.[5]

Question 5.

(1) Evaluate the challenges faced by cooperative societies in maintaining financial sustainability and operational efficiency. [5]

(1) With the growing competition, explain the role of communication in business. (5)

(iii) What is Cash Book? State the main objectives of preparing it.[5]

Question 6.

(1) Explain with examples paralanguage.

(2) What advantages does a Joint Stock Company enjoy over other forms of business organisation?

(iii) Members of a cooperative society pool their land and use modern agricultural techniques to increase productivity. What is this cooperative society called? How does it help in improving yield and reducing costs?

Question 7.

(1) "A Joint Stock Company is said to be an artificial person created by law, having a separate entity with a perpetual succession and a common seal." Explain with the help of examples. (5)

(ii) Assess the role of public sector enterprises in promoting employment opportunities and skill development. (5)

(iii) Write short notes on: (5)

(a) Production department

(b) Ledger

Question 8.

(i) Describe the relationship between soil erosion caused by overgrazing and agricultural productivity.(5)

(ii) What do you mean by depletion of natural resources? What are the various causes of depletion of resources? (5)

(iii) Analyze the relationship between greenhouse gases and global warming.(5)

**Question 9.**

**Case Study**

A leading retail chain, ShopEase, known for its nationwide presence and customer-centric approach, recently faced challenges in internal communication that had significant operational implications. The company's rapid expansion into tier-2 and tier-3 cities came with the promise of growth, but it also revealed gaps in their communication processes, impacting their overall efficiency.

ShopEase's management relied heavily on traditional communication channels, such as emails and in-person meetings, to relay operational updates, promotional strategies, and sales targets across its branches. However, this approach became increasingly problematic as the number of branches grew, resulting in delayed updates and inconsistent messaging. For instance, during a nationwide sale campaign, some branches received promotional details late, leading to stock mismanagement and customer dissatisfaction. Recognizing the problem, the company introduced a real-time communication platform tailored for commercial organizations. This platform integrated inventory management systems, customer feedback mechanisms, and employee communication channels. It allowed branch managers to access instant updates, monitor inventory levels, and communicate with the central office without delays. Within three months of implementation, ShopEase observed a 25% reduction in operational errors and a 40% increase in customer satisfaction ratings. Additionally, employee engagement surveys highlighted that 85% of staff found the new system more effective than the previous methods. Despite these improvements, challenges remain. Some employees, especially those in smaller branches, struggle with adapting to the new technology. Management is now focusing on training programs to ensure uniform adoption across all locations.

With reference to above case study, answer the following questions:

(i) What were the main communication challenges faced by ShopEase?(5)

(ii) How did the new communication platform address these challenges? (5)

(iii) What were the key outcomes observed after implementing the new communication system? (5)

**Silver grove school**

**Class -IX A**

**Biology**

**General instructions**

Section A is compulsory. Attempt any four questions from Section B The intended marks for questions or parts of questions are given in brackets []

**Section A (40 Marks)**

**Question 1**

Select the correct answers to the questions from the given options. (Do not copy the question. Write the correct answer only):

- (i). Respiration is a
  - (a) Chemical process
  - (b) Mechanical process
  - (c) Vital process
  - (d) Physical process

- (ii). The blood Leaving the tissue become richer in
  - (a) carbon dioxide
  - (b) water
  - (c) Haemoglobin
  - (d) oxygen

- (iii). Rabies is caused by
  - (a) Virus
  - (b) Bacteria
  - (c) Protozoa
  - (d) All of these

- (iv). Mammary glands are modified sweat glands which are
  - (a) Present in male
  - (b) Present in female
  - (c) Present in both male and female
  - (d) Absent in both

