

HOLIDAY HOMEWORK

SESSION - 2023-24 (CLASS-IX)

ENGLISH

• Letter Writing

1. You are interested in a short-term course in computer graphics during the holidays. Write a letter to the Director, Fortune Graphics Computers, inquiring about their short-term courses and asking for all the necessary details. You are Anuj/Anju of 28 A, Utham Nagar, New Delhi [enquiring letter]
2. You are Neeraj/Neeraja Shekhar, Principal, Vasant Public School, Pune. Your school has just started a music department. Write a letter to the Manager of Melody House, Pune, wholesale suppliers of musical instruments, placing an order for musical instruments for the school. Ask for a discount on the catalogue prices. [placing an order]
3. The unsanitary conditions in your colony are causing multiple diseases. Write a letter to the Municipal Commissioner bringing the problem to his notice and request him to take urgent action in the matter. You are Deepak/Deepa of C2/8, Ankur Enclave, New Delhi [complaint letter]

Story Writing

1. Very interesting — cooking — mother — ill — wanted — cup of tea — first for — switch on the burner — then forgot to add water — made tea — no sugar — mummy still hugged me.
 2. Politeness — related — humility — polite child — liked — soft spoken — patient listener — able to help other — carries good image — family background
- Writing five interesting articles from Newspaper

(i) Education

(ii) Women Empowerment

(iii) Smoking in public places should be banned

(iv) Selling Tobacco should be banned

(v) Population Explosion

- Prepare a report on deforestation points to be covered: causes, effect and remedies [200 words]
- Read the story book 'A Monk who sold his old ferrari'.

S.S.T Holiday Homework

Find out more about anyone of the revolutionary figure you have read about in the chapter - "French Revolution". Write a short biography of this person.

1. Why most of the world's desert is located in the western margin of continent of the subtropics? Explain.

2. Map skills :-

(a) World map.

- 20 Rivers
- 10 Mountain Ranges
- 20 Lakes
- 20 countries and its capital

(b) Map of India :-

- Important Rivers
- Natural vegetation
- Mountain Ranges

Maths Holiday Homework

1. Draw a spiral root design on A-3 size sheet.
2. Prepare a working model on any topic related math text book.

3. Prepare a project on -

- (a) Lines and angles (Roll no. 1 to 5)
- (b) Statistics (Roll no. 6 to 10)
- (c) Triangles (Roll no. 11 to 15)
- (d) Quadrilaterals (Roll no. 16 to 20)

4. Revise all the chapters have done till now.

Science Holiday Homework

1. Prepare a beautiful chart on

- (a) Plant cell and Animal cell (Roll no. 1 to 5)
- (b) Section of a stem (Roll no. 6 to 10)
- (c) Table of electron Distribution in various shells (Roll no. 11 to 15)
- (d) Name and Symbols of some ions (Roll no. 16 to 20)

2. Prepare a project on -

- (a) Newton (Roll no. - 1 to 5)
- (b) Galileo Galilei (Roll no. 6 to 10)
- (c) Camillo Galgi (Roll no. 11 to 15)
- (d) J.J Thomson (Roll no. 16 to 20)

3. Revise all chapters have done till now.

Information Technology

- 1. using various features of M.S Word, design a page informing about yourself.
- 2. write Notes on "Communication skills" on M.S Word.

Make a greeting card on Father's day on M.S word using its features like orientation, column etc

* Take printouts of above mentioned questions and bring them in a folder.

4. Make a beautiful chart on one of the following topics :- (According to your Roll no.)

- (i) Types of communication (Roll no - 1 to 5)
- (ii) Elements of the communication (Roll no. 6 to 10)
- (iii) Computer memory]- Take help from (Roll no. 11 to 15)
- (iv) storage device [Part-A] (Roll no - 16 to 20)

5. Learn the syllabus have done in class.

हिन्दी

प्र०-1 क्विज भाग - 1 गद्य खंड :-

(क) पाठ - 1, 2, 3 के शब्दार्थ, प्रश्नोत्तर, सारांश, नोटबुक में लिखें और याद करें।

(ख) निम्न काव्य खंड की अपसंग व्याख्या करें :-

- (i) साखियाँ (कवीर)
- (ii) सबद (कवीर)
- (iii) वारव (ललधद)
- (iv) सवेये (रसरवान)

प्र०-2 कृतिका :-

पाठ - 1 इस जल प्रलय में (के प्रश्न-उत्तर, सारांश नोटबुक में लिखें और याद करें।)

प्र०-3 निम्न विषयों पर असाइनमेंट तैयार कीजिए -

- (क) वाक्य के आधार पर वाक्य भेद 1-7
- (ख) उपसर्ग - प्रत्यय और समास 8-14
- (ग) अलंकार 15-20

- 90-4 आज की उपभोक्ता संस्कृति हमारे रीति रिवाज और
 लोहारों को किस प्रकार प्रभावित कर रही है? अपने
 अनुभव के आधार पर एक अनुच्छेद लिखिए।
- 90-5 पशु-पक्षियों पर लिखी कविताओं का संग्रह करें और
 उनके चित्रों के साथ उन्हें प्रदर्शित करें।
- 90-6 हजारी प्रसाद द्विवेदी के कुछ अन्य मर्मस्पर्शी निबंधों में
 अशोक के फूल और नाखून क्यों बढ़ते हैं पढ़िए और
 अपनी नोटबुक में उनका सारांश लिखिए।

90-7 निबंध लेखन :-

- (क) किसी मैच का आँसू देखा वर्णन।
 (ख) कंप्यूटर और टी.वी. का जीवन पर प्रभाव।
 (ग) बढ़ती जनसंख्या एक समस्या।
 (घ) कोरोना वायरस एक महामारी।

90-8 पत्र लेखन :-

- (क) राजधानी दिल्ली में महिलाओं/लड़कियों के प्रति बढ़ते हुए
 अपराधों को रोकने के लिए दिल्ली पुलिस आयुक्त को
 पत्र लिखिए।
- (ख) आपका टेलीफोन दो सप्ताह से खराब है। अपने क्षेत्रीय
 कार्यालय में कई बार शिकायत की है। किंतु परिणाम
 नहीं का ली है। इसकी शिकायत करते हुए प्रबंधक महानगर
 टेलीफोन निगम लिमिटेड को पत्र लिखिए।

CHAPTER - 1 [NUMBER SYSTEM]

- Find three rational numbers between $\frac{5}{7}$ and $\frac{6}{7}$.
- Find four rational numbers between $\frac{1}{4}$ and $\frac{1}{5}$.
- Locate $\sqrt{10}$ and $\sqrt{11}$ on the number line.
- Express the following in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$.
 - $0.888\dots$
 - $5.\bar{2}$
 - $0.2555\dots$
 - $0.\bar{134}$
- Simplify:-
 - $\frac{\sqrt{24}}{8} + \frac{\sqrt{54}}{9}$
 - $\sqrt[4]{16} \times \sqrt[3]{128}$
 - $4\sqrt{28} + 3\sqrt{7} + \sqrt[3]{7}$
 - $(\sqrt{3} - \sqrt{2})^2$
 - $\frac{2\sqrt{3}}{3} - \frac{\sqrt{3}}{6}$
- Rationalise the denominator of :-
 - $\frac{3 + \sqrt{2}}{4\sqrt{2}}$
 - $\frac{16}{\sqrt{41} - 5}$
 - $\frac{2 + \sqrt{3}}{2 - \sqrt{3}}$
 - $\frac{\sqrt{6}}{\sqrt{2} + \sqrt{3}}$
- Find the value of a and b : $\frac{5 + 2\sqrt{3}}{7 + 4\sqrt{3}} = a - b\sqrt{3}$
 - $\frac{\sqrt{2} + \sqrt{3}}{3\sqrt{2} - 2\sqrt{3}} = 2 - b\sqrt{3}$
- If $a = 2 + \sqrt{3}$, then find the value of $a - \frac{1}{a}$.

CHAPTER - 2 [POLYNOMIAL]

- Simplify:- (i) $(2x-5y)^3 - (2x+5y)^3$
(ii)
- If $a+b+c=5$ and $ab+bc+ca=10$, then prove that $a^3+b^3+c^3-3abc=-25$.
- Using suitable identities, evaluate:-
 - 102×101
 - $(103)^3$
 - $(999)^2$
 - $(3a-2b)^3$
 - $(\frac{1}{x} + \frac{y}{3})^3$
 - $(4 - \frac{1}{3x})^3$
- If $a+b+c=9$ and $ab+bc+ca=26$, find $a^2+b^2+c^2$.
- Factorise:- (i) $x^3-6x^2+11x-6$
(ii) x^3+x^2-4x-4
- Factorise:- (i) $x^2-21x+110$ (iii) $y^2+7y-144$
(ii) $x^2-17x+60$ (iv) $x^2-6x-135$
- Using suitable identities, solve the following:-
 - $[\frac{5}{6}a^2-2] [\frac{5}{6}a^2-2]$
 - $(-3a+5b)^2$
 - $(a+\frac{1}{3})(a-\frac{1}{3})$
 - $(a^2b-bc^2)^2$
- If $x + \frac{1}{x} = 11$, find the value of:-
 - $x^2 + \frac{1}{x^2}$
 - $x^4 + \frac{1}{x^4}$
- If $x + \frac{1}{x} = 6$, find the value of $x^3 + \frac{1}{x^3}$.
- If $2x+6y=60$ and $xy=1$, find x^2+9y^2

CHAPTER - 1 [MATTER IN OUR SURROUNDINGS]

1. Define latent heat.
2. Define boiling point.
3. Define melting point.
4. Convert the following temperature to celsius scale
a) 296 K b) 673 K c) 539 K
5. Write all the factors that affecting evaporation.
6. Why do we see water droplets on the outer surface of a glass containing ice-cold water?

