

EIGHTH CLASS MODEL PAPER (AP)

SUMMATIVE ASSESSMENT – 1

MATHEMATICS (English Version)

Time: 2 Hrs.45 Mins.

PART – A and B

Max.Marks: 80

Instructions:

1. 15 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 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.

4 × 2 = 8

ii) Each question carries 2 marks.

1. Find a rational number between $\frac{2}{3}$ and $\frac{3}{4}$.
2. Solve $8x + \frac{5}{2} = \frac{13}{2}$.
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.

5 × 4 = 20

ii) Each question carries 4 marks.

5. Express $1.\overline{729}$ in $\frac{p}{q}$ 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) $\left[(3^2 - 2^2) \div \frac{1}{5}\right]^2$ (ii) $[(5^2)^3 \times 5^4] \div 5^6$.
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.

4 × 8 = 32

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} .

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 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

Instructions:

1. **Answer All the questions.** **20 × 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

27. Express $(-2)^{-5}$ in the form of $\frac{p}{q}$. ()
 A) $\frac{1}{32}$ B) $\frac{-1}{32}$ C) $\frac{1}{10}$ D) $\frac{-1}{10}$
28. $2^{-7} \div 2^{-3} = \dots\dots\dots$ ()
 A) 2^4 B) 2^{-4} C) $\frac{1}{16}$ D) Both B and C
29. Standard form of 0.000002022 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 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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