

S-40-A
MIDTERM EXAMINATIONS (2018 - 19)
MATHEMATICS

(English Medium)

PART - A & B

Class : VIII

(Max. Marks : 80)

Time : 2.45 Hrs.

Instructions :

1. In the time duration of 2 hrs 45 min. 15 minutes is exclusively allotted to read and understand the question paper.
2. The question paper comprises of three sections I, II, III.
3. All questions are compulsory.
4. There is no overall choice. However there is internal choice to the questions under Section-III.

Marks : 60

PART-A

Time : 2 Hrs.

Section - I

Note : 1. Answer all the questions.

2. Each question carries 2 Marks. $4 \times 2 = 8$
1. All rational numbers have reciprocals. It is true. Justify Your Answer.
2. $5^{2x} = 5^{7x-9}$ find x .
3. What are those two numbers whose sum is 58 and difference is 28.
4. The printed price of a book is ₹150 and discount is 15%. Find the actual amount to be paid.

Section - II

Note : 1. Answer all the questions.

2. Each question carries 4 Marks. $5 \times 4 = 20$
5. Solve $5(x+2) - 2(3-4x) = 3(x+5) - 4(4-x)$
6. Is every rectangle a parallelogram. Explain.
7. A owner increases the rent of his house by 5% at the end of each year. If currently its rent is ₹ 2500 per month. How much will be the rent after two years.

P.T.O

8. a) Express the following in standard form.
 i) 0.0000004 mts ii) speed of light is 300000000 m/s
 b) Express the following in usual form.
 i) 4.37×10^5 ii) 32.5×10^{-4}
9. Complete the following Table.

Numbers	Associative Under			
	Addition	Subtraction	Multiplication	Division
Natural Numbers	Yes	No	.....	.....
Whole Numbers	.....	.....	.....	No
Integers	.....	No	Yes	.....
Rational Numbers	.....	.....	.....	.....

Section - III

Note : 1. Answer all the questions.

2. Choose any one from each question.

3. Each question carries 8 Marks.

$$4 \times 8 = 32$$

10. The present age of Vijaya's mother is four times the present age of Vijaya. After 6 years the sum of their ages will be 62 years. Find the present age.

(OR)

Venkanna purchased 50 dozen bananas for ₹1250. He incurred transportation charges of ₹250. He could not sell five dozen bananas as they were spoiled. He sold the remaining bananas at ₹35 for each dozen. Will he get a profit or a loss. Find profit or loss percentage.

11. I borrowed ₹12000 from Prasad at 6% per annum simple interest for 2 years. Had I borrowed this sum at 6% per annum compounded annually, what extra amount would have to pay.

(OR)

Rakesh solved some problems of exponents in the following way. Do you agree with the solutions ? If not why ? Justify your argument.

P.T.O

i) $x^{-3} \times x^{-2} = x^{-6}$

ii) $(x^2)^3 = x^6$

iii) $x^{-2} = \sqrt{x}$

iv) $3x^{-1} = \frac{1}{3x}$

12. Find three consecutive numbers such that if they are divided by 10, 17 and 26 respectively, the sum of their quotients will be 10.


(OR)

In a pack, there are 5 books each of thickness 20 mm and 5 paper sheets each of thickness 0.016 mm. What is the total thickness of the pack.

13. Draw a Rhombus ABCD in which diagonal AC = 5 cm ; BD = 6 cm.

(OR)

Construct a rectangle FLAT with FL = 5 cm ; LA = 3 cm.



Regd. No.

S-40-B

Marks :

MIDTERM EXAMINATIONS (2018 - 19)

MATHEMATICS

(English Medium)

Part - B

Class : VIII]

(Marks : 20)

Time : 30 min.

Academic Standards	A.S. - 1					A.S. - 2			A.S. - 3			A.S. - 4			A.S. - 5		Total	Grade	
	2	5	10	12	14 to 23	1	8	11	24	3	8	25	27	4	7	28 to 33			9	13
Question No.																			
Marks																			
Total																			

Name of the Student : Roll No. :

Instructions :

- Each question carries equal marks.
- Each question has 4 option. Write the capital letters indicating the answer in the given bracket.
- Marks are not awarded for over writing answers.

Section -IV**Note :** 1. Answer all the questions.

2. Each question carries 1 mark.

 $20 \times 1 = 20$ 14. The set of rational numbers are denoted by

- A) N B) Q C) R D) Z

15. $\forall a, b \in Q, a + b = b + a$; shows property of rational numbers under addition

- A) Closer B) Associative C) Commutative D) Inverse

16. The product of 3 and its reciprocal is

- A) 1 B) 0 C) 9 D) 6

P.T.O

17. Which of the following are linear equation. []
 A) $xy + yz + zx = 11$ B) $5x^2 + 4y^2 = 8$
 C) $xyz = 8$ D) $2x + 3y = 5$
18. The solution for the linear equation $2x + 4 = 10$ is []
 A) 3 B) -3 C) 6 D) -6
19. Each vertex angle of a square should be []
 A) acute B) obtuse C) Right angle D) none of these
20. independent measurement are required to draw a unique quadrilateral []
 A) 5 B) 4 C) 3 D) 2
21. $(-5)^2 \times (-5)^{-5} = \dots\dots\dots$ []
 A) $(-5)^7$ B) $(-5)^{-3}$ C) $(-5)^3$ D) $(-5)^{-5}$
22. $a^0 = \dots\dots\dots$ []
 A) 0 B) 1 C) a D) $\frac{1}{a}$
23. The compound ratio of 3 : 4 and 2 : 3 is []
 A) 9 : 8 B) 6 : 12 C) 12 : 6 D) 5 : 7
24. A rational number between 1 and 2 is []
 A) $\frac{3}{2}$ B) $\frac{3}{4}$ C) $\frac{1}{2}$ D) $\frac{2}{3}$
25. Which of the following pair of numbers have their own reciprocals. []
 A) 2, $\frac{1}{2}$ B) 2, -2 C) 1, -1 D) 3, $\frac{1}{3}$
26. $x^{-2} = \dots\dots\dots$ []
 A) -2x B) $\frac{1}{x^2}$ C) $\frac{-2}{x}$ D) $\frac{1}{2x}$

27. A quadrilateral having exactly one pair of parallel sides is called []
A) Trapezium B) Rhombus C) Rectangle D) Square
28. What number should -33 be divided by to get 11 []
A) 3 B) -3 C) $\frac{1}{3}$ D) $-\frac{1}{3}$
29. Present age of Saranya is 27 years. After 5 years her age is []
A) 22 B) 35 C) 32 D) 25
30. The distance between two places was 200 km. It was measured as 280 km. The percentage of error is []
A) 20% B) 30% C) 40% D) 50%
31. A shop gives 20% discount and a dress is marked at $\text{₹}120$ in that shop. The sale price would be []
A) $\text{₹}96$ B) $\text{₹}120$ C) $\text{₹}100$ D) $\text{₹}240$
32. If 24 Black Boards of equal sizes can be prepared from 576 sq.mt. card board then card board required for each Black board is []
A) 14 sq.mt. B) 24 sq.mt. C) 34 sq.mt. D) 44 sq.mt.
33. $3x + 1 = 10$ then $x =$ []
A) -3 B) 9 C) -9 D) 3
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