



MANAV RACHNA INTERNATIONAL SCHOOL

Scholarship Test Paper

For

Students Studying in Grade VIII - Session 2023-24
Moving to Grade IX - Session 2024-25

Date: 18.11.23

Duration: 2 Hours

Maximum Marks: 100

KINDLY FILL IN THE DETAILS

Name: _____

Father's Name: _____

Mother's Name: _____

Examination Centre: MRIS Branch _____

Name of the Invigilator: _____

Signature of the Invigilator: _____

SECTIONS	SUBJECTS	MARKS	MARKS AWARDED (to be filled by the Examiner)
A	Logic and Reasoning	20	
B	Maths	30	
C	Science	30	
D	English	20	
TOTAL		100	

GENERAL INSTRUCTIONS:

- This paper is divided into 4 sections, all sections are compulsory.
- Sections A, B and C contain Objective Type Questions of 1 mark each and need to be answered in the question paper itself.
- Section D contains Subjective Type Questions and should be attempted in the ruled sheets attached.

SECTION A

LOGIC AND REASONING

Q1. How many 4's are there in the given sequence which are immediately preceded by 7 and immediately followed by 6 ?

Sequence : 7 4 4 9 5 4 7 6 5 4 9 8 7 4 6 7 6 5 3 2 4 6 7 8 4 7 6 8 6 3 7 4 6 9 2 4 5

a) 3 b) 2 c) 4 d) 5

Q2. $5 : 7 :: 15 : \underline{\hspace{2cm}}$

a) 35 b) 21 c) 24 d) 37

Q3. Pick the odd one out:

- a) DEGJ b) QRTW c) JKNQ d) YZBE

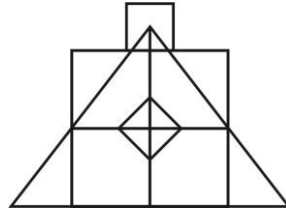
Q4. Read the following information and answer the question:

There are six children playing football namely A, B, C, D, E and F. A and E are brothers. F is the sister of E. C is the only son of A's uncle. B and D are the daughters of the brother of C's father.

How many male players are there?

- a) One b) Three c) Five d) Six

Q5. The number of squares in the given figure.



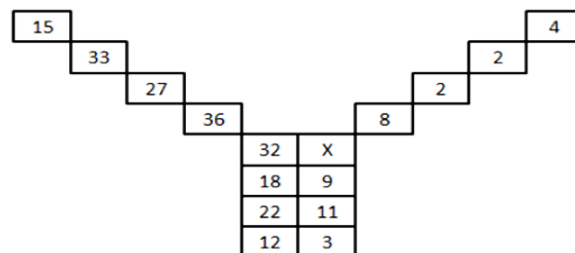
- a) 6 b) 4 c) 7 d) 8

Q6. Select the missing number from the given responses.

64	36	2
81	25	4
144	16	?

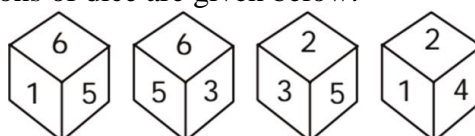
- a) 16 b) 3 c) 8 d) 6

Q7. Find the value of X in the given figure below.



- a) 4 b) 3 c) 8 d) 6

Q8. The four different positions of dice are given below:



Which number is on the face opposite to 1?

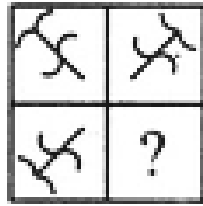
- a) 3 b) 4 c) 6 d) 5


Q9. Which of the following is not the part of the series?

1, 8, 27, 64, 125,

- a) 216 b) 343 c) 729 d) 256




Q10. Which of the following option will complete the pattern in the given figure



- a)  b)  c)  d) 

Q11. Select the figure from the options which satisfies the same condition of placement of the dots as in given figure.



- a)  b)  c)  d) 

Q12. A man is facing west. He turns 45° in the clockwise direction and then another 180° in the same direction and then 270° in the anticlockwise direction. Which direction is he facing now?

- a) South b) North West c) West d) South West

Q13. A watch reads 4:30. If the minute hand points East, in what direction will the hour hand point?

