







[FOR 8th to 9th MOVING STUDENTS]

INSTRUCTIONS

INSTRUCTION: (निर्देश)

- Duration of test is **90 Minute** and Question Paper contains **50 Questions.** The Maximum Marks are **200**. परीक्षा की अवधि 90 मिनट हैं तथा प्रश्न पत्र में कुल 50 प्रश्न है। अधिकतम अंक 200 है।
- Students cannot use Log Table, Mobile and Calculator or any other Digital Instrument in the ••• examination hall.

विद्यार्थियों को परीक्षा कक्ष में लॉग टेबल, मोबाइल, और कैलकुलेटर या किसी अन्य विद्युत यंत्र का उपयोग वर्जित है।

- Student must abide by the instruction issued during the examination, by the invigilators or the centre incharge. परीक्षा के समय विद्यार्थी को परीक्षक द्वारा दिये गये निर्देशों का पालन करना आवश्यक है।
- Sefore attempting the question paper ensure that it contains all the pages and no question is missing. Read each question carefully.

प्रश्न पत्र हल करने से पहले विद्यार्थी आश्वस्त हो जाएं कि इसमें सभी पेज संलग्न हैं तथा कोई प्रश्न छूटा न हो। प्रत्येक प्रश्न ध्यानपूर्वक पढ़े।

- Each correct answer carries 4 marks. प्रत्येक सही उत्तर के 4 अंक हैं गलत उत्तर पर अंक नही काटा जाएगा।
- ↔ A candidate has two write his/her answers in the OMR sheet by darkening the appropriate bubble with the help of Blue/Black Ball Point Pen only. परीक्षार्थी को हल किये गये प्रश्न का उत्तर पुस्तिका में सही स्थान पर केवल नीले / काले बाल पांइन्ट पेन के द्वारा उचित गोले

को गहरा करके देना है।

✤ Use of pencil is strictly prohibited. पेन्सिल का प्रयोग वर्जित है।

Name of the candidate:

Signature of the candidate: Signature of the invigilator:

- Which is solution of the question y + 3 = 20? 1. (a) $\frac{20}{3}$ (b) 17 (c) 20×3 (d) 23
- What is square of 39? 2. (a) 1521 (b) 1531 (c) 1541 (d) 1511
- Which is the value of $3\sqrt{1331}$ 3. (a) 11 (b) 21 (c) 19 (d) 0
- If the three digit number 24 x is divisible by 4. 9, the value of x is, (b) 2 (c) 9 (a) 3 (d) 0
- 5. The multiplicative identify for rational numbers is

(d) 2

- (a) 0 (b) 1 (c) -1
- If a doe is thrown, the probability of getting 6. an even number is;

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

- Which is product of $\frac{6}{13}$ and reciprocal of $\frac{-7}{13}$ 7.
 - (a) $\frac{6}{13}$ (b) $\frac{-6}{7}$ (c) $\frac{-7}{6}$ (d) $\frac{-7}{13}$
- Multiplicative inverse of $\frac{-5}{8} \times \frac{-3}{7}$ is 8.

(a)
$$\frac{8}{-5} \times \frac{7}{-3}$$
 (b) 1 (c) $\frac{5}{-8} \times \frac{3}{7}$ (d) $\frac{-15}{56}$

- The measure of x in the given figure is 9.,
 - 905 (a) 110° (b) 160⁰ 500 (c) 250⁰ (d) 360° 110°
- 10. Which of the following is the smallest negative integer? 0

11. Which of the following shows three consecutive multiples of 8?

(a) 8x, (x + 8), (x + 16)

- (b) 8x, 8(x + 1), 8(x + 2)
- (c) 8x, 8x + 8, x + 16

(d) x,
$$(x + 8)$$
, $(x + 16)$

In a quadrilateral 'Rock' which of the 12. following is a diagonal? (a) \overline{RO} (b) OK (c) \overline{OC} (d) \overline{KR}

- 13. When a die in thrown list the outcomes of an event of getting 'a prime number'. (b) 1, 3, 5 (a) 2, 3, 5
 - (d) 2, 5, 6 (c) 1, 2, 3
- 14. Perfect square number between 15 and 20 is