CHAPTER - 5 [The Fundamental unit of Life]

1. Define :-
 - a) hypotonic solution
 - b) Isotonic solution
 - c) hypertonic solution
2. Differentiate between RER and SER.
3. Write the functions of :-
 - a) Mitochondria
 - b) Golgi apparatus
 - c) lysosomes
 - d) Plastids
4. Write the full form of the following :-
 - a) DNA
 - b) ATP
 - c) SER
5. What would happen if the plasma membrane ruptures or break down?

CHAPTER - 8 [MOTION]

1. Differentiate between uniform and non-uniform motion.
2. Differentiate between displacement and distance
3. Define uniform circular motion.
4. Derive the equation $2as = v^2 - u^2$.
5. Derive the equation $v = u + at$.

P.S.M WORLD SCHOOL

CLASS - IX

Sub - English

WORKSHEET

(1) Fill in the blanks with appropriate modals.

- (i) Soldiers _____ obey orders without any question.
- (ii) I _____ go to market tomorrow.
- (iii) I wish you _____ fight this election.
- (iv) He works hard lest he _____ fail.

(2) Fill in the blank with suitable prepositions:

- (i) The girl jumped _____ the roof. (to/from/of)
- (ii) He put oranges _____ a basket (upon/to/into)
- (iii) The sun went to _____ clouds. (Behind/on to)
- (iv) Can you tell me the way _____ the airport? (to/in/at)
- (v) They walked _____ the green field and reached the bank of the river (at/across/for)

(3) Choose the option with the correct form of verb that agrees with the subject.

- (i) The regulations of the administration _____ from the curriculum.

- (a) stem
- (b) stems
- (c) stemming
- (d) are stemmed

- (ii) The children of the man who works with me _____ broken the window this morning.

- (a) were
- (b) have
- (c) had
- (d) has

(iii) One man among the crew ----- into the water every week

- (a) dive
- (b) had dived
- (c) is diving
- (d) dives.

(iv) The men of the community ----- not support the leader.

- (a) does
- (b) have
- (c) has
- (d) do

(v) Few students who ----- playing football missed the class

- (a) would be
- (b) could be
- (c) had
- (d) were

The following passage needs to be edited. There is one error in each line against which you find a blank. Write the incorrect word and the correction against the correct blank number.

(i) Cocaine may have made a comeback worldwide, and it's cocaine chic (a) -----

- That's yet got girl addicted in India young people like to go (b) -----
- But also they want to eat what their peers are eating at the (c) -----
- Junk food joints. Thus to compensate for the pizza and Coke (d) -----
- At dinner, they starve themselves thought the day that they are hurting themselves thought while short term social acceptance (e) -----

Time : 3 Hrs.

Maximum Mark : 80

General Instructions :

1. This question paper contains 3 parts- Reading, Writing and Grammar, Literature.
2. Separate instructions are given with each section and question, whenever necessary. Read these instructions very carefully and follow them.

Section - A (20 Marks)

READING (20 Marks)

1. **Read the passage given below.**

(Maggie is a golden doodle.) However, she turned out to be more golden than a doodle. She has lots of energy, is very loving, a people pleaser, soft and she loves every minute of life. But when she was small, we called her "The Demon". She loved to jump on me, bite me, and steal anything. My goal had been to get a dog that would keep me walking every day. But more than that, I am in a period of my life where I was looking for a way to give back. Seeing Maggie's loving personality and high energy, I realized that Maggie needed a job and I needed to volunteer, and if we worked together, we could both have that. But the little "demon" needed to be tamed! After going through beginner and intermediate obedience at Canine Academy, I knew that Maggie would benefit from the Off-Leash program and that would help her get ready to become a therapy dog so that she could be busy and I could give back.

She is home from the Academy now, and what a great dog she is! She loved her training and did very well at Canine Academy. Walks that used to be difficult because, at 75 lbs, her pulling on the leash was hard on me, are now a pleasure. We walk twice every day and she has many friends in the neighbourhood, that have watched her grow from an unruly puppy to a beautiful companion, thanks to the Canine Academy. We train every day and she loves to attend the weekly training sessions that the Off-Leash graduates take part in. Lisa and her trainers gave Maggie the tools she needed to be an absolutely wonderful dog. Now we work together to fine-tune those tools and everyone that knew her before is quite impressed by how well-behaved she is now. My life is so much better with Maggie in it, but part of that is thanks to the wonderful

people at the Canine Academy and the great work they do with dogs. If I ever add to my dog family, we will surely be calling them again!

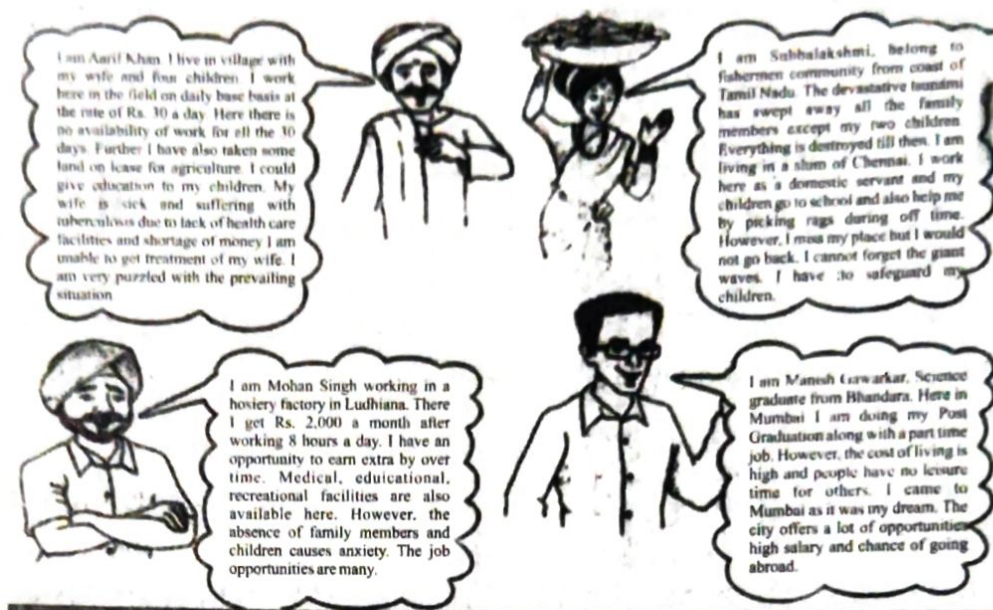
On the basis of your understanding of the above passage, answer the questions given below: (1 x 10 = 10)

- i. **Who is Maggie?**
- ii. **What qualities of Maggie are mentioned by the author in the opening paragraph?**
 - (a) She is soft and loving
 - (b) She is a villain
 - (c) She bites everyone
 - (d) She is always low on energy
- iii. **What was Maggie called when she was small?**
- iv. **What is the name of academy she goes to?**
 - (a) Off-Leash Academy
 - (b) Academy of Dogs
 - (c) Canine Academy
 - (d) Dog Family
- v. **What training programmes did Maggie undergo?**
 - (a) Beginner Obedience Programme
 - (b) Intermediate Obedience Programme
 - (c) Advanced Obedience Programme
 - (d) Off-Leash Training Programme
 - (a) Only (A) and (B)
 - (b) Only (A), (B), and (C)
 - (c) Only (A)
 - (d) Only (A), (B), and (D)
- vi. **What change occurred in Maggie after training?**
 - (a) She became high on energy
 - (b) She had a soft fur now
 - (c) She became a people pleaser
 - (d) She became well behaved
- vii. **Narrator's life is better with in it.**
- viii. **The narrator wanted Maggie to become a dog.**
- ix. **What is meant by the word, 'tamed'? (Para 1)**
- x. **What is meant by the word, 'obedience'? (Para 1)**
 - (a) faithfulness
 - (b) servility
 - (c) calmed
 - (d) respect

2. Read the passages given below.

People, generally are emotionally attached to their place of birth. But millions of people leave their places of birth and residence. There could be a variety of reasons. These reasons can be put into two broad categories:

Apart from these factors, natural disasters such as floods, drought, cyclonic storms, earthquakes, tsunami, wars and local conflicts also give an extra push to migrate. On the other hand, there are pull factors that attract people from rural areas to cities. The most important pull factor for the majority of the rural migrants to urban areas is the better opportunities, availability of regular work and relatively higher wages. Better opportunities for education, better health facilities and sources of entertainment, etc. are also quite important pull factors.



- i. push factor, these cause people to leave their place of residence or origin; and
- ii. pull factors, which attract people from different places. In India, people migrate from rural to urban areas mainly due to poverty, high population pressure on the land, lack of basic infrastructural facilities like health care, education, etc.

On the basis of your understanding of the passage, answer the questions that follow:

(1 x 10 = 10)

- i. According to the passage, one of the reasons for Subbalakshmi and Mohan Singh do not wish to go back to their places of birth or residence is that the: _____
- ii. Pick the option that lists statements that are NOT TRUE according to the passage.
 - (a) Push factors are quite a compulsion for rural people to move to a city.
 - (b) All those who migrate to cities have to bear the separation of their families.
 - (c) Pull and push factors are equally responsible for migration from rural areas to city.

(d) Only educated youth are shifting their residence in search of jobs.