- a) North b) North-West c) South-East d) North-East

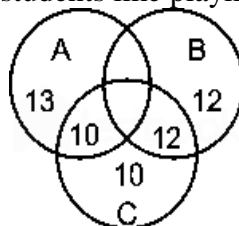
Q14. What is the number in place of “?” in the given sequence:

6, 15, 35, ?, 143, 221

- a) 45 b) 65 c) 77 d) 93

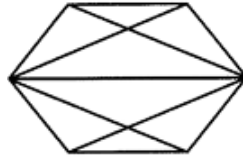
Q15. The Venn diagram below illustrates the sports preferences stated by a group of 100 college students. These students play one of the three games given below and 5 of them play all three games. These three sports are: Football (A), Tennis (B) and Cricket (C).

Based on the diagram, how many students like playing tennis and football only?



- a) 34 b) 35 c) 37 d) 38

Q16. Analyse the given figure and identify the number of pentagon in the given figure.



- a) 3 b) 4 c) 5 d) 6

Q17. CIRCLE is related to RICELC in the same way as SQUARE is related to _____.
a) QSUERA b) QUSERA c) UQSAER d) UQSERA

Q18. Statement: $P < S < R < T > Q$
Which sign should be filled in the blank for the conclusion given below?
Conclusion: P ____ T

- a) $>$ b) $<$ c) $=$ d) \leq

Q19. Today is Monday. After 63 days, it will be _____. (choose the correct alternative)
a) Wednesday b) Monday c) Tuesday d) Thursday

Q20. Find the Odd one out: Arrow, Axe, Knife, Dagger, Sword
a) Arrow b) Axe c) Knife d) Dagger

SECTION B

MATH

Q1. Two unbiased coins are tossed. Find the probability of getting no head on the first coin?

- a) $\frac{2}{4}$ b) $\frac{1}{3}$ c) $\frac{1}{4}$ d) $\frac{3}{4}$

Q2. If $3a=4b=6c$ and $a + b + c = 27\sqrt{29}$ then find the value of $\sqrt{a^2 + b^2 + c^2}$.
a) 87 b) 89 c) 80 d) 85

Q3. Ravi starts for his school at 8:20 a.m. on his bicycle. If he travels at a speed of 10 km/h, then he reaches his school late by 8 minutes but on travelling at 16 km/h he reaches the school 10 minutes early. At what time does the school start?
a) 8:30 am b) 10 am c) 9 am d) 10:30 am

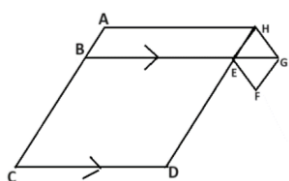
Q4. Solve for x : $\frac{x-a}{b+c} + \frac{x-b}{a+c} + \frac{x-c}{a+b} = 3$
a) $a + b + c$ b) $a - b - c$ c) $a - b + c$ d) $a + b - c$

Q5. If $x = \frac{1}{-5}$ and $y = \frac{3}{4}$ then which of the following is true?
a) $|x + y| = |x| + |y|$ b) $|x + y| < |x| + |y|$
c) $|x + y| > |x| + |y|$ d) None of these

Q6. What is the value of $\left(1 + \frac{1}{2}\right)\left(1 + \frac{1}{3}\right)\left(1 + \frac{1}{4}\right)\left(1 + \frac{1}{5}\right)\left(1 + \frac{1}{6}\right)\left(1 + \frac{1}{7}\right)$:
a) $\frac{1}{2}$ b) 2 c) $\frac{1}{4}$ d) 4