15.
$$\sqrt{\frac{216}{512}} =$$

(a) $\frac{6}{18}$ (b) $\frac{5}{3}$ (c) $\frac{6}{8}$ (d) $\frac{4}{6}$

16. There is one force which is exerted by all matter on all other matter. Which force is this?

(a) Gravitational force (b) Magnetic force

- (c) Electrostatic force (d) Friction force
- 17. If you stand in front of a plane mirror and scratch your left cheek, your image (a) Scratches its left cheek
 - (b) Scratches its right cheek
 - (c) Scratches both cheeks one by one
 - (d) Does not scratch at all

18. The image formed by a plane mirror is

- (a) Virtual, erect, behind the mirror and smaller than the object
- (b) Virtual, erect, behind the mirror and the same size as the object
- (c) Virtual, inverted, behind the mirror and the same size as the object
- (d) Real, erect, behind the mirror and the same size as the object
- 19. If the angle between the mirror and the incident ray is 300 the angle of reflection is (a) 300 (b) 600 (c) 150 (d) 900
- 20. In which case is friction a disadvantage? (a) Running a machine (b) Walking (c) Applying brakes (d) Writing
- 21. If a perfume bottle is opened in one corner of a room, the smell can be felt after sometime in the opposite corner. This shows that?
 - (a) particles of matter are constantly moving
 - (b) the perfume is strong
 - (c) the room has fan which circulates the perfume
 - (d) None of these

22. Which one of the following is a correct electronic configuration of calcium-

(a) 2, 8, 8, 1	(b) 2, 6, 8, 2
(c) 2, 8, 8, 2	(d) 2, 8, 2, 8

- **23.** Meristems are?
 - (a) Mature cells
 - (b) Well differentiated cells
 - (c) Embryonal cells
 - (d) None
- **24.** A piece of wood is held under water. The upthrust on it is :
 - (a) equal to the weight of the wood
 - (b) less than the weight of the wood
 - (c) more than the weight of wood
 - (d) zero
- **25.** The number of carbon atoms in 1g of CaCO₃ is?
 - (a) 6.022×10^{23} (b) 6.022×10^{21} (c) 3.0125×10^{22} (d) 1.204×10^{23}
- **26.** In case of transverse wave :
 - (a) the hump on the +y axis is called crest
 - (b) the hump on the –y axis is called crest
 - (c) the highest point on the hump on +y axis is called crest
 - (d) the highest point on the hump on the -y axis is called crest
- **27.** Carl Von Linne was involved with which branch of science?
 - (a) Morphology (b) Taxonomy
 - (c) Physiology (d) Medicine
- **28.** A man standing in front of a large wall claps at a regular frequency of 10 Hz. He finds that the echoes coincide with his clapping. (The speed of sound in air is 330 m s⁻¹.)
 - (i) Time taken between successive clapping is 0.1 s.
 - (ii) The distance between the man and the wall, after he stops clapping, if he hears four more echo is 33 m.
 - (iii) The distance between the man and the wall, after he stops clapping, if he hears four more echoes is 66 m.
 - (a) Only (i) and (ii) are correct
 - (b) Only (ii) and (iii) are correct
 - (c) Only (i) and (iii) are correct
 - (d) All (i), (ii) and (iii) are correct

29. Consider the graph shown in figure which of following is correct?

- (a) Region OA (uniform acceleration) and Region OB (uniform retardation)
- (b) Region OA (constant acceleration) and Region AB (variable acceleration)
- (c) Region OA (uniform velocity) and Region AB (constant acceleration)
- (d) Region of OA (uniform acceleration) and Region AB (zero acceleration)
- **30.** The matter that has stronger inter particle forces between an iron piece and a chalk piece is?
 - (a) iron(b) chalk piece(c) both(d) neither
- 31. The value of $(x+2y+2z)^2 + (x-2y-2z)^2$ is? (a) $2x^2+8y^2+8z^2$ (b) $2x^2+8y^2+8z^2+8xyz$ (c) $2x^2+8y^2+8z^2-8yz$
 - (d) $2x^2 + 8y^2 + 8z^2 + 16yz$
- **32.** The region between an arc and the two radii joining the centre of the end points of the arc is called a :
 - (a) Segment(b) Semi circle(c) Minor arc(d) Sector
- **33.** The king, queen and jack of clubs are removed from a deck of 52 cards and then well shuffled. One card is selected from the remaining cards. The probability of getting a club is.

