

SUMMATIVE ASSESSMENT 1(2016-17)CLASS VIIIMATHEMATICS (Set - B)

Time : 3 Hours

M.Marks: 90

General Instructions:

- All questions are compulsory.
- The question paper consists of 34 questions divided into four sections A,B,C,D. Section - A comprises of 8 questions of 1 mark each, Section -B comprises of 6 questions of 2 marks each, Section -C comprises of 10 questions of 3 marks each and Section D comprises of 10 questions of 4 marks each.
- Question numbers 1 to 8 in section A are multiple choice questions where you are to select one correct option out of the given four.
- Use of calculator is not permitted.

SECTION - A

- 0.0000064 expressed in standard form is
a) 64×10^6 b) 6.4×10^{-6} c) 6.4×10^{-7} d) none of these
- The sides of a quadrilateral having a common end point are called
a) Diagonals b) Adjacent sides c) Opposite sides d) none of these
- 0.5 % when expressed as a decimal is
a) 0.005 b) 0.05 c) 0.5 d) none of these
- If the present population of a place is P and it decreases at R % p.a. then, population after n years will be
a) $P \left(1 - \frac{R}{100}\right)^n$ b) $\frac{P}{\left(1 + \frac{R}{100}\right)^n}$ c) $P \left(1 + \frac{R}{100}\right)^n$ d) none of these
- $5\sqrt{0.9} = ?$
a) 0.3 b) 0.03 c) 0.33 d) none of these
- Difference between Upper Limit and Lower Limit of a class interval is called
a) Range b) Class Mark c) Class Size d) none of these
- Discount is allowed on the
a) Cost Price b) Selling Price c) Marked Price d) none of these
- $(0.05)^3 = ?$
a) 12.5 b) 0.125 c) 0.00125 d) none of these

SECTION : B

9. Evaluate: $\sqrt[3]{-32} \times \sqrt[3]{250}$
- 10.a) A collection of observations gathered initially is called _____.
- b) The mid value of a Class Interval is called its _____.
11. Write a Pythagorean triplet whose smallest member is 8.
12. After allowing a discount of 12 % on a toy, it is sold for Rs. 528. Find the Marked Price of the toy.
13. Find $8\frac{1}{3}\%$ of 24 .
14. Find the measure of each interior angle of a regular polygon having 8 sides.

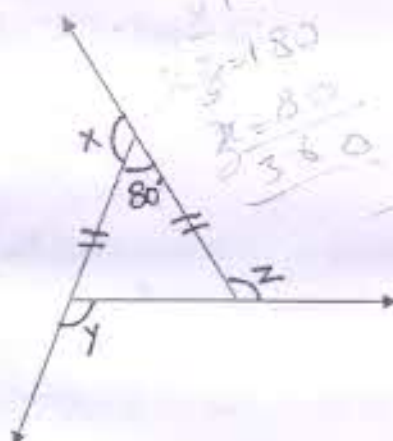
SECTION : C

15. Construct a frequency distribution table for the following—
- a) 7, 8, 6, 5, 6, 7, 7, 9, 8, 10, 9,
7, 6, 7, 8, 8, 9, 10, 5, 7, 8, 6
- b) Find the range of above data.
16. Divide $(6p^2 - 13p + 6)$ by $(3p - 2)$.
17. Find the smallest number by which 8640 must be divided so that the quotient may be a perfect cube. Also, find the cube root of the number so obtained.
18. Prove that the sum of 4 angles of a quadrilateral is 360° .
19. Find the value of x if—
- $$(2)^{3x+5} \div (2)^{-1} = 8$$
20. If $x - \frac{1}{x} = 3$, find $x^2 + \frac{1}{x^2}$
21. The monthly salary of a peon is Rs. 15625. If he gets an increase of 12 %, find his new salary.
22. Evaluate $\sqrt{10816}$ and then find the value of $\sqrt{108.16} - \sqrt{1.0816}$
23. A cycle was sold at a gain of 10%. Had it been sold for Rs. 70 more, the gain would have been 14 %. Find the C.P. of the cycle.
24. At what rate % p.a. will a sum of Rs. 3125 amount to Rs. 3645 in 2 years?

SECTION : D

25. Observe the given figure and find the value of

- a) x, y, z
 b) $x + y + z$



26. The simple interest on a certain sum of money for 3 years at 5% p.a. is Rs. 1200. What will be the Compound Interest on that sum at the same rate for the same period?

27.a) What % of 4 km is 160 metre?

b) What quantity is 30 % less than 2 litre ?

28. The daily earnings (in Rs.) of 24 stores in a market was recorded as under—

- 715, 650, 685, 550, 573, 530, 610, 525,
 742, 680, 736, 524, 500, 585, 723, 545,
 532, 560, 580, 545, 625, 630, 645, 700

Prepare a frequency table taking equal class sizes, one such class is 500 - 550 where 550 is not included

29. Solve using algebraic identities—

- a) 107×93 b) $(9x - 10)^2$

30. The angles of a quadrilateral are in the ratio 1 : 2 : 3 : 9 . Find the measure of each angle and tell the type of quadrilateral.

31.a) Find the product of $(2x + 3)(x^2 - 3x + 7)$

b) Subtract $2a - 5b + 2c - 9$ from $2c - 5b + 2a$.

32. Find the greatest 5-digit perfect square.

33. Evaluate

- a) $(10^2 - 8^2)^{1/2}$ b) $(\frac{-2}{3})^7 \div (\frac{-2}{3})^{10}$

34. A vendor buys oranges at 20 for Rs. 56 and sells them at the rate of Rs. 35 per dozen. Find his gain or loss %.