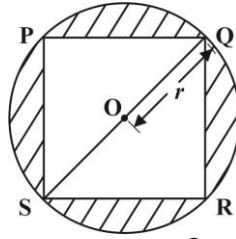
- Q7. The solution of $\frac{x+a}{x-2a} = \frac{x+3a}{x-4a}$ is:
 a) $x = a$ b) $x = \frac{-a}{2}$ c) $x = \frac{a}{2}$ d) $x = -a$
- Q8. A diagonal of a rectangle is inclined to one side of a rectangle at 34° . The acute angle between the diagonals is:
 a) 34° b) 56° c) 68° d) 42°
- Q9. If the bisectors of the angles A, B, C and D of a quadrilateral meet at O, then $\angle AOB$ is equal to:
 a) $\angle C + \angle D$ b) $\frac{1}{2}(\angle C + \angle D)$ c) $\frac{1}{2}\angle C + \frac{1}{3}\angle D$ d) $\frac{1}{3}\angle C + \frac{1}{2}\angle D$
- Q10. The smallest number that must be added to 680621 to make the sum a perfect square is:
 (A) 4 b) 5 c) 6 d) 8
- Q11. $\frac{4}{15}$ of $\frac{5}{7}$ of a number is greater than $\frac{4}{9}$ of $\frac{2}{5}$ of the same number is 8. What is half of the number?
 a) 630 b) 315 c) 210 d) 105
- Q12. A is two years older than B and B is twice as old as C. If the total of the ages of A, B and C be 27, then how old is B?
 a) 7 b) 8 c) 9 d) 10
- Q13. The empirical relation between mean, median and mode is:
 a) Mode = 3 Median – 2 Mean b) Mean = 3 Median – 2 Mode
 c) Median = 3 Mode – 2 Mean d) None of these
- Q14. The observations 29, 32, 48, 50, x, x + 2, 72, 78, 84, 95 are arranged in ascending order. 'What' is the value of x if the median of the data is 63?
 a) 61 b) 62.5 c) 62 d) 63
- Q15. Given that $10^{0.48} = x$, $10^{0.70} = y$ and $x^z = y^2$, then the value of z is close to:
 a) 1.45 b) 1.88 c) 2.9 d) 3.7
- Q16. If m and n are whole numbers such that $m^n = 121$, the value of $(m - 1)^{n+1}$ is:
 a) 1 b) 10 c) 121 d) 1000
- Q17. Simplify: $\left[\frac{1}{3 - \frac{1}{2 - \frac{1}{7}}} \right]$ is
 (a) $\frac{13}{32}$ b) $\frac{32}{13}$ c) $\frac{7}{13}$ d) $\frac{13}{7}$
- Q18. Let m be the mid-point and l be the lower class limit of a class in a continuous frequency distribution. The upper class limit of the class is:
 a) $2m + l$ b) $2m - l$ c) $m - l$ d) $m - 2l$

- Q19. The value of $\sqrt{20 + \sqrt{20 + \sqrt{20 + \dots}}} = x$ then the value of x is
a) 1 b) 2 c) 5 d) 6
- Q20. Jincy saw some pigeons feeding on some grains in her garden. When she clapped her hands $\frac{1}{3}$ of the number of pigeons flew away. However, 2 pigeons flew back to her garden. She clapped again and half of the number of pigeons flew away. Then 1 pigeon flew back to her garden. In the end, there were 5 pigeons in her garden. How many pigeons were in the garden at first?
a) 6 b) 9 c) 12 d) 18
- Q21. Two dice are thrown simultaneously. The probability of getting a multiple of 4 as the product of numbers is:
a) $\frac{7}{12}$ b) $\frac{1}{2}$ c) $\frac{1}{4}$ d) $\frac{1}{12}$
- Q22. 500 people took dips in a rectangular tank which is 80 m long and 50 m broad. What is the total rise in the level of water in the tank if the average volume of water that is displaced (or raised) by one person is 0.04 cu.m.?
a) 0.05m b) 0.00001m c) 0.005m d) 0.001m
- Q23. State True/ False for the following statements:
i. $(-1)^{24}$ would be equal to 1.
ii. The value of $(-3)^{-4}$ is 81.
iii. The scientific notation of $6.32 \times 10^{-4} = 0.000632$
iv. If $(2)^{x-3} = 1$, then $x = 3$.
a) i- True ii- False iii- True iv- False
b) i- False ii- False iii- True iv- False
c) i- False ii- False iii- True iv- True
d) i- True ii- False iii- False iv- True
- Q24. A water tank has two inlets and one outlet. Inlet 1 can fill the tank alone in 40 minutes and inlet 2 can fill the tank alone in 20 minutes. The outlet can empty the tank in 30 minutes. If the tank is to be filled while both the inlets and the outlet are open, how long will it take for the tank to fill?
a) 25 minutes b) 24 minutes c) 23 minutes d) 21 minutes
- Q25. Two trains start simultaneously from two stations 300 km apart and move towards each other. The speed of one train is more than the other by 20 km/h. If the distance between the trains after two hours is 20 km, find the speeds of the trains.
a) Speed of the 1st train is 40 km/h and speed of the 2nd train is 60 km/h.
b) Speed of the 1st train is 100 km/h and speed of the 2nd train is 80 km/h.
c) Speed of the 1st train is 70 km/h and speed of the 2nd train is 90 km/h.
d) Speed of the 1st train is 60 km/h and speed of the 2nd train is 80 km/h.
- Q26. In the given figure, ACDH is a parallelogram, EFGH is a square and the straight-line BG is parallel to CD. Find $\angle CDE$.