- (v). Ligament connects a bone with
  - (a) Skin
  - (b) Muscle
  - (c) Bone
  - (d) Both (b) and (c )

vi. The process by which energy is released from food is called:  
(a) Breathing (b) Digestion (c) Respiration (d) Circulation

vii. Which structure prevents food from entering the windpipe?  
(a) Larynx (b) Epiglottis (c) Pharynx (d) Trachea

viii. The microbe used in the production of antibiotics is:  
(a) Virus (b) Bacteria (c) Protozoa (d) Algae

ix. Which bone forms the shoulder girdle?  
(a) Femur (b) Scapula (c) Sternum (d) Patella

x. The outermost layer of skin is called:  
(a) Dermis (b) Epidermis (c) Hypodermis (d) Cuticle

xi. Which part of tooth is visible above the gum?  
(a) Root (b) Pulp (c) Crown (d) Cement

xii. Exchange of gases in lungs takes place in:  
(a) Bronchi (b) Trachea (c) Alveoli (d) Pleura

xiii. The joint that allows free movement in all directions is:  
(a) Hinge (b) Pivot (c) Ball and socket (d) Saddle

xiv. Which disease is prevented by BCG vaccine?  
(a) Polio (b) Tuberculosis (c) Typhoid (d) Measles

xv. The opening through which water enters a seed during germination is:  
(a) Hilum (b) Micropyle (c) Cotyledon (d) Plumule

### Question 2

(i) Name the following: (5)

- (a). Three disease caused by bacteria
- (b). Flower containing all the four whorls
- (c) Hardest part of tooth
- (d) Organ of breathing
- (e) Type of germination in bean

(ii) Fill in the blanks: (5)

- (a) Oxygen is transported by \_\_\_\_\_.  
(b) \_\_\_\_\_ joint is present in neck.  
(c) Yeast carries out \_\_\_\_\_ respiration.  
(d). ..... tissue connect or bind cells , tissue and organs.

(e). .... is called the energy currency of the cell

(iii) Match the following: (5)

Skull – Protection of brain

Rib cage – Protection of heart

Lactobacillus – Curd formation

Enamel – Hardest substance

Alveoli – Gas exchange

(iv) Odd one out (give reason): (5)

(a). Carpals, metacarpal, radius, tarsal

(b). Stigma, Style, Filament, Ovary.

(c). Tetanus, Typhoid, AIDS, Deptheria

(d) Plumule, Radicle, Cotyledon, Trachea

(e) Epidermis, Dermis, Sweat gland, Heart

(v). State the exact location of the following structures: ( 5)