(a) A and B

(b) B and D

(c) B and C

(d) A and B

iii. Name 2 Natural Disasters as given in Para 2.

iv. Based on the paragraph, choose the option that correctly states the ratio of Push factors and Pull factors for shifting from places of birth.



v. "...wars and local conflicts also give an extra push to migrate." The phrase **an extra push** stimulating migration is mainly a reference to:

(a) situations that are critical for migration

(b) situations that add up to the main reason for migration

(c) conditions that push the villagers even when they do not wish to migrate

(d) conditions when they are forcefully evicted from the rural areas to the city

vi. Based on the stories of four characters in the passage, choose the option that lists the statements that are **TRUE** with respect to life in their own villages.

(a) The city gives everything but not the pleasure of family members and children.

(b) Villagers often suffer from poverty and they lack basic health services

(c) All villagers have to survive through the fatal tsunami.

(d) Children remain deprived of education in villages.

(a) A and C

(b) B and D

(c) A and B

(d) C and D

vii. Based on the given stories of Subbalaksmi and Manohar Singh, pick the option that lists the main reason which causes more worry to one of them.

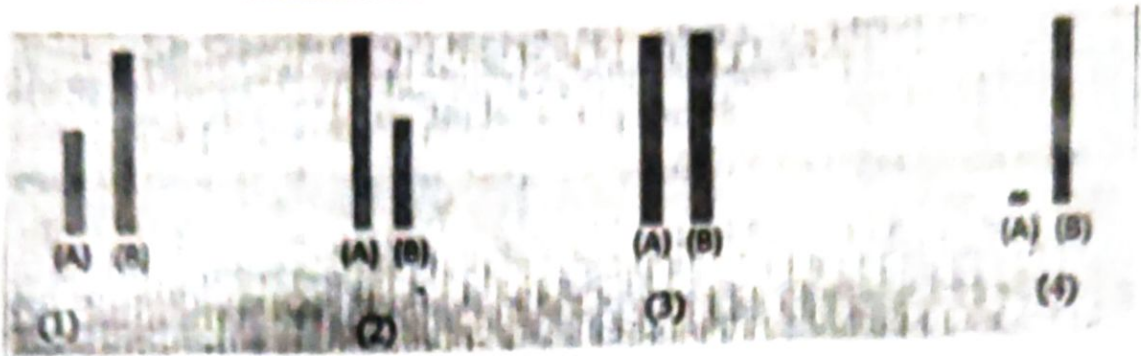
(a) All family members have been washed away by a tsunami in the village.

(b) He is away from his family members and children.

(c) She has to work as a domestic servant and rag-picker.

(d) He has to work and earn extra income by doing overtime.

- viii. In the comic strip above, out of the four characters, one has no regrets of leaving the village because of a strong emotional push factor and that character is _____.



- ix. Arrange the given pull factors from the least likely to the most likely cause of shifting places of birth and residence, as per the order stated by the writer:

(A) better opportunities for education

(B) poverty

(C) pressure of population

(a) A, B, C

(c) C, A, B

(b) B, C, A

(d) C, B, A

- x. The reasons why people leave their birth place and residence can be put into broad categories:

SECTION - B Grammar and Writing

3. Choose the correct options for of the following question.

10x1=10 Marks

- i. _____ and _____ me about your trip to Denver.

(a) Sitting down, tell

(b) Having sat down, told

(c) Sit down, tell

(d) Sitting down, telling

- ii. I _____ tennis every Sunday morning.

(a) am playing

(b) play

(c) playing

(d) am play

- iii. One of the books _____ been missing.

(a) have

(b) is

(c) are

(d) has

- iv. Students _____ borrow up to 6 books at any time.

(a) are allowed to

(b) would

(c) should

(d) could

- v. Drivers _____ stop when the traffic lights are red.

- (a) may (b) must
(c) could (d) should

vi. There is _____ water left, so drink only if you must.
(a) much (b) some
(c) little (d) none of these

vii. My success _____ blunt
(a) is (b) an
(c) are (d) will

viii. Ram as well as his friends _____ going.
(a) is (b) an
(c) are (d) has

ix. Animals does not posses qualities.

error	correction

x. They have there own talents.

error	correction

4. Attempt ANY ONE of the following in 100-120 words (5 marks)

a) You have seen innocent children working in a factory in hazardous conditions.

Write a diary entry expressing your views on child labour.

OR

b) Seema decided to write a story for her school magazine, but after some time, she could not complete it due to some urgent work. Complete the story on the basis of the beginning given below.

Hint- An old man had two daughters. He loved both of the them. Once he asked them...

5a) Srinagar with its Dal Lake, the snow clad mountain peaks and the Shalimar garden is nothing but a paradise on earth. You visited this beautiful city sometime back. Write a descriptive paragraph in 100-120 words describing the place.

OR

b) Last summer vacation you went to your friends village. His/her grandmother looked after you as if you were her own grandchild. Describe her in 100-120 words.

LITERATURE

6. Read any one of the extracts given below and answer the following questions: (5x1)

I was one of many children- a short boy with rather undistinguished looks, born to tall and handsome parents. We lived in our ancestral house, which was built in the middle of the nineteenth century. It was a fairly large pucca house, made of limestone and brick, on the Mosque Street in Rameswaram. My austere father used to avoid all inessential comforts and luxuries. However, all necessities were provided for, in terms of food, medicine or clothes. In fact, I would say mine was a very secure childhood, both materially and emotionally.

- i. What did his father often avoid?
 - (a) Non-essential comforts and luxuries
 - (b) Taking proper medication
 - (c) Wearing clothes
 - (d) Eating a nutritious and healthy meal
- ii. What necessities did the author talk about?
 - (a) In terms of food
 - (b) In terms of clothes
 - (c) In terms of medicine
 - (d) All of these
- iii. Write the meaning of 'secure'.
 - (a) Safe
 - (b) Sad
 - (c) Sedentary
 - (d) Sure
- iv. Describe Kalam's childhood.
- v. Where was Kalam's ancestral house located?

OR

But to everyone's surprise, the unborn child's grandmother, who was standing closeday, told him that they did not want a son. The holy man was also surprised.

- i. **What blessing did the holy man give earlier?**
 - (a) for peace and prosperity
 - (b) for success
 - (c) for the birth of a son
 - (d) for the birth of a daughter
- ii. **What request did the unborn child's grandmother make to the holy man?**
- iii. **The synonym of 'nearby' from the above lines-**

- (a) standing (b) close by
(c) surprise (d) holy

iv. **These lines have been taken from the chapter _____.**

v. **The grandmother referred in the para is _____.**

- (a) Kezia's grandmother (b) Kalams' grandmother
(c) Santosh Yadav's grandmother (d) Santosh Yadav

7. **Read the extract given below and answer the following questions:**

(5x1)

Then took the other, just as fair,
And having perhaps the better claim,
Because it was grassy and wanted wear;
Though as for that the passing there
Had worn them really about the same.

i. How was 'the other road' projected to be in the given lines?

- (a) Grassy (b) Less trodden
(c) Fair (d) All of these

ii. What has been termed as 'fair' in the given stanza?

iii. Write a similar word for 'probably' from the given stanza.

- (a) Fair (b) Perhaps
(c) Grassy (d) Really

iv. Give antonym of word 'claim'.

- a. Disclaim b. Disclosure
c. Discover d. Dislike

v. Name the poet of the given stanza.

OR

It is the human earth that we defile.

Our hells of fire and dust outrage the innocence of air that is everywhere
our own.

Remember, no men are foreign, and no countries strange.

i. **Hells of fire refers to destruction caused by-**

- (a) forest fires (b) arms used in war
(c) volcanoes (d) all of the above

ii. **According to the poet, human being pollute the earth by _____.**

iii. **Which of the following is NOT the same meaning as 'defile'?**

- (a) pollute (b) degrade
(c) cleanse (d) contaminate

- iv. The poem conveys the message of _____.
- v. In the poem the poet emphasizes that we should not consider anyone as our-
- (a) brother (b) soldier
(c) enemy (d) beloved

LITERATURE

8. Answer ANY FOUR questions in 40-50 words each:
(4x3=12 marks)
- (a) How did Evelyn's teachers respond when she expressed her desire to play the xylophone?
- (b) Who was Sivasubramania Iyer? What did he say to Abdul?
- (c) What ways did Kezia's grandmother encourage her to get to know her father better?
- (d) Describe the views of Margie about the old kind of school.
- (e) What kind of student was Einstein in high school?
9. Answer ANY TWO questions in 40-50 words each:
(2x3=6 marks)
- (a) What was the child's reaction on seeing a man holding a pole with yellow, red, green and purple balloons? Write your answer in the context of The Lost Child.
- (b) What did the swallow do before planning for his flight towards Egypt on the second night? Write your answer in the context of The Happy Prince.
- (c) Where did Sergei see Lushkoff after two years? What work was he doing then?
10. Answer ANY ONE of the following in 100-120 words (5x1 = 5 marks)
Why did Margie hate school? Why did she think the old kind of school must have been fun?

OR

Why did the saint punish the woman? What was the punishment? Write your answer in the context of Poem 'A Legend of the Northland.'

11. Answer ANY ONE of the following in 100-120 words (5x1 = 5 marks)
What role did Narrator's school play in normalising his life after the fire accident?

OR

Why did the people choose and crown the Guru and his disciple?

