EVERWIN MATRIC. HR. SEC. SCHOOL

12.12.19 SUMMATIVE ASSESSMENT-II Time: 2.30hr

Std: VIII MATHS-I Marks: 80

I. Choose the correct answer: (20× 1=20)

1. 15% of 25% of 10000= _____

a) 375 b) 400 c) 425 d) 475

2. 12% of 250 litres is the same as _____of 150 litres.

a) 10% b) 15% c) 20% d) 30%

3. 2 minutes is _____% to an hour.

a) 3% b) $\frac{1}{3}$% c) $3\frac{1}{3}$% d) 2%

4. 05252 is _____%

a) 0.52 b) 52.52 c) 52.5 d) 52.2

5. A quantity increases by x %. We will get the increased quantity as _____

a) I = $(1+\frac{x}{100})$A b) I = $(1-\frac{x}{100})$ c) I = $(1+\frac{x}{100})$ d)I = $(1-\frac{x}{100})$A

6. Loss or gain percentage is always calculated on the _____

a) Selling price b) Profit c) Cost price d) Discount

7. A fruit vendor sells fruits for Rs. 200 gaining Rs. 40. His gain percentage is _____

a) 20% b) 22% c) 25% d) $16\frac{2}{3}$%

8. The total bill amount of a shirt costing Rs. 575 and a T-shirt costing Rs. 325 with GST of 5% is _____

a) 940 b) 945 c) 700 d) 745

9. An article is sold for Rs. 555 at a loss of $7\frac{1}{2}$%. The cost price of the article is _____

a) 600 b) 500 c) 300 d) 400

10. Profit = _____

a) S.P-C.P b) C.P-S.P

c) Marked price- Discount d) Discount - S.P

11. The sum which amounts to Rs. 2662 at 10% p.a in 3 yrs compounded yearly is _____

a) Rs. 2000 b) Rs. 1800 c) Rs. 1500 d) Rs. 2500

12. The difference between the S.I and C.I for 2 years for principal of Rs. 5000 at the rate of interest 8% p.a is _____

a) Rs. 24 b) Rs. 32 c) Rs. 30 d) Rs. 40

13. The compound interest on Rs. 5000 at 12% p.a for 2 years compounded annually is _____

a) Rs. 1000 b) Rs. 1072 c) Rs. 1272 d) Rs. 2000

14. The compound interest on Rs. 8000 at 10% p.a for 1 year, compounded half yearly is _____

a) Rs. 800 b) Rs. 707 c) Rs. 820 d) Rs. 700

15. When the interest is compounded annually_____.

a) A =P$(1+\frac{r}{100})^n$ b) A =P$(1+\frac{r}{100})$ c) A =P$(\frac{r}{100})$ d) A=P$(\frac{r}{100})^2$

16. If the square of the hypotenuse of an isosceles right triangle is Rs. 50 cm^2, the length of each side is _____

a) 25 cm b) 5 cm c) 10 cm d) 20 cm

17. If in a Δ PQR, PR^2=PQ^2+QR^2, then the right angle of Δ PQR at the vertex_____.

a) P^2 b) R^2 c) Q^2 d) 2P

18. The hypotenuse of a right angled triangle of sides 12 cm and 16 cm is _____

a) 28 cm b) 20 cm c) 24 cm d) 21 cm

19. If 'l' and 'm' are the legs and 'n' is the hypotenuse of a triangle then, l^2 = _____

a) n^2-m^2 b) m^2+n^2 c) n^2 d) n^2+m^2

20. BC^2 = _____

a) AB^2+AC^2 b) AB^2-AC^2 c) BC^2+AC^2 d) AB^2+BC^2

II. Answer of the following: (Any 9) (9× 3=27)

Question **No: 34** is compulsory, either 'a' or 'b'

21. Can a right triangle have sides that measures 5 cm, 12 cm and 13 cm?

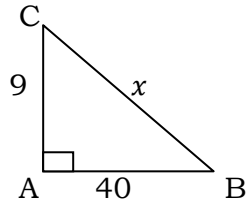
22. Say True or False:

i) 8, 15, 17 is a Pythagorean triplet.

ii) In a right angled triangle, the hypotenuse is the greatest side.

iii) Pythagoras theorem is true for all types of triangle.