(a).oil gland

(b). Alveoli

(C ). Villi

(d ). Pollen grain

(e). Meristematic tissue

## Section B (40 Marks)

Attempt any four questions

Question 3

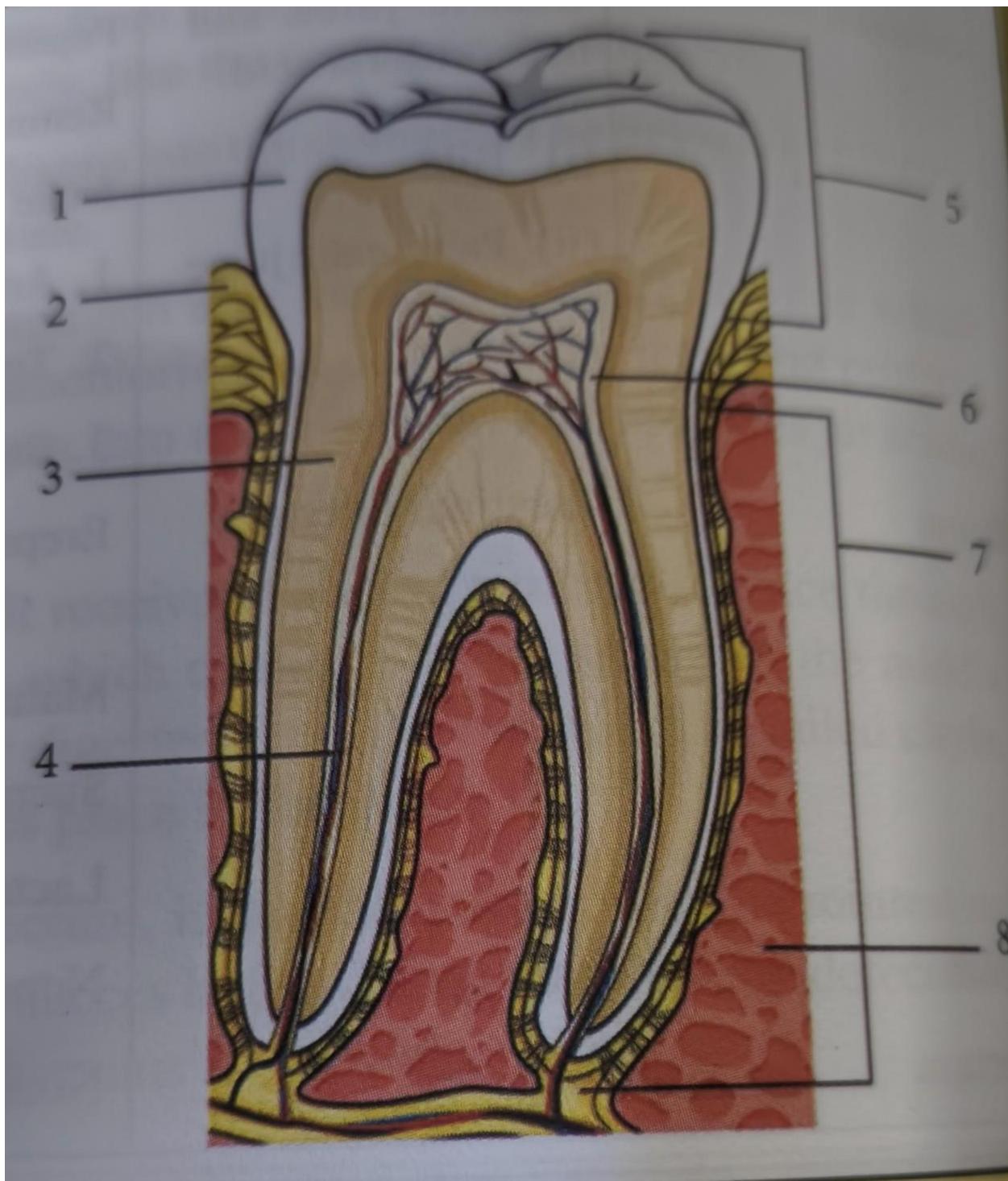
(i). Define - Disease (1)

(ii). Give two difference between communicable and nam communicable disease ( 2)

(c) Mention three functions of WHO. (2)

(d) State two uses of microbes in medicine. (2)

(e).Look at the diagram of teeth and answer the questions that follow.



- (i). Name the part 1 to 8 shown by guidelines.
- (ii). Identify the type of teeth shown and state its function.
- (iii). How many such teeth are present in an adult human?

