

PREVIOUS YEAR QUESTION PAPER

PATH - 2019

Time Allotted : 2 Hours

Maximum Marks : 180

- Please read the instructions carefully. You are allotted 5 minutes specifically for this purpose.
- You are not allowed to leave the Examination Hall before the end of the test.

INSTRUCTIONS

A. General Instructions :

1. There are 1 to 45 Question. Attempt ALL the questions. Answers have to be marked on the OMR sheets
2. Rough spaces are provided for rough work inside the question paper. No additional sheets will be provided for rough work.
3. Blank Papers, clip boards, log tables, slide rule, calculator, cellular phones, pagers and electronic device in any form, are not allowed.

B. Filling of OMR Sheet :

1. Ensure matching of OMR sheet with the question paper before you start marking your answers on OMR sheet.
2. On the OMR sheet, darken the appropriate bubble with black/blue pen for each character of your Enrollment No. and write your Name, Test Centre and other details at the designated places.
3. OMR sheet contains alphabets, numerals & special characters for making answer.

C. Marking Scheme for All Three Parts :

1. This booklet contains 45 questions & all questions are compulsory.
2. For each question you will be **awarded 4 marks** if you have darkened **only** the bubble corresponding to the correct answer and **zero mark** if no bubbles are darkened. In all other cases, **minus one (-1) mark** will be awarded.

Name of Candidate :

Registration No. :

1. An electric wire connected in a circuit gets heated up when current is allowed to flow through it. This is due to
 - (a) Heating effect of current
 - (b) Electrical effect of current
 - (c) Musical effect of current
 - (d) Optical effect of current
2. A glowing filament will be
 - a) At a low temperature
 - b) At a high temperature
 - c) At atmospheric temperature
 - d) At the temperature of ice
3. When electric current passes through a wire, it behaves like a magnet. This is the
 - a) Magnetic effect of current
 - b) Electrical effect of current
 - c) Heating effect of current
 - d) Optical effect of current
4. The value of 2km/hr is equal to
 - a) $4/9$ m/s
 - b) $5/9$ m/s
 - c) $13/9$ m/s
 - d) $7/8$ m/s
5. The speedometer of a vehicle measures the speed in ()
 - a) m/sec
 - b) m/min
 - c) km/hr
 - d) km/min
6. The process of removing the fleece of sheep along with a thin layer of skin is called
 - a) Rearing
 - b) Shearing
 - c) Sorting
 - d) Scouring
7. The wind speed during the second cyclone that hit Orissa during the year 1999 on 29th October was
 - a) 260 km/hr
 - b) 200 km/hr
 - c) 150 km/hr
 - d) 100 km/hr
8. increased wind speed is accompanied by
 - a) no change in temperature
 - b) reduced pressure
 - c) increased pressure
 - d) no change in pressure
9. A dark funnel shaped cloud that reaches from the sky to the ground is called a
 - a) Hurricane
 - b) Typhoon
 - c) Tornado
 - d) Thunderstorm
10. Red pigment in red blood cells is ()
 - a) Haemoglobin
 - b) Plasma
 - c) Arteries
 - d) Veins
11. The cells in the blood which fight against the germs entering the body are ()
 - a) RBC
 - b) WBC
 - c) Platelets
 - d) Haemoglobin
12. The heart is located in the
 - a) Cranial cavity
 - b) Thoracic cavity
 - c) Abdominal cavity
 - d) Pelvic cavity
13. Find the excretory organ from the following
 - a) Kidney
 - b) Heart
 - c) Lungs
 - d) liver
14. The uric acid excreted by lizards is
 - a) White in colour
 - b) Red in colour
 - c) Brown in colour
 - d) Black in colour
15. Give the chemical name of window cleaner ()
 - a) Calcium hydroxide
 - b) Magnesium hydroxide
 - c) Ammonium hydroxide
 - d) Sodium hydroxide