(a)
$$\frac{13}{49}$$
 (b) $\frac{10}{49}$ (c) $\frac{3}{49}$ (d) $\frac{1}{12}$

34. In a \triangle ABC in which D, E, F be the mid point of AB, BC and AC respectively. If G is any point on EF, then the area of \triangle AGB is:

(a)
$$\frac{\Delta}{2}$$
 (b) $\frac{\Delta}{3}$ (c) $\frac{\Delta}{4}$ (d) $\frac{\Delta}{5}$

- **35.** Which of the following is not a cube of negative integer?
- (a) -1
 (b) 1000
 (c) -8
 (d) -1728
 36. In a Isosceles trapezium ABCD if ∠A = 45⁰ then ∠C will be.
 (a) 90⁰
 (b) 135⁰
 (c) 60⁰
 (d) None

37. A cord in the form of a square enclose the area 'S' cm². If the same cord is bent into the form of a circle, then the area of the circle is ...?

(a)
$$\frac{\pi S^2}{4}$$
 (b) $4\pi S^2$ (c) $\frac{s}{4\pi}$ (d) $\frac{4S}{\pi}$

38. Sides AB and AC of ABC are trisected at D and E then ΔADE and trapezium DECB have their areas in the ratio of :

(a) 1:4 (b) 1:8 (c) 1:9 (d) 1:2

39. The sides of a triangle are in the ratio of 3 : 5 : 7 and its perimeter is 300 cm. Its area will be ...?

(a) 1000 $\sqrt{3}$ sq. cm (b) 1500 $\sqrt{3}$ sq. cm

(c) $1700 \sqrt{3}$ sq. cm (d) $1900 \sqrt{3}$ sq. cm

40. If $2^{5x} \div 2^x = \sqrt[5]{2^{20}}$ then x =

(a) 0 (b) -1 (c) $\frac{1}{2}$ (d) 1

41. In a certain code language. 'FATHER' is written as 'REHTAF' and 'COUPLE' is written as 'ELPUOC'. How will 'REMAIN' be written in that language?

a) NIAEMR	(b) NIAMER
c) NAIEMR	(d) INAMER

42. Select the option that is related to the fifth term is the same way as the second term is related to the first term and the fourth term is related to the third term

LEAN : NEAL : : MEAN	: NEAM : : HEAR : ?
(a) HREA	(b) RHEA
(c) REAH	(d) RAEH

43. Select the correct option that indicates the arrangement of the given words in a logical and meaningful order.

1. Core	2. Atmosphere
3. Universe	4. Surface
5. Galaxy	
(a) 1, 3, 4, 5, 2	(b) 4, 3, 5, 2, 1
(c) 1, 4, 2, 5, 3	(d) 1, 4, 2, 3, 5

44. To different positions of the same dice are shown, the six faces of which are numbered from 1 to 6. Select the number that will be one the face opposite to the face showing '5'.



45. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



46. Select the correct mirror image of the give combination when the mirror is placed at MN as shown.



5T3W1Z(a) SIM3L2()

(c) Brother in Law

(a) 18

Z 1 **W** 3 **T** 5(d) **2 L** 3 **M** I **S** (b)

47. Tarun is the son of Charan. Charan has only two children. Tarun is the brother of Ravali. Ravali is the daughter of Pranavi. Aditi is the granddaughter of Pranavi. Sunder is the father of Aditi. How is Sunder related to Tarun?

(a) Brother	(b) Son
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(d) Son in Law

48. How many squares are there in the given figure?



(c) 20 (d) 22

- **49.** Arrange the given words in the sequence in which they occur in the dictionary.
 - 1. Resettle
 2. Resolve

 3. Reserve
 4. Reshuffle

 5. Reshape
 (b) 3, 1, 5, 4, 2

 (c) 3, 1, 5, 2, 4
 (d) 3, 2, 1, 5, 4
- 50. If '×' means '-','÷' means '+','+' means '×' and '-' means '÷', then what will be the value of the following expression? 16÷32-4×2+1=?
 (a) 32
 (b) 7.5
 (c) 10
 (d) 22