Question 4

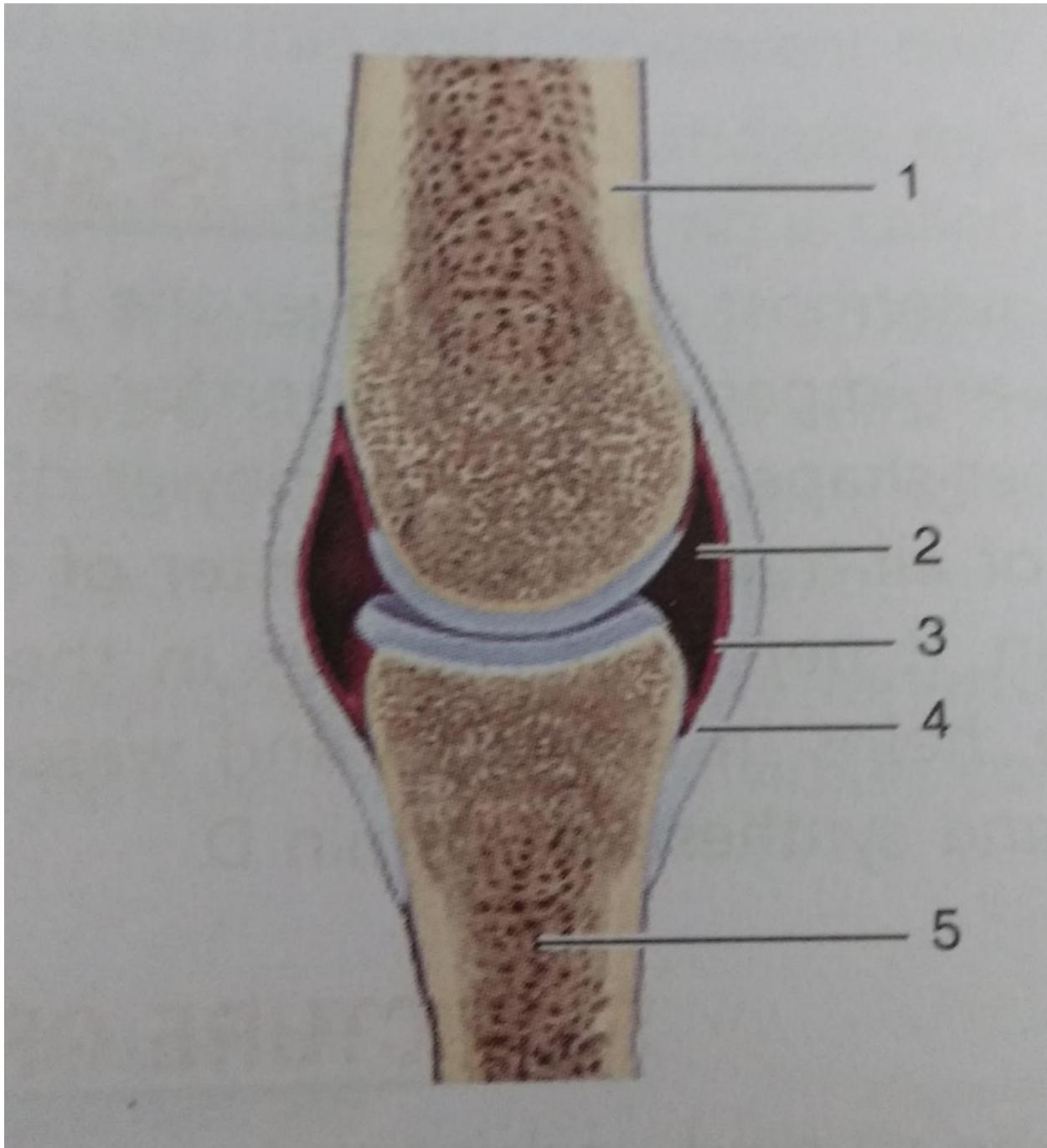
(a) What is skeleton? (1)

(b) Write two functions of vertebral column. (2)

(c) Differentiate between ligament and tendon. (2)

(d) Draw a labelled diagram of a synovial joint. (2)

(e).Look at the diagrammatic sketch of synovial joint and answer the questions that follow.



(i). Name the parts 1 to 5.