- a) 45° b) 125° c) 135° d) 185°

- Q27. In the given figure PQRS is a square inscribed in a circle with centre O and radius 'r'. The total area of the shaded region is:



- a) $2r^2(2 - \pi)$ b) $4r^2 - 4r$ c) $r^2(\pi - 2)$ d) $\pi(r^2 - 2)$

- Q28. Find the value of $\sqrt{\frac{m}{n}}$, if $m = \left[\left(\frac{2}{9} \right)^5 \times \left(\frac{2}{9} \right)^{-3} \right]^{-1}$ and $n = (-9)^3 \div (-9)^1$.

- a) $\frac{1}{4}$ b) $\frac{1}{2}$ c) $\frac{81}{4}$ d) $\frac{9}{2}$

- Q29. The value of $\frac{a^{-1}}{a^{-1} + b^{-1}} + \frac{a^{-1}}{a^{-1} - b^{-1}}$ is:

- a) $\frac{2b^2}{b^2 - a^2}$ b) $\frac{2a^2}{a^2 - b^2}$ c) $\frac{2a^2}{b^2 - a^2}$ d) $\frac{2b^2}{a^2 - b^2}$

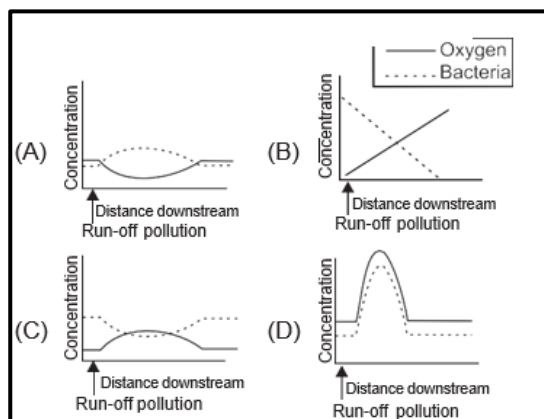
- Q30. If $3^{x+8} = 27^{2x+1}$, then find the value of

- $\left[\left(\frac{\sqrt{289}}{\sqrt[3]{216}} \right)^x \div \left(\frac{17}{\sqrt[4]{1296}} \right)^x \right]^{\frac{1}{2}}$
- a) 1 b) 0 c) $\frac{16}{7}$ d) $\frac{7}{16}$

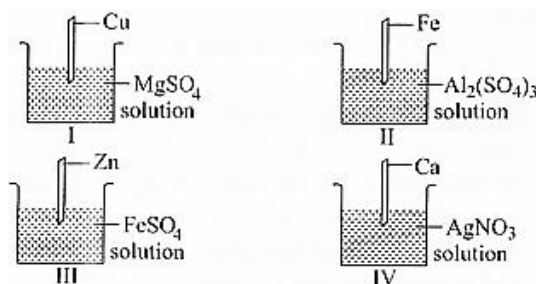
SECTION C

SCIENCE

- Q1. Viruses exist on the borderline between living and non- living matter. They cause diseases in animals, plants and human beings. They are made of biochemical known as
- a) Enzymes b) Nucleoproteins c) Carbohydrates d) Peptones
- Q2. Run-off pollution of a particular river resulted from overuse of chemical fertilizers by a nearby farm. Which of the following graphs correctly shows the resulting changes in levels of oxygen and bacteria in this river?



