

Rajya Shiksha Kendra, M.P. Bhopal

Annual Examination Session 2024-25

Subject - Mathematics

Time - $2\frac{1}{2}$ Hours	Class - 8	Max. Marks- 60
-----------------------------	-----------	----------------

Multiple Choice Questions. (Q.1 to 5)

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

- Q.1 The product of two negative rational numbers is always: 1
 (A) zero (B) one (C) positive (D) negative
- Q.2 Linear equation in one variable is - 1
 (A) $3x$ (B) $3x^2$ (C) $3x + 1 = 0$ (D) $3x^2 + 1 = 0$
- Q.3 If the diagonals of a quadrilateral are equal and they bisect each other, then the quadrilateral is a 1
 (A) parallelogram (B) rhombus (C) trapezium (D) rectangle
- Q.4 The value of $2^2 + 5^2$ 1
 (A) 4 (B) 7 (C) 25 (D) 29
- Q.5 $P^{20} \times P^{30}$ is equal to - 1
 (A) $P^{20} + P^{30}$ (B) $P^{20} \times P^{30}$ (C) $P^{20} + P^{30}$ (D) $P^{20} - P^{30}$

Fill in the blanks. (Q. 6 to 10)

Instruction- Each question carries 1 mark.

- Q.6 Multiplicative identity of a rational number $\frac{a}{b}$ is 1
- Q.7 A simple closed curve made up of only is called a polygon. 1
- Q.8 Pictorial representation of data using symbols is 1
- Q.9 The tax added to the price of the goods is called 1
- Q.10 The value of a^0 is 1

Very Short Answer Type Questions. (Q. 11 to 16)

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

- Q.11 What is the line segment called that joins two non adjacent vertices of a polygon? 2
- Q.12 Write 8×10^4 in usual form. 2
- Q.13 Three persons can install new doors in a house in 4 days, then how many persons will be needed to complete the work in 2 days. 2
- Q.14 The relationship between what type of quantities is expressed by a ratio? 2

Q.15 Find the value of 35^2 using the Formula 'Ekadhiken Purven'.

2

Q.16 Write the perfect square numbers from 11, 12, 16, 32 and 36.

2

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

Instructions- Solve the following questions. Each question carries 3 marks.

Q..17 How much cloth will remain if $\frac{2}{3}$ meter long cloth is cut from $\frac{5}{2}$ meter long cloth?

3

Q.18 Solve the equation: $x = \frac{4}{5}(x+10)$

3

Q.19

Month	July	August	September
Number of watches sold	100	150	200

3

Draw the bar diagram to express the above information.

Q.20 Find the square root of 64 by the method of repeated subtraction.

3

Q.21 Find the cube root of 64.

3

Q.22 A wardrobe set was purchased for ₹ 8000. Its value depreciated at the rate of 10%.

3

Find the value of the wardrobe set after one year?

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

Instructions- Solve the following questions. Each question carries 5 marks.

Q.23 Simplify: $(a+b+c)(a+b-c)$

5

Q.24 A milk tank is in the shape of a cylinder, whose radius is 1.5 m and length is 7 m. <https://www.mpboardonline.com>

5

Find the quantity of milk that can be filled in this tank in liters.

(Scale 1 cubic meter = 1000 liters)

Q.25 Solve: $9x^2y^2(3z-24) \div 27xy(z-8)$

5

Q.26 The distance covered by the train is given in the following table

5

Time (in Hours)	1	2	3	4	5
Distance (in km)	60	120	180	240	300

Draw a linear graph to express the above data.

---x---