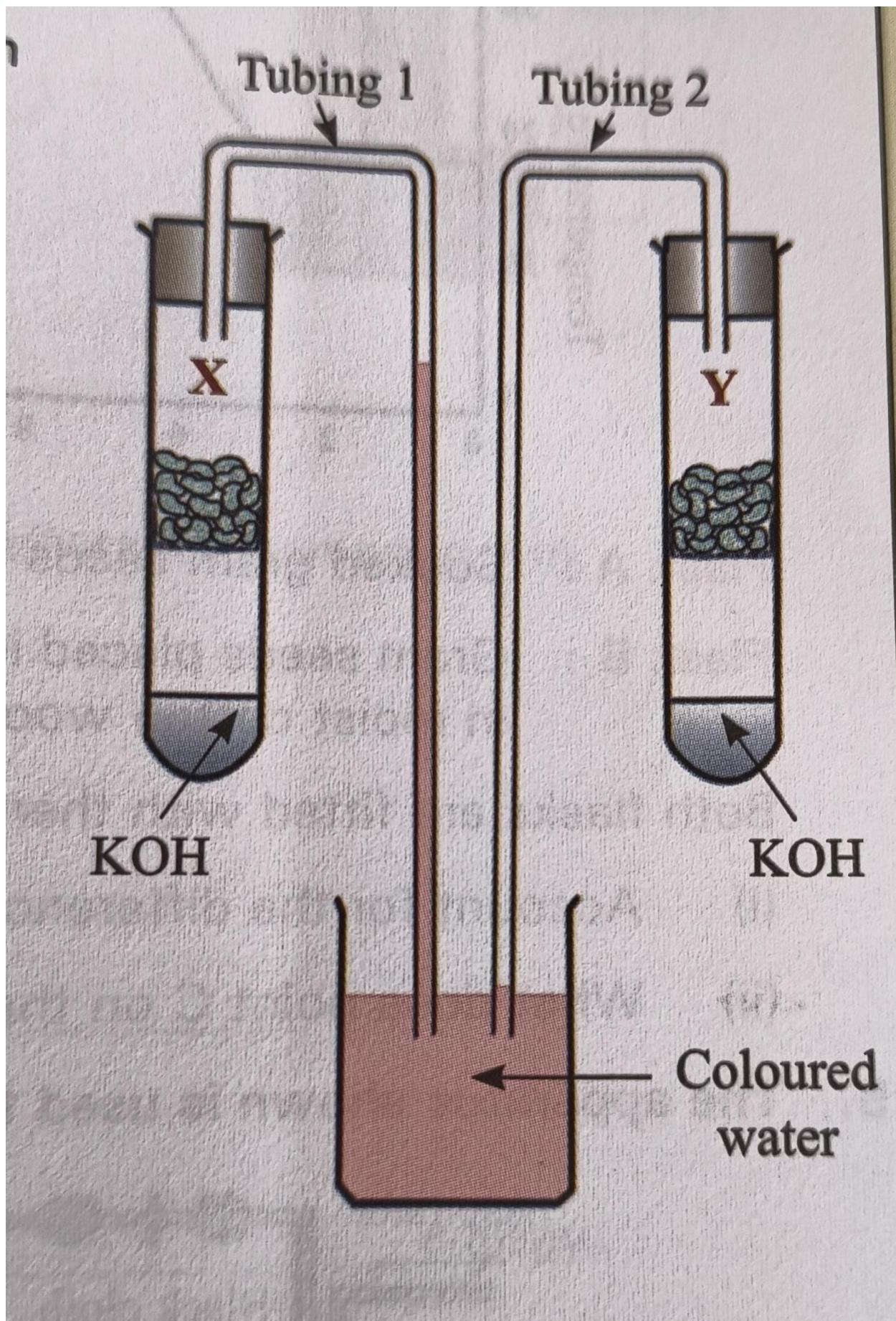
(ii) What is a synovial joint?

(iii) Where do you find such a joint?

Question 5

- (a) Define breathing. (1)
- (b) State two differences between inhalation and exhalation. (2)
- (c) Describe the structure of alveolus. (2)
- (d) Draw a labelled diagram of human respiratory system. (2)

(e). Study the figure given below and answer the following question



(i). What is the purpose of keeping potassium hydroxide solution in test tube x and y?

(ii). Why has the coloured water rise in tubing 1

(iii). Name the biological process which cause above rise.