पी एस एम वर्ल्ड स्कूल
वार्षिक परीक्षा (२०२२-२३)
विषय- हिंदी
कक्षा- नौवीं

समय: 3 घंटे

अधिकतम अंक: 80

प्र० 1 नीचे दिए गए गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए।

(5)

जीवन रुकने का नहीं चलते रहने का नाम है। कुछ लोग असफलता की अवस्था में निराश होकर अपने उत्साह का दामन छोड़ बैठते हैं। भूल जाते हैं कि परिश्रम एवं प्रयत्न में तो भाग्य को बदल देने की भी क्षमता रहती है। बंसी बन कर रोना-धोना व्यर्थ है। मनुष्य इस संसार का सर्वश्रेष्ठ प्राणी है। अतः उसे अपना जीवन सार्थक बनाने के लिए आशा का सहारा लेना चाहिए। आलसी बनकर समय व्यर्थ बिताना अपने साथ अन्याय करना है। हमें अपने साधनों एवं क्षमताओं का प्रयोग कर प्रगति के पथ पर बढ़ना चाहिए। हमें भावात्मक कार्य की अपेक्षा रचनात्मक कार्य करना चाहिए। दुःख में घबराना कायरता का प्रतीक है। हर शाम के सूरज को ढलना ही है। रात को आना ही है तो क्या अँधेरे में हाथ पर हाथ रखकर बैठे रहा जाए या उठकर एक दीपक जला लें। सूर्य के समक्ष दीपक की क्या बिसात ! पर एक दीपक भी पर्याप्त है एक घर को रोशन देने के लिए।

क) जीवन नाम है –

i) स्वार्थों के आवागमन का

ii) आत्मविश्वास का

iii) निरंतर कर्मरत रहने का

iv) ईश्वर के प्रति आस्था का

ख) असफलता की स्थिति में, व्यक्ति का कर्तव्य है-

i) निराश होकर कर्म करना छोड़ दें

ii) आशावादी बनकर निरंतर परिश्रम करें

iii) भाग्य के भरोसे स्वयं छोड़ दें

iv) उत्साह का दामन छोड़ दें

ग) प्रगति के पथ पर अग्रसर होने के लिए आवश्यक है-

i) परिथितियों के साथ समझौता करना

ii) अनुकूल समय की प्रतीक्षा

iii) किसी भी प्रकार की कीमत चुकाने हेतु तत्परता

iv) अपनी क्षमताओं व साधनों का समुचित प्रयोग

घ) लेखक के अनुसार भावात्मक और रचनात्मक कार्यों में ज्यादा महत्वपूर्ण है-

i) भावात्मक

ii) रचनात्मक

iii) i. और ii. दोनों

iv) दोनों में से कोई नहीं

ङ) 'एक दीपक भी पर्याप्त है घर को रोशन करने के लिए'- पंक्ति से अभिप्राय है 'एक दीपक भी पर्याप्त है घर को रोशन करने के लिए'- पंक्ति से अभिप्राय है-

i) अँधेरा दूर करने का प्रयास

ii) दीपक जलाने की प्रेरणा

iii) छोटी छोटी उपलब्धियाँ प्राप्त करने की प्रेरणा

iv) दीपक की महत्ता

प्र० 2 अपठित पद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए।

(5)

है जनम लेते जगह में एक ही,

पौधा उन्हें है पालता।

रात में उन पर चमकता चाँद भी,

सी चाँदनी है डालता।

छेद कर काँटा किसी की उँगलियाँ,

फाड़ देता है किसी का वर वसन।

प्यार डूबी तितलियों के पर कतर,

और का है बढ़ देता श्याम मन।

फूल लेकर तितलियों को गोद में,
और को अपना अनूठा रस पीला।
निज सुगंधों को निराले ढंग में,
है सदा देता कली जी को खिला।

है खटकता एक सबकी आँख में,
दूसरा है सोहता सुर-सीस पर।
किस तरह कुल की बड़ाई काम दे,
जो किसी में हो बड़प्पन की कसर।

- क) इस कविता के लिए कौन सा शीर्षक सर्वाधिक उपयुक्त रहेगा?
ख) 'वर वसन' में किस अलंकार का प्रयोग है?
ग) काँटा क्या काम कर देता है?
घ) फूल क्या काम करता है?
ङ) इस कविता में क्या शिक्षा दी गई है?

प्र० 3 निम्नलिखित शब्दों और प्रत्यय अलग कीजिए-

(2¹/2)

- i) गैरजिम्मेदार ii) अनावश्यकता iii) अधार्मिकता iv) अस्वाभाविक v) दुकानदार

प्र० 4 निम्नलिखित पंक्तियों में प्रयुक्त अलंकार बताइए-

(2¹/2)

- क) तीन बेर खाती थी वे तीन बेर खाती है।
ख) मधुबन की छाती को देखो
सुखी कितनी इसकी कलियाँ
ग) मेघ आए बड़े बन-ठन के सँवर के।
घ) पायो जी मैंने राम - रतन धन पायो।
ङ) देख लो साकेत नगरी है यही,
स्वर्ग से मिलने गगन में जा रही।

प्र० 5 निम्न समस्त पदों का विग्रह करके समास का भेद बताइए – (कोई 2)

(4)

- i) प्रतिवर्ष ii) नीलकंठ iii) पंचवटी

प्र० 6 नीचे दिए गए प्रश्नों के उत्तर दीजिए (कोई 8 करें)

(10)

- क) किस घटना ने सालिम अली के जीवन की दिशा को बदल दिया और उन्हें पक्षी प्रेमी बना दिया?
ख) 'साँवले सपनों की याद' पाठ में लेखक ने सालिम अली के व्यक्तित्व खींचा है उसे अपने शब्दों में लिखिए।
ग) हरिशंकर परसाई ने प्रेमचंद का जो शब्दचित्र हमारे सामने प्रस्तुत किया है उससे प्रेमचंद के व्यक्तित्व की कौन - कौन सी विशेषताएँ उभरकर आती हैं?
घ) प्रेमचंद के फूटे जूते' पाठ में 'टीले' शब्द का प्रयोग किन सन्दर्भों को इंगित करने के लिए किया गया होगा?
ङ) लेखिका उर्दू-फ़ारसी क्यों नहीं सीख पाई?
च) लेखिका ने अपनी माँ के व्यक्तित्व की किन विशेषताओं का उल्लेख किया है?

प्र० 7 अर्थ की दृष्टि से वाक्य का प्रकार लिखिए-

(5)

- क) रीना विद्यालय नहीं जा रही है।
- ख) यदि मेहनत करोगे तो सफलता मिलेगी।
- ग) अरे ! आज तुमने कमाल कर दिया।
- घ) सब लड़के साथ खेलो।
- ङ) गाँधी जी का नाम सबने सुना है।

प्र० 8 निम्नलिखित प्रश्नों के उत्तर दीजिए -

(10)

- क) 'बच्चे काम पर जा रहे हैं' कविता में सुविधा और मनोरंजन के उपकरणों से बच्चे वंचित क्यों हैं?
- ख) बादलों के आने पर प्रकृति में जिन गतिशील क्रियाओं को कवि ने चित्रित किया है, उन्हें लिखिए।
- ग) लता ने बादल रूपी मेहमान को किस तरह देखा और क्यों?
- घ) 'ग्राम श्री' कविता में किस मौसम के सौंदर्य का वर्णन है?
- ङ) गाँव को 'मरकत डिब्बे सा खुला' क्यों कहा गया है?

प्र० 9 नीचे दिए गए गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए।

(6)

तुम फोटो का महत्व नहीं समझते। समझते होते, तो किसी से फोटो खिंचाने माँग लेते। लोग तो माँग के कोट से वर-दिखाई करते हैं। और माँग की मोटर से बारात निकालते हैं। फोटो खिंचाने के लिए तो बीवी तक माँग ली जाती है, तुमसे जूते ही माँगते नहीं बने ! तुम फोटो का महत्व नहीं जानते। लोग तो इत्र चुपड़कर फोटो खिंचाते हैं जिससे फोटो में खुशबू आ जाए ! गंदे-से-गंदे आदमी की फोटो भी खुशबू देती है।

- क) फोटो के महत्व को कौन नहीं जानता और क्यों?
- ख) लोग फोटो खिंचाने के लिए क्या-क्या करते हैं?
- ग) "गंदे-से-गंदे आदमी की फोटो भी खुशबू देती है" - में छिपा व्यंग्य स्पष्ट कीजिए।

प्र० 10 निम्नलिखित काव्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए।

(5)

फैली खेतों में दूर तलक
मखमल की कोमल हरियाली;
लिपटी जिसमें रवि की किरणें
चाँदी की सी उजली जाली !
तिनकों के हरे- हर तन पर
हिल हरित रूधिर है रहा झलक,
श्यामल भू तल पर झुका हुआ
नभ का चिर निर्मल नील पलक।

- क) कवि ने हरियाली को मखमल समान कोमल क्यों कहा है?
- ख) हरी घास पर पड़ी ओस की बूँदों को देखकर कवि क्या कल्पना करता है?
- ग) हरियाली पर सूर्य की किरणें कैसी लग रहीं हैं?
- घ) 'चाँदी की सी उजली जाली' में कौन सा अलंकार है?
- ङ) उपर्युक्त काव्यांश में से 'सूर्य' और 'लहू' के पर्यायवाची शब्द छाँटो।

प्र० 11 किन्हीं २ प्रश्नों के उत्तर दीजिए-

(5)

- क) अपनी बेटी का रिश्ता तय करने के लिए रामस्वरूप उमा से जिस प्रकार व्यवहार की अपेक्षा कर रहे हैं वह उचित क्यों नहीं है?
ख) लेखिका ने अपनी नानी को कभी देखा भी नहीं फिर भी उनके व्यक्तित्व से वे क्यों प्रभावित थी?
ग) 'शिक्षा बच्चों का जन्मसिद्ध अधिकार है' - इस दिशा में लेखिका के प्रयासों का उल्लेख कीजिए।