23. Find the unknown side in the following triangle.



24. Find the compound interest on Rs. 3200 at 2.5% p.a for 2 years compounded annually.

25. The present height of a tree is 847 cm. Find its height two years ago if it increases at 10% P.A

26. Find the difference between the S.I and C.I for 2 yrs for Principal of Rs. 5000 at the rate of interest 8% p.a

27. If selling an article for Rs. 820 causes 10% loss on the selling price, find its cost price.

28. Find the selling price of the book, if the marked price is Rs. 225 and discount 8%

29. The price of 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.

30. 48 is 32% of what number?

31. What is 25% of 30% of 400?

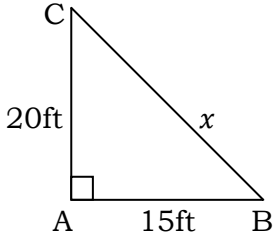
32. If a Car is sold for Rs. 2,00,000 from its original price of Rs.3,00,000 find the percentage for decrease in the value of car.

33. A bank pays Rs. 240 as interest for 2 years for a sum of Rs. 3000 deposited as savings. Find the rate of interest given by the bank.

34. a) Find the discount%, If the marked price is Rs. 750 and selling price is Rs. 615

(or)

b) Find the length of the support cable required to support the tower with floor.



III. Answer of the following: (Any 5) (5× 5=25)

Question **No. 43** is compulsory either 'a' or 'b'

35. Find the difference in simple interest and compound interest on Rs. 5000 for 1 year at 2% p.a compounded half yearly.

36. Find the amount on Rs. 15000 for 3 years if the rates of interest are 15%, 20% , and 25% for I, II, and III years respectively.

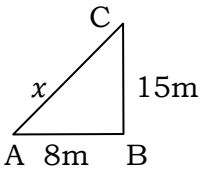
37. If a mattress is marked for Rs. 7500 and is available at two successive discounts of 10% and 20%, find the amount to be paid by the customer.

38. Find the total bill amount of the school bag, if the marked price is Rs. 500, discount is 5% and GST is 12%.

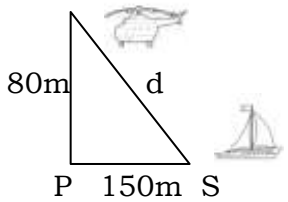
39. A number when increased 18% gives 236. Find the number.

40. A student get 31% marks in an examination but fails by 12 marks. If the pass percentage is 35%, find the maximum marks of the examination.

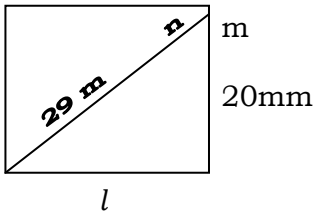
41. A junction where two roads intersect at right angles is shown in the figure. Find AC if AB = 8 cm and BC = 15 m.



42. Find the distance between the helicopter and the ship.



43. a)Find the area of rectangular plot of land shown in the figure.



(or)

b) The marked price of an LED tube light is Rs. 550 and the shopkeeper offers a discount of 8% on it. Find the selling price of the LED tube light.

IV. Geometry: (Any 1- either 'a' or 'b') (1× 8=8)

44. a) Construct the following trapezium with given measures and also find their area. BIKE with $\overline{BI} \| \overline{EK}$, BI = 4 cm, IK = 3.5 cm, BK = 6 cm and BE = 3.5 cm

(or)

b) Construct the following parallelograms with the given measurements and find their area. ARTS, AR = 6 cm, RT = 5 cm and $\angle ART = 70°$