Question 6

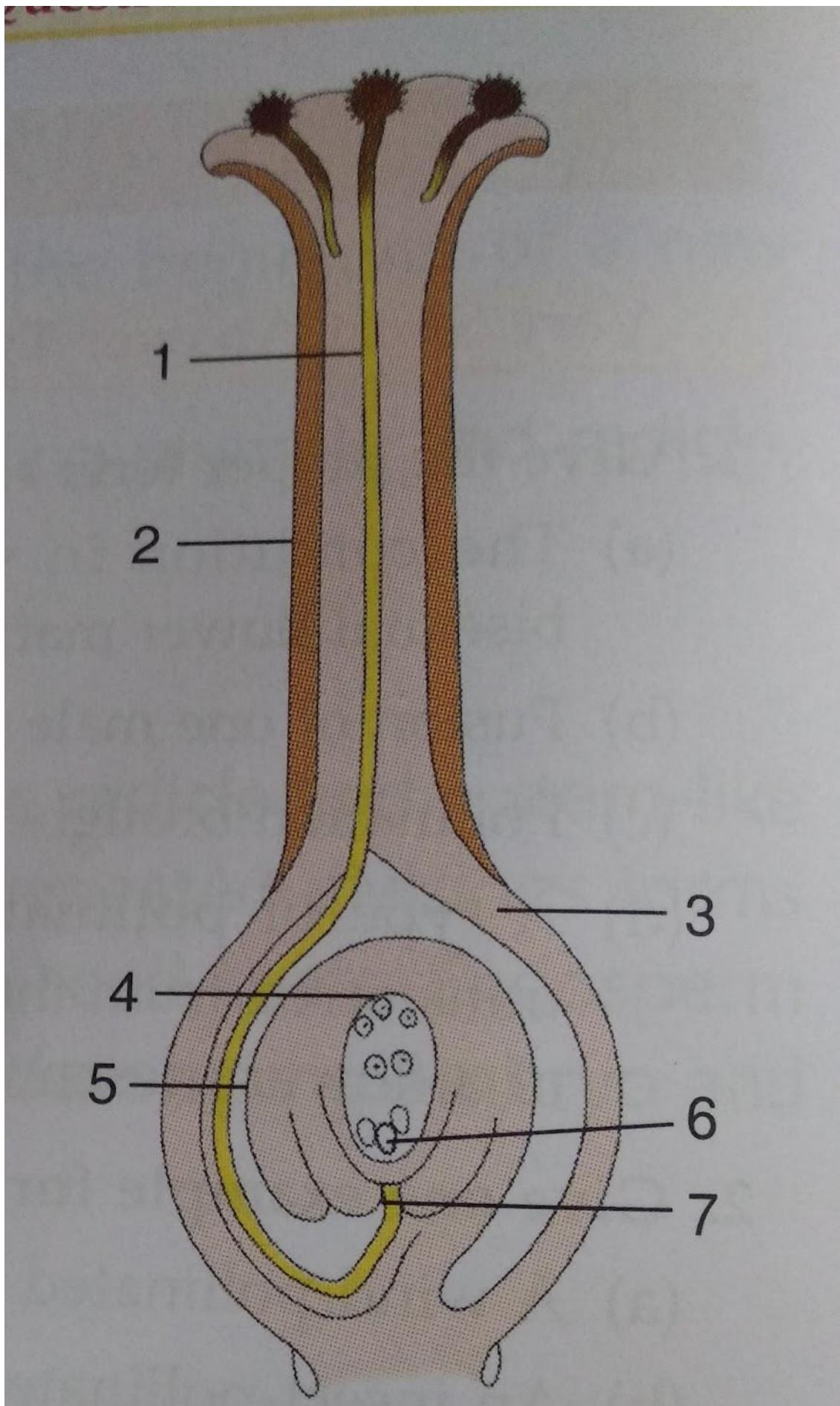
(a) Name the Outermost layers of skin. (1)

(b) Mention two functions of sweat glands. (2)

(c) Write the full form of BCG and OPV. (2)

(d). Write the difference between aerobic and anaerobic respiration. ( 2)

(e). Study the figure given below and answer the following questions-. 3



(a) Label the parts marked 1-7.

(b) What is the function of stigma?

(c) What is the function of a pollen tube?

Question 7.

