EIGHTH CLASS MODEL PAPER (AP)

SUMMATIVE ASSESSMENT – 1

MATHEMATICS (English Version)

Time	: 2 Hrs.45 Mins.	PART – A and B	Max.Marks: 80					
1115	15 minutes of time is allo	atted for reading the question namer						
2	Answer All the questions	s and the reading the question paper.						
3	Answer An the questions Answers for questions under PART – A should be written in a separate answer booklet.							
4								
5.	There is an internal choi	ce in Section – III.						
6.	Write answers neatly an	d legibly.						
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Time	:: 2 Hrs.	PART – A	Marks: 60					
		SECTION – I						
Note:	i) Answer All questions.		$4 \times 2 = 8$					
	ii) Each question carries 2	marks.						
1.	Find a rational number betwe	$\operatorname{een}\frac{2}{3}$ and $\frac{3}{4}$.						
2.	Solve $8x + \frac{5}{2} = \frac{13}{2}$.							
3.	Express 0.00009298 in the st	andard form.						
4.	A cycle marked at Rs.3600 a	nd sold for Rs.3312. What is the discount	and discount percentage?					
		SECTION – II						
Note:	i) Answer All questions.		$5 \times 4 = 20$					
	ii) Each question carries 4	marks.						
5.	Express $1.7\overline{29}$ in $\frac{p}{q}$ form.							
6.	The difference between two times the smaller number. Fi	numbers is 8. If 2 is added to the bigger nd the numbers.	number the result will be three					

- 7. Simplify and give reasons (i) $\left[(3^2 2^2) \div \frac{1}{5} \right]^2$ (ii) $\left[(5^2)^3 \times 5^4 \right] \div 5^6$.
- 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.

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) $\frac{3x+1}{6} + \frac{2x-3}{7} = \frac{x+3}{8} + \frac{3x-1}{14}$ ii) 0.18(5x-4) = 0.5x + 0.8

11. a) Solve $\frac{5x+2}{2x+3} = \frac{12}{7}$

(**OR**)

- **b**) If $x = \left(\frac{3}{2}\right)^2 \times \left(\frac{2}{3}\right)^{-4}$ then find the value of x^{-2} .
- 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 AB = 6 cm, AD = 4.5 cm and BD = 7.5 cm.

(**OR**)

b) Construct a quadrilateral ABCD with AB = 5.5 cm, BC = 3.5 cm, CD = 4 cm, AD = 5 cm and $\angle A = 45^{\circ}$.

Time: 30 Mins.	PART – B	Marks: 20
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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)	()	a) 1				
	ii) Additive inverse of (-1)	()	b) 0				
	iii) Additive identity	()	c) –1				
	A) i–b, ii–c, iii–a B) i–c	, ii–a	, iii–b		C) i–a, ii–b, iii–c	D) i–a, ii–c, iii–b		

 $4 \times 8 = 32$

- **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 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.	$\left(\frac{-3}{13}\right) \div \left(\frac{-4}{65}\right) = \dots$				()
	A) $\frac{15}{4}$	B) $\frac{-15}{4}$	C) $\frac{4}{15}$	D) $\frac{-4}{15}$		
19.	$\left(\frac{5}{6}\right) - \left(\frac{3}{4}\right) = \dots$				()
	A) $\frac{1}{4}$	B) $\frac{-1}{4}$	C) $\frac{1}{12}$	D) $\frac{-1}{12}$		
20.	Assertion: $5x + 6y = 12$	is a linear equation.			()

()

20. Assertion: 5x + 6y = 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) $3x^2 + 5 = 14$	B) $3 = 2x + y$	C) $5m - 6n = 0$	D) $3x + 5 = 14$		
22.	If $3p - 7 = 0$ then the va	lue of p =			()
	A) 7	B) 3	C) $\frac{7}{3}$	$D)\frac{3}{7}$		
23.	$\frac{2x}{13} = 4$ then x =				()
	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.C) Both statements are correct.		B) Only statement 2 is 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? () C) rectangle A) kite B) rhombus D) parallelogram

27.	Express $(-2)^{-5}$ in the fo	form of $\frac{p}{q}$.			()	
	A) $\frac{1}{32}$	B) $\frac{-1}{32}$	C) $\frac{1}{10}$	D) $\frac{-1}{10}$			
28.	$2^{-7} \div 2^{-3} = \dots$				()	
	A) 2 ⁴	B) 2 ⁻⁴	C) $\frac{1}{16}$	D) Both B and C			
29.	Standard form of 0.000	002022 is			()	
	A) 20.22×10^{-6}	B) 202.2×10^{-5}	C) 20.22×10^{-5}	D) 2.022 × 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			()	
	A) I = $\frac{PR}{100}$	B) I = $\frac{TR}{100}$	C) I = $\frac{PTR}{1000}$	D) I = $\frac{PTR}{100}$			
33.	Discount is a decrease p	percent of 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.

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