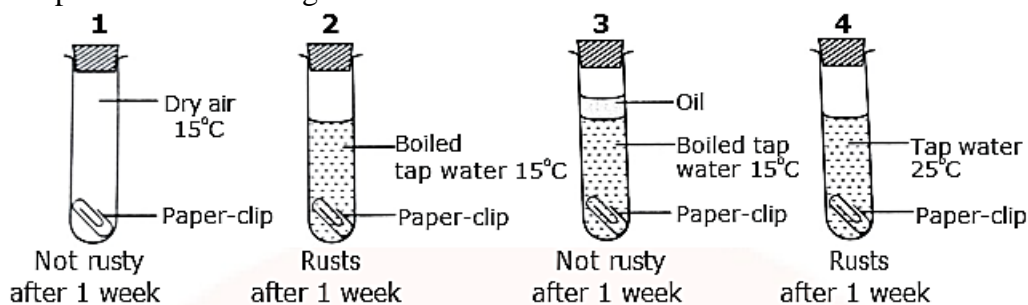
- Q3. Assertion: When the deep-sea fish are brought to the surface of the sea, their bodies burst.
Reason: Blood in the blood vessels of the deep-sea fish flows at very high pressure
- Both Assertion (A) and Reason (R) are true and Reason (R) is a correct explanation of Assertion (A).
 - Both Assertion (A) and Reason (R) are true but Reason (R) is not a correct explanation of Assertion (A).
 - Assertion (A) is true and Reason (R) is false.
 - Assertion (A) is false and Reason (R) is true.
- Q4. Assertion: A concave mirror and a convex lens both have the same focal length in air. When they are submerged in water, they will still have the same focal length.
Reason: The refractive index of water is greater than the refractive index of air.
- Both Assertion (A) and Reason (R) are true and Reason (R) is a correct explanation of Assertion (A).
 - Both Assertion (A) and Reason (R) are true but Reason (R) is not a correct explanation of Assertion (A).
 - Assertion (A) is true and Reason (R) is false.
 - Assertion (A) is false and Reason (R) is true.
- Q5. Four experimental set-ups are as shown in the given figure



No reaction will take place in beaker(s)

- II only
- I and IV only
- I and II only
- III and IV only

- Q6. Four experiments on rusting are shown below.

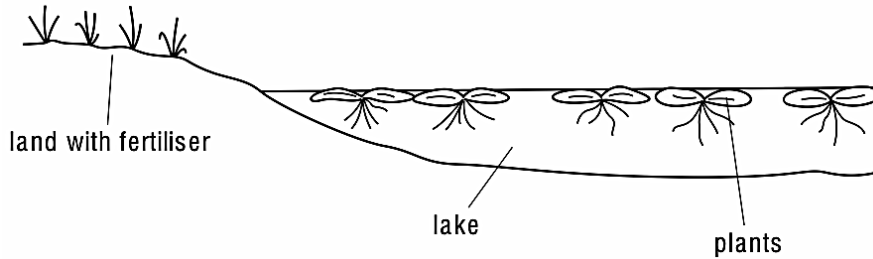


Which two experiments can be used to show that air is needed for iron to rust?

- 1 and 3
- 1 and 4
- 2 and 3
- 2 and 4

- Q7. A man stands between two vertical walls. One wall is 300 m away and the other is 600 m away. After making a loud clap, he hears two echoes at an interval of time t . Calculate the time interval t . (Take the speed of sound in air to be 300 m/s)
- 1.0 s
 - 1.5 s
 - 2.0 s
 - 4.0 s

- Q8. A farmer put some fertiliser on his field. Soon afterwards, there was a heavy storm and some of the fertiliser drained into a lake.



What is the effect of the fertiliser on the growth of the crop plants in the field and the plants in the lake?

	Crop plants	Lake plants
a)	Decreased growth	Decreased growth
b)	Decreased growth	Increased growth
c)	Increased growth	Decreased growth
d)	Increased growth	Increased growth

- Q9. Consider the following statements and select the option which correctly identifies true (T) and false (F) ones.

- Robert Brown discovered nucleus in the cells.
- The plasma membrane is made up of a double layer of lipid molecules and protein molecules.
- Chloroplast helps in osmoregulation and maintains the osmotic pressure in a cell.
- Carbohydrates and fats are completely oxidized with the help of enzymes present in the mitochondria.

	(i)	(ii)	(iii)	(iv)
a)	T	T	F	F
b)	T	T	F	T
c)	T	F	T	T
d)	T	F	F	T

- Q10. Which of the following is a correct sequence of events that occur in human reproduction?

- Gametogenesis → Gestation → Insemination → Fertilisation → Implantation → Parturition
- Gametogenesis → Insemination → Fertilisation → Implantation → Gestation → Parturition
- Gametogenesis → Insemination → Gestation → Fertilisation → Implantation → Parturition
- Gestation → Gametogenesis → Insemination → Implantation → Fertilisation → Parturition

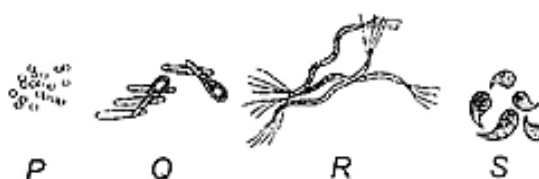
Q11. A man sharpens his knife as shown in the figure. Which of the properties of friction are in use?