16. If there is a discount of 40% on an articles costing Rs 7000, then the price after discount is
- a) Rs 4500 b) 4200 c) 4400 d) 4600
17. Which of the following is the greatest rational number?
- a) $15/7$ b) $15/8$ c) $15/10$ d) $15/12$
18. Which of the following figure has 7 lines of symmetry?
- a) Regular hexagon b) Regular Octagon c) Regular heptagon d) Regular Triangle
19. $-5+9+(-5)+(-10)+(1)$ is equal to
- a) 13 b) -13 c) -10 d) 10
20. Find the product of the cube of $(1/2)$ and the square of $(-3/5)$
- a) $72/25$ b) $200/9$ c) $9/200$ d) $-3/10$
21. Number of angles formed by a transversal, when intersect 3 parallel lines is:
- a) 8 b) 12 c) 4 d) 6
22. Two lines perpendicular to the same line are _____ to each other:
- a) Perpendicular b) parallel c) Opposite d) none of these
23. Find the length of side of a parallelogram whose area is 246cm^2 and base is 20cm
- a) 1.23cm b) 13.2cm c) 12.3cm d) 1.32cm
24. A circle has area which is 100 times the area of another circle. What is the ratio of their circumferences?
- a) 10:1 b) 1:10 c) 1:1 d) 2:1
25. A piece of wire in the form of a rectangle with dimensions 12m by 10m is bent to form a circle. Find the diameter of a circle.
- a) 14m b) 17m c) 51.5cm d) 17.5cm
26. A football team played 30 matches in one season and won 40% of them. Number of matches they won is
- a) 12 b) 10 c) 18 d) none of these
27. On a certain sum the interest paid after 15 months is Rs.150 at 5% rate of interest p.a. The sum is
- a) Rs.11250 b) Rs.112.50 c) Rs.2400 d) Rs.200

28. The amount to be paid at the end of 3 years for Rs.1100 at 11% rate of interest p.a.

- a) 115 b) 120 c) 365 d) 363

29. If angles of a triangles are in the ratio 1:3:5, The value of the greatest angles is

- a) 900 b) 1000 c) 1800 d) 800

30. Acid and water are mixed in the ratio 2:9. Find the quantity of acid in 66 litres of dilute acid.

- a) 12 litres b) 11 litres c) 54 litres d) 6 litres

31. 0, 5, 22, 57, 116, ?

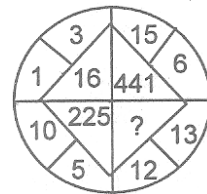
- (A) 205 (B) 216 (C) 192 (D) 207

32. F3X, H7U, J15R, L31O, ?

- (A) M46L (B) N44L (C) N63L (D) N44M

33. ? IS

- (A) 125 (B) 25
(C) 625 (D) 156



34. Arrange the following group of letters such that when arranged in a specific order, meaningful word is formed.

V A H Y E

1 2 3 4 5

- (A) 2,3,4,5,1 (B) 3,2,5,1,4 (C) 3,5,2,1,4 (D) 1,5,2,3,4

35. find which one word can not be made from the letters of the given word. TEMPERAMENT

- (A) METER (B) PETER (C) TENTER (D) TESTER

36. If JAPAN is coded as KCSES, then the code for CASTLE will be -

- (A) DCIJOB (B) DCJKRD (C) DCKMSG (D) DCVXQK

37. In a certain code, C is coded as 0, E as 7, T as 4, I as 9, P as 1, R as 3, and U as 5. How is 1904537 coded in that code?

- (A) PICTRUE (B) PICTURE (C) RICTPUE (D) PCTUREI

38. A man walks 9 km due East and then 12 km due South. How far is he from the starting point?

- (A) 15 km (B) 6 km (C) 7 km (D) None of these

39. What is the value of $(48 - 12) \div 4 + 6 \div 2 \times 3 = ?$

- (A) 10 (B) 0.6 (C) 2 (D) 18

40. $a - b - c$ implies –

- (A) $a - b - c$ (B) $b + a - c$ (C) $c \times b + a$ (D) $b + a \div c$

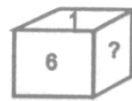
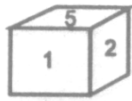
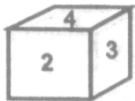
41. Find the days the week on 16 January, 1969.

- (A) Tuesday (B) Thursday (C) Friday (D) Monday

42. 3, 6, 24, 30, 63, 72, ?, 132

- (A) 30 (B) 40 (C) 80 (D) 120

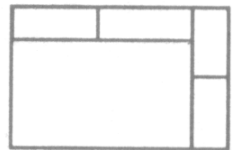
43. From the following figures of dice, find which number will come in place of ‘?’



- (A) 4 (B) 5 (C) 2 (D) 3

44. What is the number of rectangles in the following figure ?

- (A) 6 (B) 7 (C) 8 (D) 9



45. If **AJAY** is written as **1117**, then is same code **NAMA** would be written as

- (A) 5114 (B) 5411 (C) 5141 (D) 4511

ROUGH WORK