COMMON SECOND TERM SUMMATIVE EXAMINATION-2019

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Standard VIII

Reg.No. : | | | | | | |

Time: 2.00 hours. **MATHEMATICS** Marks: 60

Part - A

I. Choose the correct answer: 10 x 1 = 10

1. When 60 is subtracted from 60% of a number to given 60, the number is _____.
   a) 60 b) 100 c) 150 d) 200
2. The price of a slipper is Rs.198. What is the marked price of the slipper if it bought at 10% discount?
   a) Rs.250 b) Rs.240 c) Rs.210 d) Rs.220
3. The sum which amounts to Rs.2662 at 10% p.a. in 3 years compounded yearly is _____.
   a) Rs.2000 b) Rs.1800 c) Rs.1500 d) Rs.2500
4. The value of P in the equation $\frac{2P}{3} = 20$ is _____.
   a) 30 b) 20 c) 60 d) 40
5. Sum of a number and its half is 45 then the number is _____.
   a) 15 b) 20 c) 30 d) 40
6. Pythagorus theorem is true for _____ type of triangles.
   a) acute angle b) right angle c) obtuse angle d) all
7. If the square of the hypotenuse of an isoscles right triangle is 50 cm^2, the length of each side is _____.
   a) 25 cm b) 5 cm c) 10 cm d) 20 cm
8. Every 3rd number of the Fibonacci sequence is multiple of _____.
   a) 2 b) 3 c) 5 d) 8
9. If the word "PHONE" is coded as "SKRQH", how will "RADIO" be coded?
   a) SCGNH b) VRGNG c) UDGLR d) SDHKQ
10. The number of conversion periods, if the interest on a principal is compounded every two months is _____.
    a) 2 b) 4 c) 6 d) 12

II. Fill in the blanks: 5 x 1 = 5

11. 10 hours is _____ % of a day.
12. Loss or gain percentage is always calculated on the _____.
13. The linear equation in one variable has _____ solution.
14. X-axis and Y-axis intersect at _____.
15. Two numbers are said to be _____ if their HCF is 1.

III. Match the following: 5 x 1 = 5

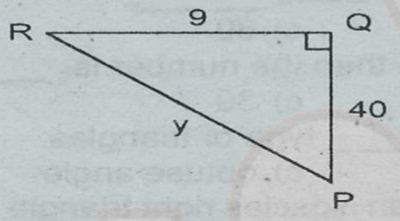
16. Selling price > Cost price - $\frac{2}{3}x$
17. Cost price > Selling price - (3,4,5)
18. Half of a number - Profit
19. Two third of a number - Loss
20. Pythagorean triplet - $\frac{x}{2}$
    - $\frac{3}{2}x$

Part - B

IV. Answer any 9 questions: 9 x 2 = 18

21. 48 is 32% of what number?

22. What is 25% of 30% of 400?
23. The price of a rain coat was slashed from Rs.1060 to Rs.901 by a shopkeeper in the winter season to boost the sales. Find the rate of discount given by him.
24. Some articles are boughg at 2 for Rs.15 and sold at 3 for Rs.25. Find the gain percentage.
25. Find the difference in C.I and S.I for P = Rs.5000, r = 4% p.a, n = 2 years.
26. Solve: $2x + 5 = 9$
27. The sum of three consecutive odd numbers is 75. Which is the largest among them?
28. Find the value of x : $\frac{2x}{3} - 4 = \frac{10}{3}$
29. Find the quadrants without plotting the points on a graph sheet.
    i) (3,0) ii) (–5,2) c) (4,–5) d) (–8,–12)
30. Can a right triangle have sides that measure 5 cm, 12 cm and 13 cm?
31. Find y.



32. Find the 8th term and 11th term of the fibonacci sequence 1,1,2,3,5, ...
33. Find the HCF of 144 and 120 using repeated subtraction method.

Part - C

V. Answer any 4 questions: 4 x 3 = 12

34. If the selling price of 10 rulers is the same as the cost price of 15 rulers, then find the gain percentage.
35. If a mattress is marked for Rs.7500 and is available at two successive discounts of 10% and 20%, find the amount to be paid by the customer.
36. Mahesh invested Rs.5000 at 12% p.a for one year. If the interest is compounded half yearly, find the amount he gets at the end of the year.
37. Find m : $\frac{m+9}{3m+15} = \frac{5}{3}$
38. The sum of the digits of a two-digit number is 8. If 18 is added to the value of the number, its digits get reversed. Find the number.
39. A 20-feet ladder leans against a wall at height of 16 feet from the ground. How far is the base of the ladder from the wall?
40. Solve: $\frac{4y}{3} - 7 = \frac{2y}{5}$

Part - D

VI. Answer the following: 2 x 5 = 10

41. a) Construct a trapezium CARD in which $\overline{CA}$ is parallel to $\overline{DR}$, CA = 9 cm, $\angle CAR = 70°$, AR = 6 cm and CD = 7 cm. ***(or)***
    b) Construct a parallelogram CAMP with CA = 6 cm, AP = 8 cm and CP = 5.5 cm and find their area.
42. a) Draw the graph of $y = x - 4$ ***(or)***
    b) A train runs constantly at a speed of 80 km/hr. Draw a time-distance graph. Also find the time-taken to cover 240 km.

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