- i. Friction helps us to hold objects.
- ii. Friction acts in the opposite direction of motion.
- iii. Friction causes the surfaces in contact to wear away.
- iv. Friction produces heat energy

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

Q12. Bacteria have been grouped into four different types based on their shapes. Select the correct statement.



- a) Vibrio cholerae is an example of type S, which causes cholera.
- b) Lactobacillus is an example of type P, which helps in curdling of milk.
- c) Type R bacteria are rod-shaped and are called as bacilli bacteria.
- d) Streptococcus is an example of type Q bacteria that causes pneumonia.

Q13. Read the following statements carefully and identify X, Y and Z respectively.

i.	X is stored under kerosene.
ii.	Y catches fire on exposure and stored in water.
iii.	Z reacts with steam.

a) Na, Mg, Cu b) Na, P, Fe c) Cu, Zn, K d) Zn, Cu, Na

Q14. Assertion: Copper does not react with dilute Hydrochloric acid even on heating but it reacts with Sulphuric acid.

Reason: Metals generally do not react with acids.

- a) Assertion and reason both are correct statement and reason is correct explanation for assertion.
- b) Assertion and reason both are correct statement and reason is not correct explanation for assertion.
- c) Assertion is correct statement but reason is wrong statement.
- d) Assertion is wrong statement but reason is correct statement.

Q15. The substance W is a fossil fuel. It occurs deep below the ground in certain areas of the Earth. Another fossil fuel X is found trapped above the deposits of W. When W is subjected to a process called Y, then a number of different products are collected at different temperature ranges which are put to different uses. A special grade of product Z obtained in this way is used as aviation fuel in jet aeroplanes. Name the product Z.

a) Water b) Semi solid c) Kerosene d) petroleum

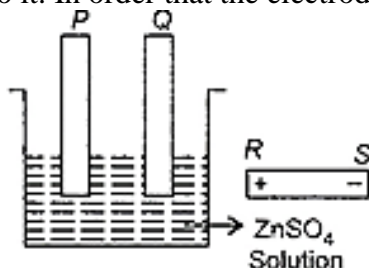
Q16. Two small organisms X and Y both reproduce by the method of budding. Organism X is industrially very important because it is used in making alcohol from sugar. It is also used in making bread. Organism Y is a tiny animal having tentacles which lives in water. Which of the following show the correct option for X and Y?

- a) X-Yeast, Y-Hydra
- b) X-Fungi, Y-Paramoecium
- c) X-Hydra, Y-Yeast
- d) X-Amoeba, - Y-Euglena

Q17. How does the eye lens change in order to focus on near objects?

- a) The lens gets thinner
- b) The retina moves closer to lens
- c) The lens becomes thicker
- d) The pupil becomes smaller

Q18. The diagram shows a beaker containing a solution of zinc sulphate and two carbon electrodes. A battery is placed next to it. In order that the electrode P be plated with zinc.



- a) P must be connected to S and Q to R
- b) P must be connected to Q and S to R
- c) P must be connected to R and Q to S
- d) P and Q must be connected to R.

Q19. When electricity is passed through calcium nitrate solution in water, what is likely to be formed at the cathode and why?

- a) Hydrogen because it is a very reactive than calcium
- b) Calcium because it is a very reactive than hydrogen
- c) Hydrogen because it is less reactive than calcium
- d) Calcium because it is less reactive than hydrogen.

Q20. A person fires a gun in front of a building 167 m away. If the speed of sound is 334 m/s. Calculate the time in which he hears an echo.

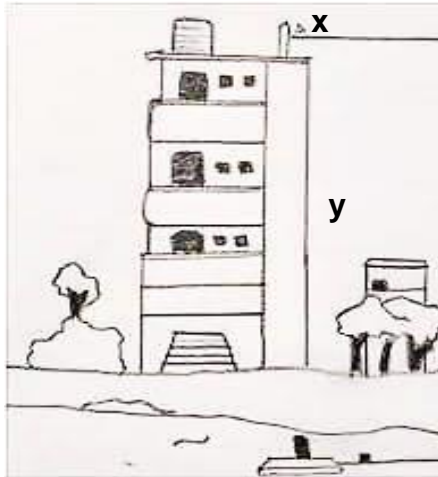
- a) 0.2s
- b) 2s
- c) 1.0s
- d) 0.1s

Q21. Assertion (A) Cloning is the production of an exact copy of a cell.

