

INDIAN SCHOOL SALALAH
SECOND TERM EXAMINATION, 2018-19

Subject: Mathematics

Time Allowed: 2 ½ hours

Class: VII

Max. Marks: 80

GENERAL INSTRUCTIONS

- a) All the questions are compulsory.
- b) This question paper consists of 30 questions.
- c) Section A contains 6 questions of 1 mark each. Section B contains 6 questions of 2 marks each. Section C contains 10 questions of 3 marks each. Section D contains 8 questions of 4 marks each.

SECTION.A

Question numbers 1 to 6 carry 1 mark each.

1. Two angles of a triangle are 45° and 75° . Find the third angle.
2. Set up an equation: Seven times a number m is 42.
3. Find the perimeter of the rectangular floor whose length and breadth are 15.6m and 4.4m respectively.
4. Convert the fraction $\frac{5}{4}$ to percent.
5. Identify the numerical coefficient of terms in the given expression: $15a - b$.
6. All integers and fractions are rational numbers. Is this statement True or False?

SECTION.B

Question numbers 7 to 12 carry 2 marks each.

7. Find the Circumference and Area of a circular garden whose radius is 21m.
8. Read the following questions and state whether they are True or False.
 - a) Two Acute angles are congruent.
 - b) Two Squares having same perimeter are congruent.
9. Is it possible to have a right triangle with the sides 8cm, 6cm and 10cm?
10. Solve $2y + 5 = 37$.
11. Subtract $(x - 2y - 3z)$ from $(2x + 3y - 5z)$
12. If 35% of a journey is 1050 km, how long is the whole journey?

SECTION.C

Question numbers 13 to 22 carry 3 marks each.

13. In the given figure.1, ΔPQR is an Isosceles triangle where $PQ = PR$ and PS is perpendicular to QR . Show that $\Delta PQS \cong \Delta PRS$. Give reasons for your proof.

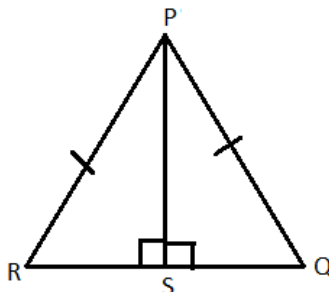


Figure 1

14. A path of width 5 m is cultivated all along the outside of a rectangular plot 90 m x 40 m. Find the total area of the path.
15. Construct an equilateral triangle ΔRUN with $RU = 5\text{cm}$. Measure $\angle RUN$.
16. Sreedevi bought pencils at ₹120 a dozen. She sold it at ₹15 each. Find her loss or profit percent.
17. Height of a pole is 24 m, find the length of the rope tied with its top from a point on the ground at a distance of 10 m from the bottom.
18. Simplify and find the value of $7b^2 + 4b - 3b^2 + 3b - 4$ when $b = 2$.
19. In the given figure 2, $\angle CBA = 40^\circ$ find the values of the angles marked x , y and z .

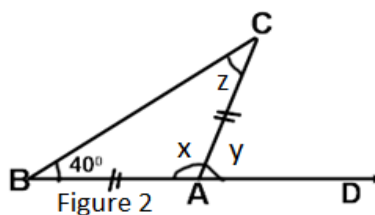


Figure 2

20. Subtract the sum of $\frac{3}{5}$ and $\frac{2}{3}$ from the sum of $\frac{1}{3}$ and $\frac{2}{5}$
21. Find the cost of polishing a parallelogram shaped table at ₹18 per m^2 , if the base and the corresponding altitude are 14.2 m and 15.5 m respectively.
22. Find the simple interest on ₹ 5600 at 8% per annum for 2 years. Also find the amount.

SECTION.D

Question numbers 23 to 30 carry 4 marks each.

23. Find the perimeter of the rectangle whose length is 40 cm and its diagonal is 41 cm.

24. From the sum of $4 + 3z$ and $5 - 4z + 2z^2$, subtract the sum of $3z^2 - 5z$ and $-2z^2 + 3z + 5$
25. Construct $\triangle ABC$ in which $AB = 7\text{cm}$, $\angle A = 90^\circ$ and $\angle B = 60^\circ$. Measure $\angle C$.
26. A rectangular garden is 200m long and 170 m wide. It has two paths, each 5m wide crossing each other at right angles through the centre. Find the area of paths. If the cost of laying red stones on the path is ₹ 2 per sq.m, find the total cost of laying stones.
27. Represent $\frac{-3}{7}$ on the number line. Find 4 rational numbers between $\frac{-3}{7}$ and $\frac{2}{3}$.
28. Solve: $8(x - 4) + 2 = 42$
29. In the given figure 3, PS bisects $\angle QPR$ and $\angle QTR$. Prove $\triangle PRT \cong \triangle PQT$? Give reasons.
Is $QT = RT$?

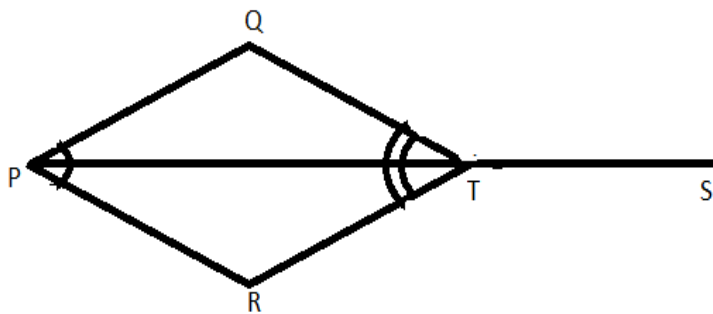


Figure 3

30. Ravi earns ₹ 10,000 per month. He spends 15% of it for house rent, 12% for food and 10% for payment of bills. He saves the rest of the amount. Find his monthly savings in rupees.