प्र० 12 दिए गए संकेत बिंदुओं के आधार पर किसी एक विषय पर 200 से 250 शब्दों में निबंध लिखिए।

(10)

- i. महानगरों में बढ़ता यातायात: एक समस्या
- ❖ समस्या का कारण
 - ❖ वैभव का प्रतीक
 - ❖ दुर्घटनाएँ
 - ❖ वायु एवं ध्वनि प्रदूषण
 - ❖ कुछ सुझाव
- ii. अच्छा स्वास्थ्य महावरदान
- ❖ प्रस्तावना
 - ❖ अस्वस्थ व्यक्ति की दशा
 - ❖ अच्छा स्वास्थ्य एक वरदान है
 - ❖ पौष्टिक भोजन का स्वरूप एवं महत्व
 - ❖ नियमित एवं सादा जीवन
- iii. भारत की बहुमुखी प्रगति
- ❖ आत्मनिर्भरता
 - ❖ विज्ञापन के क्षेत्र में विकास
 - ❖ ऊर्जा के क्षेत्र में विकास
 - ❖ अंतरिक्ष विज्ञान के क्षेत्र में विकास

प्र० 13 निम्नलिखित में से कोई एक पत्र लिखिए-

(10)

- ❖ अपने क्षेत्र में बिजली आपूर्ति की समस्या के संदर्भ में सम्बंधित अधिकारी को शिकायती पत्र लिखिए।
अथवा
- ❖ बड़े भाई को पत्र लिखिए जिसमें उसके द्वारा दी गई सीख पर आचरण करने का आश्वासन दीजिए।

P.S.M WORLD SCHOOL
ANNUAL EXAMINATION (2022-23)
CLASS – IX
SUBJECT – INFORMATION TECHNOLOGY (402)

Time: 2 Hrs.

M.M.: 50

General Instructions:

- i. Please read the instructions carefully.
- ii. This Question Paper consists of 21 questions in two sections: Section A & Section B.
- iii. Section A has Objective type questions whereas Section B contains Subjective type questions.
- iv. Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.
- v. All questions of a particular section must be attempted in the correct order.

SECTION A - OBJECTIVE TYPE QUESTIONS (24 MARKS):

- i. This section has 05 questions.
- ii. Marks allotted are mentioned against each question/part.
- iii. There is no negative marking.
- iv. Do as per the instructions given.

SECTION B - SUBJECTIVE TYPE QUESTIONS (26 MARKS):

- i. This section has 16 questions.
- ii. A candidate has to do 10 questions.
- iii. Do as per the instructions given.
- iv. Marks allotted are mentioned against each question/part.

Section A: OBJECTIVE TYPE QUESTIONS

Q. 1 Answer any 4 out of the given 6 questions on Employability Skills. (1 x 4 = 4 marks)

i. Which of the these sentences use uppercase letters correctly?

- | | |
|---------------------------------|---------------------------------|
| a. I am Hungry. | b. Divya and sunil are reading. |
| c. The bucket is Full of water. | d. She lives in Delhi. |

ii. Dressing and grooming are important because they help us to look _____ .

- | | |
|-----------|---------------------|
| a. smart | b. untidy |
| c. shabby | d. all of the above |

iii. What is/are the reason/reasons behind Lack of self – confidence?

- | | |
|-----------------------|-------------------------|
| a. Lack of initiative | b. Fear of failure |
| c. Both a & b | d. Positive affirmation |

iv. Which of the following is not a reward of entrepreneurship?

- | | |
|----------------------|-------------------------|
| a. Flexible schedule | b. Recognition and fame |
| c. Stay creative | d. All of these |

v. Which type of business buys products at wholesale price and sells them in retail?

- | | |
|----------------|------------------|
| a. Service | b. Manufacturing |
| c. Merchandise | d. Hybrid |

vi. What is/are the benefit/benefits of Self – management

- a. Self- discipline
- b. Smart working
- c. Clarity of thoughts
- d. All of these

Q2. Answer any 5 out of the given 6 questions. (1 x 5 = 5 marks)

i. ITeS is defined as outsourcing processes that can be enabled by _____.

- a. Information technology
- b. Human resource
- c. Networking
- d. Communication technology

ii. Identify the home row keys

- a. QWER;TYK
- b. AS ER;UILO
- c. ASDF JKL;
- d. AXCFJNM;

iii. Companies having head quarters in one country and offices in multiple locations across the globe are ____ .

- a. MNCs
- b. ISP
- c. GIC
- d. All of these

iv. In a spreadsheets, calculations are done on _____.

- a. Data
- b. Labels
- c. Functions
- d. Formula

v. A user has stored the formula =B5 + B6 in the cell A1 and copied the formula in cell A2. The changed formula will look like _____.

- a. =B6 + B7
- b. =C5 + C6
- c. =C6 + C7
- d. =B5 + B6

vi. When values are changed in the cells, the result of calculations update according to the changes. – This is an advantage related to which of the following?

- a. Functions
- b. Formula
- c. Both a) and b)
- d. Charts

Q. 3 Answer any 5 out of the given 6 questions. (1 x 5 = 5 marks)

i. The keys which have letters/alphabets printed on them are called the _____ keys.

- a. Alphabet
- b. Number
- c. Enter
- d. Caps Lock

ii. ! punctuation mark is typed with the help of _____ key.

- a. Ctrl
- b. Shift
- c. Arrow
- d. Alt

iii. Virtual keyboard can be displayed by pressing _____ key.

- a. F5
- b. F8
- c. F9
- d. Ctrl+K

iv. Knees and elbows should make which angle while sitting and typing?

- a. 90 degrees
- b. 180 degrees
- c. 45 degrees
- d. 20 degrees

v. _____ involves the development of muscle memory or memory of touch to locate the keys on the keyboard while typing.

- a. Dragging
- b. Touch typing
- c. Dropping
- d. Clicking

vi. He _____ born in 2001 in Odisha?

- a. has
- b. is
- c. was
- d. did

Q. 4 Answer any 5 out of the given 6 questions.

(1 x 5 = 5 marks)

i. _____ feature generates copies of letter for multiple recipients.

- a. Thesaurus
- b. Template
- c. Auto-complete
- d. Mail merge

ii. Rohan wants to convert upper case letter to lower and lower to upper in a title. What should he do?

- a. Apply Toggle Case
- b. Retype the title
- c. Apply Capitalize Every Word case
- d. Apply Title text case

iii. _____ contains the merge field names in the top row.

- a. Main document
- b. Data source
- c. Merged document
- d. None of these

iv. Reshmi is a teacher and she is writing steps to shut down a computer for small kids. Which list type is best suited for kids?

- a. Bullet
- b. Numbered
- c. Paragraph
- d. Table

v. Renu is making her computer project. She needs to show a flow chart of her program in the project documentation. Which of the following features should help her?

- a. Basic shapes
- b. Polygons
- c. Flowchart shapes
- d. Symbol shapes

vi. Which of the following actions changes the dimensions of an image inserted in a document?

- a. Crop
- b. Rotate
- c. Skew
- d. Symbol shapes

Q. 5 Answer any 5 out of the given 6 questions.

(1 x 5 = 5 marks)

i. To write mathematical equations, which of the following text style is helpful?

- a. Superscript
- b. Overline
- c. Strikethrough
- d. Italic

- ii. Just like Writer and Calc, LibreOffice Impress is a/an _____ application?
- a. Powerful
b. Open source
c. Presentation
d. Commercial
- iii. The effect with which a slide switches to the next during a presentation is called _____.
- a. Animation
b. Motion path
c. Transition
d. Advance slide
- iv. $=A5 + \$B5 * \$D\$5$ – this formula is an example of _____?
- a. Relative reference
b. Absolute reference
c. Mixed reference
d. All of these
- v. The electronic page in a presentation is called a _____.
- a. page
b. e-page
c. slide
d. e-slide
- vi. _____ option determines the speed of an animation effect in a presentation.
- a. Delay
b. Duration
c. Start
d. Motion path

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills. (2 x 3 = 6 marks)

Answer each question in 20 – 30 words.

Q. 6 What do you mean by interjection and conjunction? Explain with 2 examples each.

Q. 7 How is RAM different from ROM?

Q. 8 List 2 advantages of written communication.

Q. 9 What do you mean by peripheral devices?

Q. 10 What do you mean by green economy?

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

Q. 11 How is BPO different from BPM?

Q. 12 What are word processors? Give some examples.

Q. 13 What do you mean by a call centre?

Q. 14 Give any 2 purpose of using charts and graphs.

Q. 15 What are the basic components of a slide?

Q. 16 Why is formatting necessary?

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

Q. 17 What is the use of different workspace views of Impress? Explain about any four views.

Q.18 how many stages are involved in touch typing technique? Describe each state.

Q. 19 What is a spreadsheet? Briefly discuss any 4 major features of a spreadsheet program.

Q. 20 What do you mean by rotating, cropping and resizing an image?

Q. 21 What is the significance of a chart? Briefly describe the use of any 3 distinct types of charts.

P.S.M WORLD SCHOOL
ANNUAL EXAMINATION (2022-23)
CLASS – IX
SUBJECT – MATHEMATICS

Time: 3 Hrs.

