## EIGHTH CLASS MODEL PAPER (AP) <br> SUMMATIVE ASSESSMENT - 1

MATHEMATICS (English Version)

## Time: 2 Hrs. 45 Mins.

PART - A and B
Max.Marks: 80

## Instruetions.

1. $\mathbf{1 5}$ minutes of time is allotted for reading the question paper.
2. Answer All the questions
3. Answers for questions under PART - A should be written in a separate answer booklet.
4. The question paper consists of $\mathbf{4}$ sections and 33 questions.
5. There is an internal choice in Section - III.
6. Write answers neatly and legibly.

| Time: 2 Hrs. | PART - A | Marks: 60 |
| :--- | :---: | :---: |
|  | SECTION - I |  |

Note: i) Answer All questions.
ii) Each question carries 2 marks.

1. Find a rational number between $\frac{2}{3}$ and $\frac{3}{4}$.
2. Solve $8 x+\frac{5}{2}=\frac{13}{2}$.
3. Express 0.00009298 in the standard form.
4. A cycle marked at Rs. 3600 and sold for Rs.3312. What is the discount and discount percentage?
SECTION - II

Note: i) Answer All questions.
ii) Each question carries 4 marks.
5. Express $1.7 \overline{29}$ in $\frac{\mathrm{p}}{\mathrm{q}}$ form.
6. The difference between two numbers is 8 . If 2 is added to the bigger number the result will be three times the smaller number. Find the numbers.
7. Simplify and give reasons (i) $\left[\left(3^{2}-2^{2}\right) \div \frac{1}{5}\right]^{2}$ (ii) $\left[\left(5^{2}\right)^{3} \times 5^{4}\right] \div 5^{6}$.
8. The compound ratio of $3: 4$ and the inverse ratio of $4: 5$ is $45: x$. Find ' $x$ '.
9. Draw a square JUMP with diagonal 4.2 cm .

## SECTION - III

## Note: i) Answer All questions.

ii) Each question carries 8 marks.
iii) Choose (a) or (b) any one from each question.
10. a) By what number should $\left(\frac{1}{2}\right)^{-1}$ be multiplied so that the product may be equal to $\left(\frac{-4}{7}\right)^{-1}$ ?
(OR)
b) Solve each of the following and check your result.
i) $\frac{3 x+1}{6}+\frac{2 x-3}{7}=\frac{x+3}{8}+\frac{3 x-1}{14}$
ii) $0.18(5 x-4)=0.5 x+0.8$
11. a) Solve $\frac{5 x+2}{2 x+3}=\frac{12}{7}$
(OR)
b) If $x=\left(\frac{3}{2}\right)^{2} \times\left(\frac{2}{3}\right)^{-4}$ then find the value of $x^{-2}$.
12. a) A man sold two articles at Rs. 25920 each. These were sold at $8 \%$ gain and $4 \%$ loss respectively. Find the gain or loss percent in the whole transaction.
(OR)
b) Find the compound interest on Rs.12,000 for 3 years at $10 \%$ per annum compounded annually.
13. a) Construct a parallelogram ABCD with $\mathrm{AB}=6 \mathrm{~cm}, \mathrm{AD}=4.5 \mathrm{~cm}$ and $\mathrm{BD}=7.5 \mathrm{~cm}$.
(OR)
b) Construct a quadrilateral ABCD with $\mathrm{AB}=5.5 \mathrm{~cm}, \mathrm{BC}=3.5 \mathrm{~cm}, \mathrm{CD}=4 \mathrm{~cm}, \mathrm{AD}=5 \mathrm{~cm}$ and $\angle \mathrm{A}=45^{\circ}$.

Time: 30 Mins.
PART - B
Marks: 20
Instructions:

1. Answer All the questions.
$20 \times 1=20$
2. Each question has four options. Write the capital letter indicating the answer in the given brackets.
3. Marks are not awarded for over writing answers.
4. Each question carries 1 mark.