(a) What is seed germination? (1)

(b) State two conditions necessary for germination. (2)

(c) Differentiate between epigeal and hypogeal germination. (2)

(d) What is calyx ? List its various functions. 2

(e) Draw a labelled diagram of a dicot seed. (3)

Question 8

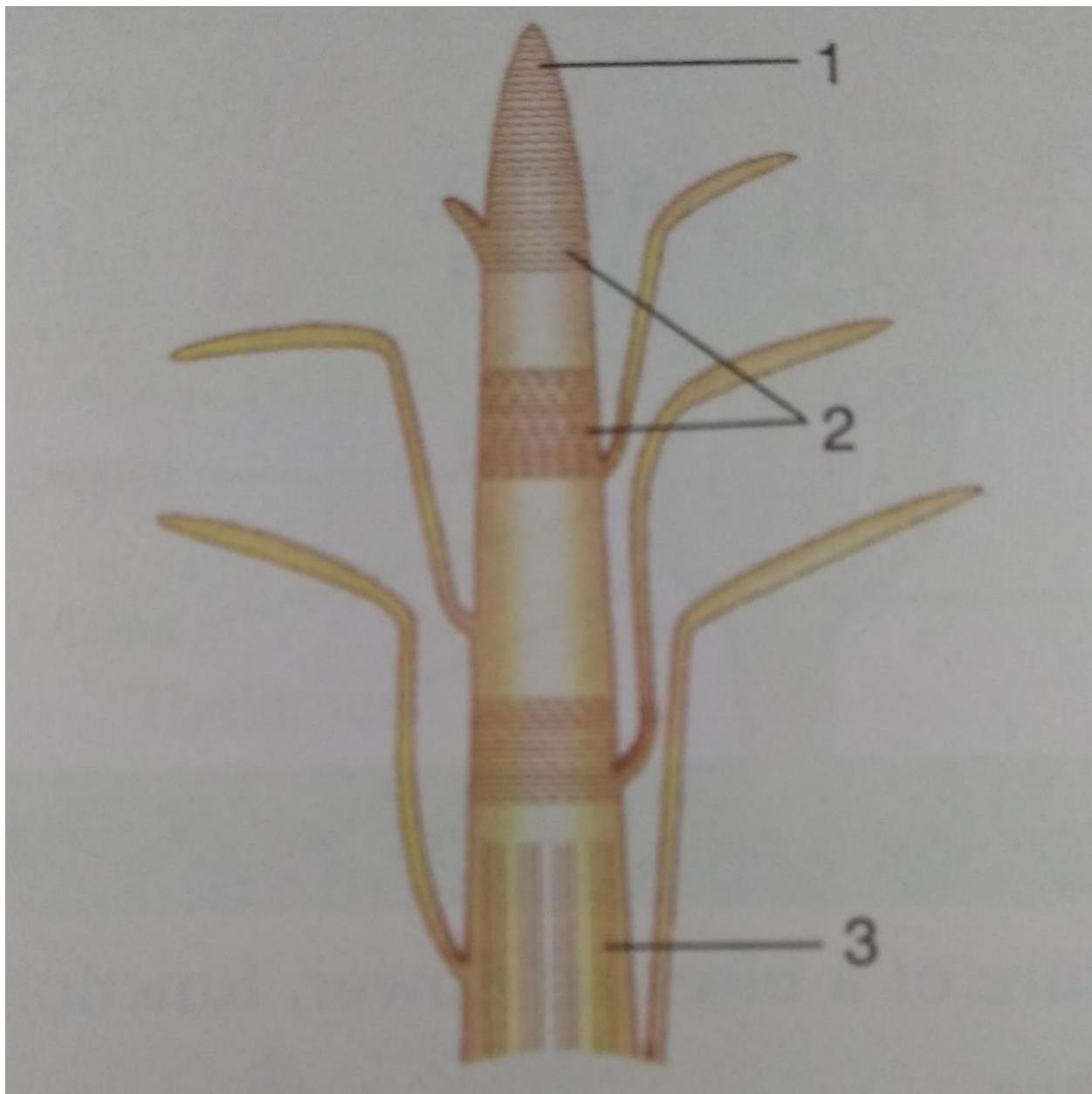
(i) Define the term species

(ii). Write the characteristics of class Mammalia.