M.M.: 80

General Instructions:

1. This Question Paper has 5 Sections A-E.
2. Section A has 20 MCQs carrying 1 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 assessment (04 marks each) with sub-parts of the values of 1, 1 and 2 marks each respectively.
7. All Questions are compulsory. However, an internal choice in 2 Qs of 5 marks, 2 Qs of 3 marks and 2 Questions of 2 marks has been provided. An internal choice has been provided in the 2marks questions of Section E
8. Draw neat figures wherever required. Take $\frac{22}{7}$ wherever required if not stated.

Section – A

Q1. Every rational number is

- | | |
|---------------------|-------------------|
| a) A natural number | b) An integer |
| c) A real number | d) A whole number |

Q2. Zero of the zero polynomial is 0

- | | |
|--------------------|----------------|
| a) 0 | b) 1 |
| c) Any real number | d) Not defined |

Q3. The linear equation $2x - 5y = 7$ has

- | | |
|------------------------------|------------------|
| a) A unique solution | b) Two Solutions |
| c) Infinitely many solutions | d) No solution |

Q4. The point at which two coordinate axes meet is called the

- | | |
|-------------|-------------|
| a) Abscissa | b) Ordinate |
| c) Origin | d) Quadrant |

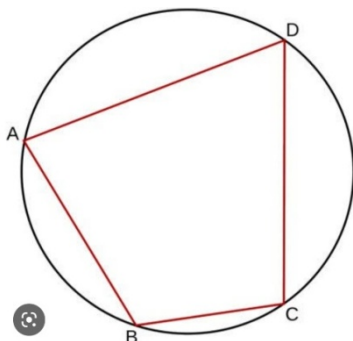
Q5. The angles of a triangle are in the ratio 5:3:7. The triangle is

- | | |
|-----------------------------|------------------------------|
| a) An acute angled triangle | b) An obtuse angled triangle |
| c) A right triangle | d) An isosceles triangle |

Q6. The diagonals AC and BD of a parallelogram ABCD intersect each other at point O. If $\angle DAC = 32^\circ$ and $\angle AOB = 70^\circ$, then $\angle DBC$ is equal to

- | | |
|---------------|---------------|
| a) 24° | b) 86° |
| c) 38° | d) 32° |

Q7. In the given figure, ABCD is a cyclic quadrilateral in which $\angle A = (2x + 40^\circ)$ and $\angle C = (3x + 20^\circ)$, then the value equation



- | | |
|---------------|---------------|
| a) 20° | b) 40° |
| c) 24° | d) 48° |

Q20. Assertion (A): The rationalised form of $\frac{1}{\sqrt{2}}$ is $\frac{\sqrt{2}}{2}$.

Reason (R): The conjugate of $\sqrt{2}$ is $\sqrt{2}$.

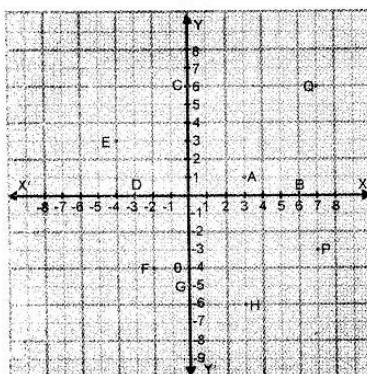
- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true but R is not the correct explanation of A.
- c) A is true but R is false.
- d) A is false but R is true.

Section – B

Q21. Solve the equation $a - 15 = 25$ and state which axiom do you use here.

Q22. It is known that $x + y = 10$ and that $x = z$. Show that $z + y = 10$?

Q23. Write the co-ordinates of each of the following points marked in the bar graph.



Q24. Simplify : $2^{2/3} \cdot 2^{1/5}$

OR

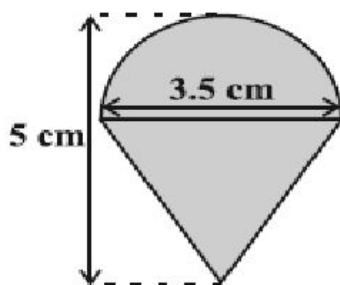
If,

$$a = \frac{3 + \sqrt{5}}{2},$$

$$a^2 + \frac{1}{a^2}.$$

then find the value of .

Q25. Harish was a student of 9th class. Once his birthday party was arranged in a restaurant. He got a playing top (lattu) as his birthday present, which surprisingly had no color on it. He wanted to color it with his crayons. The top is shaped like a cone surmounted by a hemisphere as shown in the figure. The entire top of each lattu is 5 cm in height and the diameter of the top is 3.5 cm. Rashid wants to color the hemispherical part by red color and the conical part by green color.



Answer the following questions:

- i. What is the area to be colored by red color?
- ii. Also, find the area to be colored by green color.

OR

Find the ratio of the curved surface areas of two cones if their diameters of the bases are equal and slant heights are in the ratio 4 : 3.

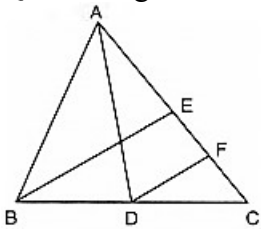
Section – C

Q26. If $a = xy^{p-1}$, $b = xy^{q-1}$ and $c = xy^{r-1}$, prove that $a^{q-r} b^{r-p} c^{p-q} = 1$

Q27. Construct a histogram for the following data:

Monthly School fee (in ₹):	30-60	60-90	90-120	120-150	150-180	180-210	210-240
No of Schools	5	12	14	18	10	9	4

Q28. In Figure AD and BE are medians of ABC and BE || DF. Prove that CF = AC.



Q29. Find at least 3 solutions for the following linear equation in two variables:

$$2x + 5y = 13$$

Q30. Draw a histogram of the following distribution:

Height (in cm)	Number of students
150 - 153	7
153 - 156	8
156 - 159	14
159 - 162	10
162 - 165	6
165 - 168	5

OR

The production of oil (in lakh tonnes) in some of the refineries in India during 1982 was given below:

Refinery:	Barauni	Koyali	Mathura	Mumbai	Florida
Production of oil (in lakh tonnes)	30	70	40	45	25

Construct a bar graph to represent the above data so that the bars are drawn horizontally.

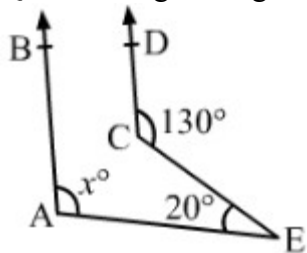
Q31.

Factorize:

$$2\sqrt{2}x^3 + 3\sqrt{3}y^3 + \sqrt{5}(5 - 3\sqrt{6}xy)$$

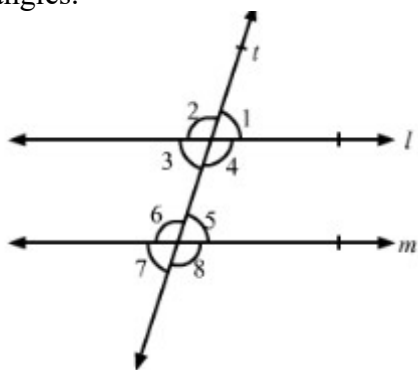
Section – D

Q32. In the given figure, $AB \parallel CD$. Find the value of x



OR

In the given figure, $l \parallel m$ and a transversal t cuts them. If , find the measure of each of the marked angles.



Q33. A right angled triangle with sides 3 cm and 4 cm is revolved around its hypotenuse. Find the volume of the double cone thus generated.

Q34. Find the area of the triangle whose sides are 42 cm, 34 cm and 20 cm in length. Hence, find the height corresponding to the longest side.

OR

The perimeter of a triangle is 50 cm. One side of a triangle is 4 cm longer than the smaller side and the third side is 6 cm less than twice the smaller side. Find the area of the triangle.

Q35. Let R_1 and R_2 are the remainders when the polynomials $x^3 + 2x^2 - 5ax - 7$ and $x^3 + ax^2 - 12x + 6$ are divided by $x + 1$ and $x - 2$ respectively. If $2R_1 + R_2 = 6$, find the value of a .

Section – E

Q36. Read the text carefully and answer the questions:

Peter, Kevin James, Reeta and Veena were students of Class 9th B at Govt Sr Sec School, Sector 5, Gurgaon. Once the teacher told **Peter to think a number x and to Kevin to think another number y** so that the difference of the numbers is 10 ($x > y$).

Now the teacher asked James to add double of Peter's number and that three times of Kevin's number, the total was found 120.

Reeta just entered in the class, she did not know any number.

The teacher said Reeta to form the 1st equation with two variables x and y .

Now Veena just entered the class so the teacher told her to form 2nd equation with two variables x and y .

Now teacher Told Reeta to find the values of x and y . Peter and kelvin were told to verify the numbers x and y .



- i. What are the equation formed by Reeta and Veena?
- ii. What was the equation formed by Veena?

iii. Which number did Peter think?

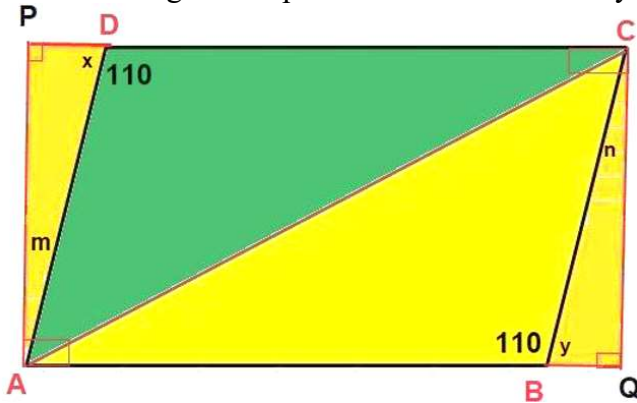
OR

Which number did Kelvin think?