Reason (R) For Cloning the base cell can be taken from a female organism only.

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

Q22. Observe the picture and answer the following questions-



What is X in the above figure?

- a) superconductor b) conductor c) insulator d) semiconductor

Q23. Some chemical elements are required in large amounts by the plants for their proper growth. These inorganic elements are called macronutrients or macroelements. Which of the following elements do not come under the category of macronutrients?

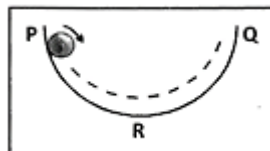
- i. Phosphorous
- ii. Manganese
- iii. Magnesium
- iv. Iron

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

Q24. You are studying the movement of substances in and out of cells. In which type of cellular transport does a cell expend energy to move molecules against their concentration gradient?

- a) Diffusion b) Facilitated diffusion c) Active transport d) Osmosis

Q25. Harish rolled a steel ball at one edge of the glass bowl as shown below:



If there is no friction between the surfaces of the ball and the bowl, what will happen to the ball?

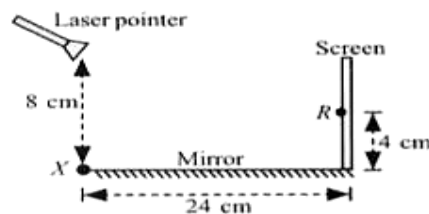
- a) The ball will roll out of the glass bowl near edge 'Q'.
- b) It will stop at centre point 'R' after a number of to and fro motions.
- c) It will keep moving between point 'P' and 'Q' and will never stop.
- d) It will not move at all since friction is required for movement.

Q26. Assertion: Besides curdling of milk, lactobacillus also improve its nutritional quality by increasing vitamin-B12.

Reason: Lactobacillus, when present in human stomach, check disease causing microbes.

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

- Q27. Which of the following represents an incorrect match?
- a) Coal gas – Methane + Hydrogen b) LPG – Propane + Butane
c) Producer gas – Carbon + Nitrogen d) CNG – Compressed methane
- Q28. Which of the following statements are correct?
- i. Yellow flames are ideal for heating.
ii. The substances which vaporise during burning give flames.
iii. Luminous zone contains unburnt carbon particles.
iv. The non luminous zone has the highest temperature.
- a) (i), (ii) and (iii) only b) (ii) and (iv) only
c) (ii), (iii) and (iv) only d) (i), (iii) and (iv) only
- Q29. Solve the following riddles by identifying X,Y and Z. X- Your mother loves to cook in the utensils which are coated with me because I make them non-stick.
Y- I protect the firemen by coating their uniforms to make them fire resistant.
Z- I am a very familiar form of polyester and used for making bottles, utensils, films etc. X Y Z
- a) Acrylic, Rayon, PET b) PET, Polythene, Teflon
c) Teflon, Bakelite, Melamine d) Teflon, Melamine, PET
- Q30. The ray from a laser pointer hits a plane mirror and the reflected ray strikes a screen. How far away from point X should the ray strike the mirror to cause the reflected ray to hit point R?



- a) 6 cm b) 12 cm c) 16 cm d) 18cm

SECTION D

ENGLISH

- Q1. Read the following passage. 10 Marks
- (i) AI will probably not make human workers obsolete, at least not for a long time.
To put some of your fears to rest the robots are probably not coming for your jobs, at least not yet.
- (ii) Given how artificial intelligence has been portrayed in the media, in particular in some of our favorite sci-fi movies, it's clear that the advent of this technology has created fear that AI will one day make human beings obsolete in the workforce. After all, as technology has advanced, many tasks that were once executed by human hands have become automated. It's only natural to fear that the leap toward creating intelligent computers could herald the beginning of the end of work as we know it.
- (iii) But, I don't think there is any reason to be so fatalistic. A recent paper published by the MIT Task Force on the Work of the Future entitled "Artificial Intelligence and The Future of Work," looked closely at developments in AI and their relation to the world of work. The paper paints a more optimistic picture.
- (iv) Rather than promoting the obsolescence of human labor, the paper predicts that AI will continue to drive massive innovation that will fuel many existing industries and could have the

potential to create many new sectors for growth, ultimately leading to the creation of more jobs.