(iii). What is vivipary germination write its two example.

(iv). Write the difference between cartilage and bone.

(v). Study the figure given below and answer the following questions:



- a) Label the parts 1- 3
- (b) Where it is located?
- (c ) Mention its function.

**SILVER GROVE SCHOOL**  
**CLASS – IX-K (SAMPLE PAPER SET – A)**  
**SUB – COMPUTER APPLICATION**

**SECTION A – MULTIPLE CHOICE QUESTIONS**

**(1 X 20 = 20)**

1. Which of the following is a primitive data type in Java?
  - a) String
  - b) Array
  - c) int
  - d) Class
2. Which keyword is used to declare a constant in Java?
  - a) static
  - b) final
  - c) const
  - d) constant
3. The size of int data type in Java is:
  - a) 2 bytes
  - b) 4 bytes
  - c) 8 bytes
  - d) Depends on system
4. Which operator is used for logical AND?
  - a) &
  - b) &&
  - c) |
  - d) ||
5. Which of the following is a valid Java identifier?
  - a) 9number
  - b) class
  - c) total\_marks
  - d) total-marks
6. Which statement is used to take input in Java?
  - a) input()
  - b) read()
  - c) Scanner
  - d) System.in.read()
7. Which loop is guaranteed to execute at least once?
  - a) for
  - b) while
  - c) do-while
  - d) nested
8. The smallest unit of data in a computer is:
  - a) Byte
  - b) Bit
  - c) Nibble
  - d) Word
9. Which of the following is not a Java keyword?
  - a) class
  - b) public
  - c) integer
  - d) static
10. JVM stands for:
  - a) Java Variable Machine
  - b) Java Virtual Machine
  - c) Java Visual Machine
  - d) Joint Virtual Machine
11. Which symbol is used for single line comment in Java?
  - a) /\* \*/
  - b) \*
  - c) //
  - d) \*\*
12. Which data type is used to store true or false values?
  - a) int
  - b) boolean
  - c) char
  - d) float
13. Which operator is used for logical AND?
  - a) &
  - b) &&
  - c) ||
  - d) !
14. Which loop executes at least once?
  - a) for
  - b) while
  - c) do-while
  - d) nested
15. Which statement is used to take input in Java?
  - a) System.out.print()
  - b) Scanner
  - c) println()
  - d) import
16. The default value of int variable is:
  - a) 1
  - b) null
  - c) 0
  - d) undefined

## SECTION – B (SUBJECTIVE TYPE QUESTIONS)

$$(2 \times 10 = 20)$$

1. Define Java. Mention any two features of Java.
2. Differentiate between for loop and while loop.
3. What is conditional statement? Explain if-else with syntax.
4. Explain type conversion in Java with an example.
5. What is the difference between for loop and while loop?
6. What is the use of `Math.random()` and `Math.sqrt()` methods?.
7. What is a compiler? How is it different from an interpreter?
8. Explain if-else-if ladder statement with proper syntax.
9. if  $a = 4, b = 3$   
Find the value of : `++a + ++b + a;`
10. Write the difference between & and && operator with example.

### SECTION – C (ATTEMPT ANY FOUR)

$$(15 \times 4 = 60)$$

1. Write a Java program to display the sum of first 10 natural numbers using a loop.
2. Write a program in Java to input name and basic salary of an employee. Calculate and display the gross salary and net salary when:

Da	=	20% of basic
Hra	=	13.5% of basic
PF	=	11% of basic
Gross	=	basic + da + hra
Net pay	=	Gross - PF
3. A certain amount is invested at the rate 5% per annum for 2 years. Find the difference between compound interest (CI) and simple interest (SI). Write a program to take amount as an input.

Hint :  $SI = \frac{P \times R \times T}{100}$        $CI = A = P (1 + r / n)^n$   
: And  $CI = A - P$
4. Write a program to input two numbers and display their sum, difference, product and quotient.
5. Write a program to display the first 10 natural numbers using a loop.

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