

Summative Assessment - I (2014-15)

compared of course
Bati

Class - VII
Subject - Maths

Time : 2½ hrs.

M. M. : 90

Note:- This paper is divided into four sections -

Section A contains 8 MCQs of 1 mark each.

Section B contains 10 questions of 2 marks each.

Section C contains 9 questions of 3 marks each.

Section D contains 7 questions of 5 marks each.

Attempt each section with carefully.

Section - A

(1 mark each)

Q.1. If $\frac{x-1}{x+1} = \frac{7}{9}$, then $x = ?$

- (a) 6 (b) 7 (c) 8 (d) 10

Q.2. Simplify $(-36) \div (-9) = ?$

- (a) 4 (b) -4 (c) 5 (d) none of these

Q.3. $\left(\frac{-1}{2}\right)^3 = ?$

- (a) $\frac{-3}{2}$ (b) $\frac{-1}{8}$ (c) $\frac{-1}{6}$ (d) none of these

Q.4. $6ab \times 4b = ?$

- (a) $24ab^2$ (b) $24a^2b$ (c) $6a^2b$ (d) none of these

Q.5. $\left\{\left(\frac{1}{3}\right)^2\right\}^4$

- (a) $\left(\frac{1}{3}\right)^6$ (b) $\left(\frac{1}{3}\right)^8$ (c) $\left(\frac{1}{3}\right)^{16}$ (d) $\left(\frac{1}{3}\right)^{24}$

Q.6. $\frac{3}{4}$ as rate percent is -

- (a) 7.5% (b) 75% (c) 0.75% (d) none of these

Q.7. $(-4) \div \frac{2}{3} = ?$

- (a) 6 (b) -6 (c) 12 (d) 18

Q.8. $2\frac{2}{3} + 3\frac{1}{2} = ?$

(a) $6\frac{1}{6}$

(b) $3\frac{1}{6}$

(c) $2\frac{1}{5}$

(d) $6\frac{1}{2}$

Section - B

(2 marks each)

Q.9. Simplify and express the result in exponential form -

$$\left(\frac{-2}{5}\right)^{11} \times \left(\frac{-2}{5}\right)^4$$

Q.10. Find the value of -

$$(-15) \times 8 + (-15) \times 2$$

Q.11. Solve $\rightarrow 3x + \frac{1}{5} = 2 - x$

Q.12. Find $\rightarrow \frac{-3}{8} - \frac{7}{11}$

Q.13. Subtract $(2x^2 - 5x + 7)$ from $(3x^2 + 4x - 6)$.

Q.14. Multiply $\rightarrow (3xy + 2y)$ by $5xy$.

Q.15. Which is greater -

1.37 or 1.49

Q.16. Simplify - $(-2)^3 \times (-10)^3$.

Q.17. Show that the numbers 22, 23, 42, 63 are in proportion.

Q.18. **The class Picnic**

Solve the following percent problem ^{alt} related to picnic.

(a) Based on the attendance at past picnics, Luis expects 95% of the students in his class to attend this year's picnic. If 120 students are in the class how many students are likely to attend picnic.

Section - C

(3 marks each)

Q.19. Write down a pair of integers whose -

(a) difference is -10 (b) sum is 0

Q.20. Lipika reads a book for $1\frac{3}{4}$ hours every day. She reads the entire book in 6 days. How many hours in all were required by her to read the book.

Q.21. Give four rational numbers equivalent to -

$$\frac{4}{5}$$

- By what number should we multiply 3^{-9} . So that the product is equal to 3.
- Q.23. Simplify the expression and find the value, if x is equal to 2.
 $3(x+2) + 5x - 7$
- Q.24. If $x : 18 : 5 : 3$, find the value of x.
- Q.25. The sum of two consecutive multiples of 3 is 69, find them.
- Q.26. If 15% of the workers in a factory are females and the number of male workers is 272, find the total number of workers in the factory.
- Q.27. Nine added to thrice a whole number gives 45. Find the number.

Section - D

(5 marks each)

- Q.28. A certain freezing process requires that room temperature be lowered from 40°C at the rate of 5°C every hour. What will be the room temperature 10 hours after the process begins ?
- Q.29. A vehicle covers a distance of 43.2 km. in 2.4 litres of petrol. How much distance will it cover in one litre of petrol.
- Q.30.(a) Write the following rational numbers in ascending orders
 $\frac{-3}{7}, \frac{-3}{2}, \frac{-3}{4}$
- (b) Find the value of $\frac{3}{4} \div \left(\frac{-4}{65}\right)$
- Q.31. Multiply : $\frac{-4}{3}xy^3$ by $\frac{6}{7}x^2y$ and find the value for $x = 2$ and $y = 1$.
- Q.32. The numerator of a fraction is 4 less than the denominator if 1 is added to both its numerator and denominator, it becomes $\frac{1}{2}$. Find the fraction.
- Q.33. I buy a T.V. for Rs. 10,000 and sell it at a profit of 20%. How much money do I get for it.
- Q.34. Simplify $\rightarrow \frac{25 \times 5^2 \times t^2}{10^3 \times t^4}$