

## Rajya Shiksha Kendra M.P., Bhopal

Annual Examination Session - 2025-26

Subject - Mathematics

Time -  $2\frac{1}{2}$  hours.

Class -

M.M. - 60

## Multiple Choice Questions. (Q.1 to 5)

Instructions- Choose and write the correct option. Each question carries 1 mark.

- Q.1 A quadrilateral whose opposite sides and all angles are equal, is- 1  
 (A) Rectangle (B) Parallelogram  
 (C) Trapezium (D) Rhombus
- Q.2 The probability of getting a number less than 5 when a dice is thrown will be. 1  
 (A)  $\frac{1}{6}$  (B)  $\frac{4}{6}$   
 (C)  $\frac{5}{6}$  (D)  $\frac{3}{6}$
- Q.3 Square root of the number 4096 will be: 1  
 (A) 99 (B) 98  
 (C) 96 (D) 97
- Q.4 The number of zeroes in the cube of 60 will be: 1  
 (A) 1 (B) 2  
 (C) 3 (D) 4
- Q.5 Square of a number is 7225, then the number will be: 1  
 (A) 75 (B) 80  
 (C) 85 (D) 95

## Fill in the blanks (Question 6 to 10)

Instruction- Each question carries 1 mark.

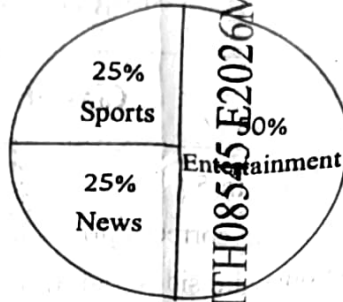
- Q.6 In the equation  $2x+8 = 16$ ,  $x$  is a 4 1
- Q.7 A graphical representation that shows the whole and its parts is called a pie chart 1
- Q.8 The square of any even number is always even. 1
- Q.9 The price at which an item is sold is called selling price 1
- Q.10 The usual form of  $3.02 \times 10^{-6}$  is 0.00000302 1

## Very Short Answer Type Questions. (Q. 11 to 12)

Instructions- Solve the following questions. Each question carries 2 marks.

- Q.11 Solve:  $\frac{-5}{4} \times \frac{-3}{7}$   $\frac{15}{28}$  2
- Q.12 What is the sum of the measures of the exterior angles of a polygon? 2

Q.13 The following pie chart shows the number of people watching different types of TV channels. If the total number of people is 100, what is the number of people watching news?



Q.14 Find the perfect square numbers between 40 and 100.

Q.15 1 micron is equal to  $1/1000000$  m, write the numbers used in the statement in standard (scientific) form.

Q.16 If the point (5, 3) is plotted on a graph paper, what will be the coordinates of the x axis and y axis?

**Short Answer Type Questions. (Q.. 17 to 22)**

**Instructions :** Solve the following questions. Each question carries 3 marks.

Q.17 Simplify:  $\frac{3}{7} + \left(\frac{-6}{11}\right) + \left(\frac{-8}{21}\right) + \left(\frac{5}{22}\right)$

Q.18 Solve the equation:  $3x + 4 = 2x + 18$

Q.19 If the volume of a cube is 125 cubic cm, find the length of its side.

Q.20 If 72 percent of 50 students are interested in mathematics, then how many students are interested in mathematics.

Q.21 The annual simple interest earned on money deposited in a bank is shown in the table. Draw a line graph based on the table.

Money Deposited (in ₹)	100	200	300	500
Earned Interest (in ₹)	10	20	30	50

Q.22 Find the value of  $95^2$  using the formula 'Ekaunika Purven'.

**Long Answer Type Questions. (Q. 23 to 26)**

**Instructions :** Solve the following questions. Each question carries 5 marks.

Q.23 The length of a rectangle is  $7x$  units and its width is  $(2x + 1)$  units. Find the area of the rectangle.

Q.24 The radius of the base of a cylinder is 7 cm and its height is 14 cm. Find the volume of the cylinder.

Q.25 In a factory, 42 machines are required to manufacture certain items in 63 days. How many machines will be required to manufacture the same items in 54 days?

Q.26 Factorise the expression  $3x^2 - 48$  and divide by  $(x - 4)$ .

*Handwritten notes:*  
 $7x(2x+1)^3$   
 $(14x^2 + 7x) \text{ unit}^2$