## SECTION - IV

14. Match the following.
i) Multiplicative inverse of $(-1) \quad(\quad) \quad$ a) 1
ii) Additive inverse of $(-1) \quad$ ( ) b) 0
iii) Additive identity
( ) c) -1
A) $i-b$, ii-c, $i i i-a$
B) i-c, ii-a, iii-b
C) $\mathrm{i}-\mathrm{a}, \mathrm{ii}-\mathrm{b}$, iii-c
D) $\mathrm{i}-\mathrm{a}, \mathrm{ii}-\mathrm{c}$, iii-b
15. Which of the following statements is false?
A) Product of two negative rational numbers is always positive.
B) Product of two positive rational numbers is always positive.
C) Product of a rational number and its reciprocal is 0 .
D) The reciprocal of a positive rational number is positive.
16. $a, b, c$ are three rational numbers then $a+b=b+a$ is $\qquad$ property with respect to addition. ( )
A) closure
B) commutative
C) associative
D) inverse
17. Which of the following has no reciprocal?
A) 1
B) -1
C) 0
D) all
18. $\left(\frac{-3}{13}\right) \div\left(\frac{-4}{65}\right)=$ $\qquad$
A) $\frac{15}{4}$
B) $\frac{-15}{4}$
C) $\frac{4}{15}$
D) $\frac{-4}{15}$
19. $\left(\frac{5}{6}\right)-\left(\frac{3}{4}\right)=$ $\qquad$
A) $\frac{1}{4}$
B) $\frac{-1}{4}$
C) $\frac{1}{12}$
D) $\frac{-1}{12}$
20. Assertion: $5 x+6 y=12$ is a linear equation.

Reason: If the degree of an equation is one then it is called a linear equation.
A) Both assertion and reason are true and reason is the correct explanation of assertion.
B) Both assertion and reason are true but reason is not the correct explanation of assertion.
C) Assertion is true but reason is false.
D) Assertion is false but reason is true.
21. Which of the following are simple equations?
A) $3 x^{2}+5=14$
B) $3=2 x+y$
C) $5 m-6 n=0$
D) $3 x+5=14$
22. If $3 p-7=0$ then the value of $p=\ldots \ldots .$.
A) 7
B) 3
C) $\frac{7}{3}$
D) $\frac{3}{7}$
23. $\frac{2 x}{13}=4$ then $x=$ $\qquad$
A) 52
B) 13
C) 8
D) 26
24. Statement 1: In trapezium one pair of opposite sides are parallel.

Statement 2: In a parallelogram two pair of opposite sides are parallel.
A) Only statement 1 is correct.
B) Only statement 2 is correct.
C) Both statements are correct.
D) Both statements are wrong.
25. Number of independent measurements required to construct a rhombus
A) 2
B) 3
C) 4
D) 5
26. Which of the following figures have all vertex angles are equal?
A) kite
B) rhombus
C) rectangle
D) parallelogram
27. Express $(-2)^{-5}$ in the form of $\frac{\mathrm{p}}{\mathrm{q}}$.
A) $\frac{1}{32}$
B) $\frac{-1}{32}$
C) $\frac{1}{10}$
D) $\frac{-1}{10}$
28. $2^{-7} \div 2^{-3}=$ $\qquad$
A) $2^{4}$
B) $2^{-4}$
C) $\frac{1}{16}$
D) Both B and C
29. Standard form of 0.000002022 is $\qquad$ ...
A) $20.22 \times 10^{-6}$
B) $202.2 \times 10^{-5}$
C) $20.22 \times 10^{-5}$
D) $2.022 \times 10^{-6}$
30. Which of the following numbers is equal to $\frac{-8}{27}$ ?
A) $\left(\frac{3}{2}\right)^{-3}$
B) $\left(\frac{2}{3}\right)^{-3}$
C) $\left(\frac{-2}{3}\right)^{3}$
D) $\left(\frac{3}{2}\right)^{-2}$
31. For any non zero rational number $a, a^{7} \div a^{12}=$
A) $a^{5}$
B) $a^{-19}$
C) $a^{-5}$
D) $a^{19}$
32. Principle to find simple interest is $\qquad$
A) $I=\frac{P R}{100}$
B) $I=\frac{T R}{100}$
C) $I=\frac{P T R}{1000}$
D) $I=\frac{P T R}{100}$
33. Discount is a decrease percent of $\qquad$ price.
A) cost
B) list
C) marked
D) Both B and C

## ANSWERS

## PART - B

14-B; 15-C; 16-B; 17-C; 18-A; 19-C; 20-A; 21-D; 22-C; 23-D; 24-C; 25-A; 26-C; 27-B; 28-D; 29-D; 30-C; 31-C; 32-D; 33-D.