Q37. Read the text carefully and answer the questions:

In the middle of the city, there was a park ABCD in the form of a parallelogram form so that $AB = CD$, $AB \parallel CD$ and $AD = BC$, $AD \parallel BC$.

Municipality converted this park into a rectangular form by adding land in the form of APD and BCQ. Both the triangular shape of land were covered by planting flower plants.



- i. Show that APD and BQC are congruent.
- ii. PD is equal to which side?

OR

- i. What is the value of m?
- ii. Show that ABC and CDA are congruent.

Q38. Mathematics teacher of a school took his 10th standard students to show Taj Mahal. It was a part of their Educational trip. The teacher had interest in history as well. He narrated the facts of Taj Mahal to the students. Then the teacher said in this monument one can find combination of solid figures. There are 4 pillars which are cylindrical in shape. Also, 2 domes at the back side which are hemispherical. 1 big domes at the centre. It is the finest example of the symmetry. (Use $\pi = 22/7$)

(i) How much cloth material will be required to cover 2 small domes each of radius 4.2 metres?



(ii) Write the formula to find the volume of one pillar (including hemispherical dome) :

(iii) The volume of the hemispherical dome at the centre if base radius is 7 m is

(iv) What is the lateral surface area of all 4 pillars if height of the each pillar is 14 m and base radius is 1.4 m (without dome)?

P.S.M WORLD SCHOOL
ANNUAL EXAMINATION (2022-23)
CLASS – IX
SUBJECT – SOCIAL SCIENCE

Time: 3 Hrs.

M.M.: 80

Very Short answer question

(1x7=7)

1. Why was Bastil most hated Prison in France?
2. When was Indian Forest Service started?
3. Name The parallel of latitude which divides India into almost equal parts?
4. Where does the heaviest rainfall of the world occur?
5. Which age group is generally considered in adolescent group?
6. Define the term constituency?
7. Writes the names of two poorest state in India.

Short answer questions

(11 x 3=33)

8. Evaluate the functions of national
9. An Adivasi child will be able to name hundreds of species of tree and plants how many species of trees can you name. (name any six)

OR

Why did British introduce waste land rules? How did this affect the life of pastoralists?

10. What are the factor affecting the climate of India?
11. What are the causes of sudden growth of population in India since 1951? Write any three reasons.
12. Why the peninsular rivers of India are seasonal in nature give three reasons.
13. Why we need constitution in democracy?
14. Mention essential qualification for the post of President of India.
15. " Rights play an important role in any democracy " explain the given statement with the help of any three points.
16. What is the difference between multiple cropping and modern farming method?
17. Explain how poverty line is estimated in India.

Long answer questions

(5x8=40)

18. Why did British government want to change grazing land in to farming land give five reason.
19. What were the features of Nazism?
20. What is sex ratio ? right main causes of adverse sex ratio in India.
21. What are the challenges to free and fair election describe any five challenges?
22. How can you say that the president occupies the position of a nominal head of the state? Give reason in support of your answer.

OR

What effects did nazism have on the school system. Give five points.

23. What are different dimension of food security? Mention any two scheme launched by the government to provide food security to the poor.
24. How has increasing population prove to be one of the man reason of poverty explain in detail.
25. Identify this features with the help of following information and write their correct names on the lines marked in the map.

a) The state having longest International boundaries	d) Jim Corbett National park
b) The smallest state in respect of area	e) Bharat pur bird sanctuary
c) Kajiranga national park	

P.S.M WORLD SCHOOL
ANNUAL EXAMINATION (2022-23)
CLASS – IX
SUBJECT – SCIENCE

Time: 3 Hrs.

M.M.: 80

Section A

1. Match the following with the correct response:-

(1) Sublimation	(A) Heat required to change the state of 1Kg of solid into liquid
(2) Evaporation	(B) Change of liquid state into vapours without coming to its boiling point
(3) Latent heat of vaporisation	(C) Change of solid directly into vapours
(4) Latent heat of fusion	(D) Heat required to change the state of 1Kg liquid into vapours

a) 1-C, 2-B, 3-D, 4-A

b) 1-A, 2-C, 3-B, 4-D

c) 1-B, 2-D, 3-A, 4-C

d) 1-D, 2-A, 3-C, 4-B

2. The primary function of smooth endoplasmic reticulum in liver cells is:

a) detoxification

b) protein synthesis

c) carbohydrate metabolism

d) catabolism of proteins

3. Match the following with the correct response:

(a) Velocity	(i) m/s^2
(b) Displacement	(ii) m/s
(c) Acceleration	(iii) s
(d) Time	(iv) m

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

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

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

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

4. Preventive and control measures adopted for the storage of grains include

a) strict cleaning

b) fumigation

c) all of these

d) proper drying

5. Latex of which of the following plants yield chewing gum?

a) Achrassapota

b) Bougainvillea

c) Cucurbita

d) Castor

6. Cell arises from the pre-existing cell was stated by

a) Virchow

b) Purkinje

c) Robert Hook

d) Robert Brown

7. Match the following with the correct response:

(1) 1 mole of	(A) molecules
(2) 1 mole of N	(B) 12 g

(3) 1 mole of C	(C) atoms
(4) 1 mole of	(D) 18 g

a) 1-C, 2-B, 3-D, 4-A

b) 1-D, 2-A, 3-C, 4-B

c) 1-A, 2-C, 3-B, 4-D

d) 1-B, 2-D, 3-A, 4-C

8. Haversian canals are present in _____.

a) Ligament

b) Bone

c) Cartilage

d) Tendon

9. A heavier and a lighter body have equal momentum, then

a) heavier will have more K.E.

b) lighter will have more K.E.

c) they will have equal K.E.

d) K.E. will be independent of momentum

10. Match the following with the correct response:

(a) I equation of motion	(i) $v = u + at$
(b) II equation of motion	(ii) $v^2 = u^2 + 2as$
(c) III equation of motion	(iii) $S = ut +$
(d) Retardation	(iv)

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

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

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

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

11. Calculate the number of moles in 17 g of hydrogen peroxide (H_2O_2).

a) 2 mole

b) 1 mole

c) mole

d) 3 mole

12. Match the following with the correct response

(a) Aerenchyma	(i) Permanent tissue
(b) Parenchyma	(ii) Thin-walled packing cells
(c) Chlorenchyma	(iii) Buoyancy
(d) Cork	(iv) Photosynthesis

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

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

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

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

13. Organelle without a cell membrane is

a) Ribosome

b) Golgi apparatus

c) Chloroplast

d) Nucleus

14. Nitrogen is:

a) Diatomic

b) Monatomic

c) Triatomic

d) Tetratomic

15. Which of the following settles down when allowed to stand undisturbed for some time?

a) Copper sulphate solution

b) Blood

c) Muddy water

d) Solution of egg albumin in water

16. 'Operation Flood' in India refers to:-

- a) Controlling floods during the rainy season.
- b) Increase in milk production by the development of co-operative dairy on a large scale.
- c) Increase in fish production during floods.
- d) The large increase in egg production.

17. **Assertion (A):** A tiger can accelerate from rest at the rate of 4 m/s^2 .

Reason (R): The velocity attained by it in 10s is 40 m/s.

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

18. **Assertion (A):** During evaporation of liquids, the temperature remains unaffected.

Reason (R): Kinetic energy of the molecules is inversely proportional to absolute temperature

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

- b) Both A and R are true but R is not the correct explanation of A.
- c) A is true but R is false.
- d) A is false but R is true.

19. **Assertion (A):** 1-day Vinita went to see his brother's competition and he saw his brother in pain and not able to run comfortably.

Reason (R): Two bones can be connected to each other by another type of connective tissue called the ligament. This tissue is very elastic. It has considerable strength.

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

20. **Assertion (A):** Isotopes are electrically neutral.

Reason (R): Isotopes are species with same mass number but different atomic numbers.

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true but R is not the correct explanation of A.
- c) A is true but R is false.

d) A is false but R is true.

Section B

21. A certain household has consumed 250 units of energy during a month. How much energy is this in joules?

OR

A horse pulls a cart with a force of 300 N, such that the system of horse and cart moves with uniform speed of 18 kmh^{-1} on a level road. Calculate the power developed by the horse in watt and also find its equivalent horse power. (Take $1 \text{ hp} = 746 \text{ W}$)

22. What are the factors which are responsible for bringing a change in the physical state of a substance?

23. Two children are at opposite ends of an aluminium rod. One strikes the end of the rod with a stone. Find the ratio of times taken by the sound wave in air and in aluminium to reach the second child. Given velocity of sound in air and aluminium are 346 ms^{-1} and 6420 ms^{-1} respectively.

24. Why are we able to sip hot tea or milk faster from a saucer rather than a cup?

25. Explain why the sole of a shoe is worn out.

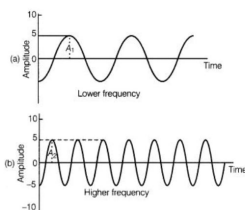
OR

Explain, why is it difficult for a fireman to hold a hose, which ejects large amounts of water at a high velocity.

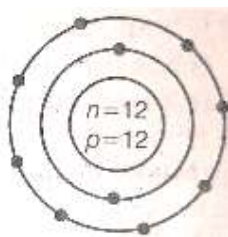
26. If bromine atom is available in the form of, say, two isotopes and . Calculate the average atomic mass of bromine atom.

Section C

27. Observe the following graphical diagram and answer the following questions:



1. What is represented by the graphical diagram shown above?
2. Which wave characteristic determine the pitch of sound?
3. What is the relationship between pitch and frequency?