- (v) While AI has made major strides toward replicating the efficacy of human intelligence in executing certain tasks, there are still major limitations. In particular, AI programs are typically only capable of “specialized” intelligence, meaning they can solve only one problem, and execute only one task at a time. Often, they can be rigid, and unable to respond to any changes in input, or perform any “thinking” outside of their prescribed programming.
- (v) Humans, however, possess “generalized intelligence,” with the kind of problem solving, abstract thinking and critical judgement that will continue to be important in business. Human judgement will be relevant, if not in every task, then certainly throughout every level across all sectors.
- (vi) There are many other factors that could limit runaway advancement in AI. AI often requires “learning” which can involve massive amounts of data, calling into question the availability of the right kind of data, and highlighting the need for categorization and issues of privacy and security around such data. There is also the limitation of computation and processing power. The cost of electricity alone to power one supercharged language model AI was estimated at \$4.6 million.

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

- i. According to the passage, what is one fear people have about artificial intelligence (AI)?
 - a) It will never become as intelligent as humans.
 - b) AI will lead to job obsolescence.
 - c) AI will make humans more creative.
 - d) AI will never be used in the workforce.
- ii. In the passage, what does the term "fatalistic" most likely mean?
 - a) Optimistic and hopeful
 - b) Pessimistic and fearful
 - c) Believing in predetermined outcomes and accepting them
 - d) Progressive and innovative
- iii. What is the key difference between AI's "specialized" intelligence and human intelligence, as mentioned in the passage?
 - a) AI can perform abstract thinking.
 - b) AI can respond to changes in input.
 - c) AI can solve only one problem at a time.
 - d) AI can adapt to any programming.
- iv. According to the passage, what are some factors that could limit the advancement of AI technology?
 - a) Availability of data, privacy, and processing power.
 - b) AI's ability to perform abstract thinking.
 - c) Fear of job obsolescence.
 - d) The less cost of AI technology.
- v. What does the passage imply about the role of human judgement in the workforce?
 - a) Human judgement will become obsolete.
 - b) Human judgement will always be essential.
 - c) Human judgement is irrelevant in every task.
 - d) Human judgement is limited to specific sectors.

- vi. Why is the availability of the right kind of data important for AI?
- It helps AI perform specialized tasks.
 - It ensures AI's general intelligence.
 - It affects AI's learning and performance.
 - It is not mentioned in the passage.
- vii. What is the main message of the passage regarding AI's impact on the job market?
- AI will lead to the end of work as we know it.
 - AI will create more jobs and foster innovation.
 - AI will replace humans in every sector.
 - AI's impact on the job market is not discussed in the passage.
- viii. What factor is NOT mentioned in the passage as a potential limitation of AI development?
- Availability of data
 - Privacy and security concerns
 - Computation and processing power
 - Ethical concerns related to AI
- ix. What does the term "obsolescence" mean in the context of the passage?
- Rapid development of technology.
 - Becoming outdated or no longer in use.
 - Adaptation to new working methods.
 - An increase in job opportunities.
- x. Why does the passage emphasize the cost of electricity to power one supercharged language model AI?
- To highlight the affordability of AI technology
 - To illustrate the challenges of AI development
 - To promote the use of renewable energy sources for AI
 - To encourage AI developers to reduce their costs

Q2. WRITING SECTION

10 Marks

- a) Imagine you are a time traveller who has just returned from the year 2050. Write a paragraph describing what the world is like in the future. Consider changes in technology, the environment, society, and any other aspects that you find intriguing. Try to paint a vivid picture of the world in 2050. Remember to include details and use descriptive language to make your vision of the future come to life. Write a paragraph in 150-200 words.

OR

- b) Write a story in about 150-200 words using the opening lines given below:

The ominous clouds hung low in the evening sky, casting eerie shadows over the deserted carnival grounds. As I cautiously approached the rusty, creaking Ferris wheel, I couldn't help but wonder if the rumours about this place were true.....

ANSWER SHEET FOR ENGLISH

Name of the Student: _____

[illegible]

[illegible]

[illegible]