28.

iii. How do we get the number of protons as 12?

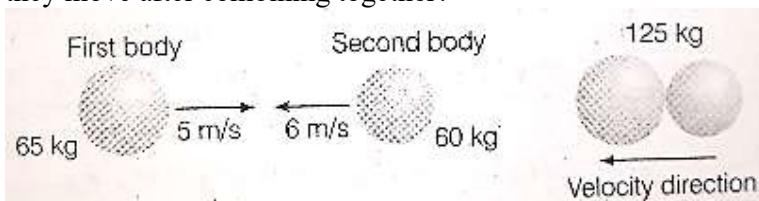
29. A body is dropped from a height of 320 m. The acceleration due to the gravity is 10 m/s^2 .
- How long does it take to reach the ground?
 - What is the velocity with which it will strike the ground?

OR

Two cars A and B are moving along a straight line. Car A is moving at a speed of 80 Km/h while car B is moving at a speed 50 Km/h in the same direction. Find the magnitude and direction of:

- the relative velocity of car A with respect to B
 - The relative velocity of car B with respect to A.
30. Due to heavy rains and speedy winds a tree broke and fell on the road. Two persons from local shops came and begin to remove that broken part of the tree, but in vain as the log was too heavy. A passerby came to their help with a few solid heavy sticks. Consequently, the heavy log was put aside and the commutation on the road began as usual.
- Comment upon the value(s) displayed by the passerby?
 - Name the energy stored when the heavy log of the tree was lifted to some height?

31. Two bodies as shown in the figure collide with each other and join thereafter, with what velocity will they move after combining together?

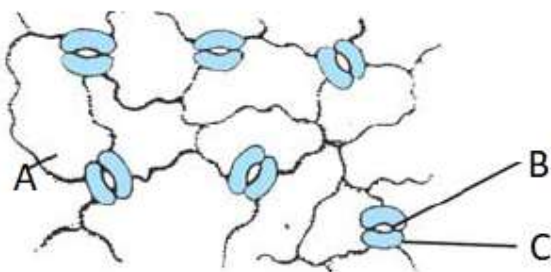


32. What is the difference between plasma membrane and cell wall ? Give the functions of each one.

OR

Differentiate between active and passive transport.

33. Observe the given below diagram and answer the following questions:



- What does A represent in the given diagram? How does cell 'A' of root hairs cells help in water absorption?
- How does B in the given diagram help the plants?
- Out of A, B, and C cells in the above diagram, which cell helps in the closing and opening of the stomata? Write the name of the cell.

- i. At some moment, two giant planets Jupiter and Saturn of the solar system are in the same line as seen from the earth. Find the total gravitational force due to them on a person of mass 50 kg on the earth. Could the force due to the planets be important?

Mass of the Jupiter = 2×10^{27} kg

Mass of the Saturn = 6×10^{26} kg

The distance of Jupiter from the earth = 6.3×10^{11} m

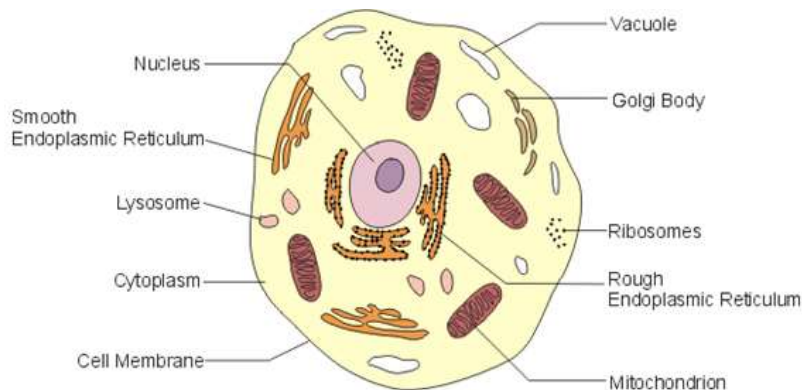
The distance of Saturn from the earth = 1.28×10^{12} m

- ii. A bag of sugar weighs 'w' at a certain place on the equator. If this bag is taken to Antarctica, then will it weigh the same or more or less. Give a reason for your answer.

OR

- i. A cube of side 5 cm is immersed in water and then in saturated salt solution. In which case, will it experience a greater buoyant force? If each side of the cube is reduced to 4 cm and then immersed in water, what will be the effect on the buoyant force experienced by the cube as compared to the first case for water. Give the reason for each case.
- ii. A ball weight 4 kg of density 4000 kg m^{-3} is completely immersed in water of density 10^3 kg m^{-3} . Find the force of buoyancy on it. (Given $g = 10 \text{ ms}^{-2}$.)

35. Given below is shown the structure of an animal cell.

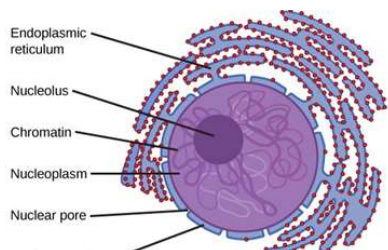


Using the above diagram, answer the following questions:

1. In which cell organelle cellular respiration takes place?
2. Why the nucleus is called the brain of the cell?
3. Why lysosomes are called suicide bags?
4. Which is the fluid content that contains specialised cell organelles inside the plasma membrane?
5. What is the composition of the cell membrane?

OR

The labelled diagram of the nucleus is shown below:

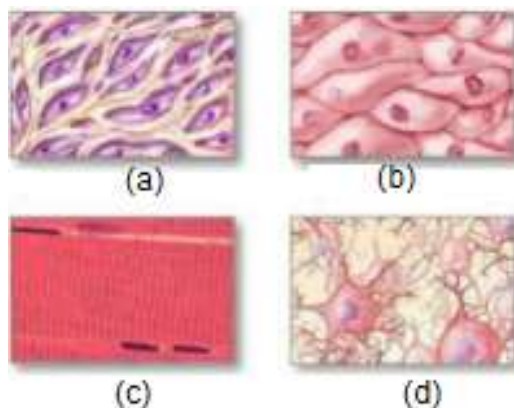


1. Which nuclear structures are embedded in the nucleoplasm?
 2. What is the function of the nucleolus in the nucleus?
 3. What is the composition of chromosomes in the nucleus?
 4. When are the chromosomes seen in the nucleus?
 5. Which structure transmits the heredity information from parents to offsprings?
36. 1. Distinguish among the true solution, suspension and colloid in a tabular form under the following heads:
1. Stability
 2. Filterability
 3. Type of mixture
2. Give the expression for the concentration of a solution. How will you prepare a 10% solution of glucose by mass in the water?

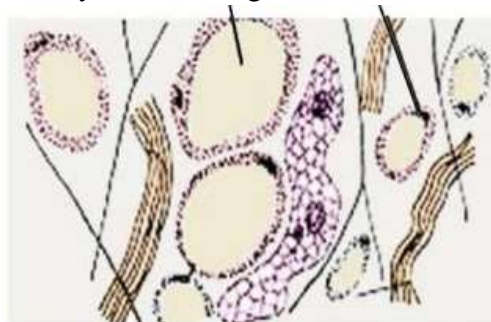
Section E

37. Read the text carefully and answer the questions:

Animal tissues are of many types such as epithelial tissue, connective tissue, muscular tissue and nervous tissue. Blood is a type of connective tissue, and muscle forms muscular tissue. The nature of the matrix differs in concordance with the function of the particular connective tissue. Blood has a fluid (liquid) matrix called plasma, in which red blood corpuscles, white blood corpuscles and platelets are suspended. Blood flows and transports gases, digested food, hormones and waste materials to different parts of the body. Bone is another example of connective tissue. It forms the framework that supports the body. It also anchors the muscles and supports the main organs of the body. Another type of connective tissue, cartilage, has widely spaced cells.



1. Identify the following tissue.



2. Are the cells of connective tissues loosely spaced?

What are the components of the matrix of bone?

38. Read the text carefully and answer the questions:

Poultry is the rearing of domesticated fowl (chicken), ducks, geese, turkey and some varieties of pigeon for their meat and eggs. Poultry birds are of two types that is broilers and layers. One is specialized meat-producing poultry birds while other is egg-laying poultry birds. The tremendous rise in the availability of poultry products is called Silver Revolution.



- i. What is the meaning of layers regarding poultry?
- ii. There are different breeds of hens, so give some information about broiler.
- iii. We know that different types of revolution regarding animal husbandry. So, what is the silver revolution explain?

OR

There are different breeds of poultry birds, mention two examples of indigenous and exotic breeds of poultry birds.

39. Read the following and answer any four questions from (i) to (iv).

A mole of an atom is a collection of atoms whose total mass is the number of grams equal to the atomic mass. Since equal number of moles of different elements contain an equal number of atoms it becomes convenient to express the amounts of the elements in terms of moles. A mole represents a definite number of particles viz, atoms, molecules, ions or electrons. This definite number is called Avogadro number or Avogadro constant which is equal to 6.022×10^{23} . Hence a mole represents 6.022×10^{23} particles of the substance. One mole of substance represents one gram-formula of the substance. One mole of a gas at standard temperature and pressure occupies 22.4 litres.

- i. How many grams of sodium must be taken to get 1 mole of the element ?
- ii. What is the mass in grams of a single atom of chlorine? (Atomic mass of chlorine = 35.5)
- iii. How many number of moles are there in 5.75 g of sodium ? (Atomic mass of sodium =
- iv. What is the mass in grams of 2.42 mol of zinc? (Atomic mass of Zn = 65.41)