INDIAN SCHOOL SALALAH

SECONDTERM EXAMINATION, 2018-19

Subject: Mathematics	Time allowed: 3 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. Find the ratio of 8 kg to 250 g
- 2. The circumference of a circle of diameter 28 cm is _____
- 3. The value of $3x^2 5x + 3$ when x = -2 is _____
- 4. Write the equation for the following statement:

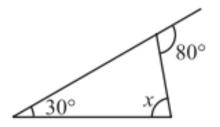
'If you take away 5 from three times of *x*, you get 25 '

- 5. How many altitude does a triangle have?
- 6. How many rational numbers are there between two rational numbers?

SECTION B

Question numbers 7 to 12 carry 2 marks each.

- 7. Babu saves ₹ 1000 from his salary. If this is the 20 % of his salary .What is his salary?
- 8. In a triangle, if one side is 7 cm and its corresponding height 4 cm, find its area.
- 9. Solve: 3(x+2) 7 = 20.
- 10. From the given figure find the value of x :



- 11. Give any two real-life examples for congruent shapes.
- 12. What should be added to $5pq 3p^2 + q^2$ to get $7p^2 + 2pq + q^2$?

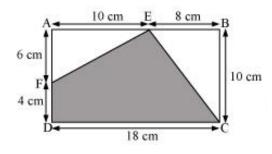
SECTION C

Question numbers 13 to 22 carry 3 marks each.

13. Rani borrows ₹ 10,000 from a Bank and pays back after 3 years at 13 % interest

p.a. Find the amount paid by Rani.

- 14. Construct \triangle ABC in which AB = 5 cm, AC = 6.5 cm and m \angle B = 55⁰.
- 15. Find the area of the shaded portion.



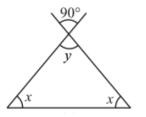
16. Simplify and find the value of the expression if x = 2, a = -1 and b = 1.

3(2x - a + 2b) + x - 2a - 4b.

17. PQR is an isosceles triangle with PQ = PR and PS is one of its altitude. Show that

$\Delta PSQ \cong \Delta PSR.$

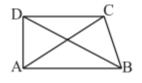
18. Find the values of *x* and *y* :



- 19. A man travelled 60 km by car and 240 km by train. Find what per cent of total journey did he travel by car and what per cent by train?
- 20. Draw a number line and represent the following rational numbers on it:

$$\frac{-7}{4}$$
, $\frac{4}{5}$ and $\frac{5}{-3}$

21. ABCD is a quadrilateral.



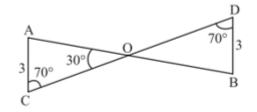
Is AB + BC + CD + DA > AC + BD? Justify your answer.

22. How many tiles whose length and breadth are 13 cm and 7 cm respectively are needed to cover a rectangular region whose length and breadth are 520 cm and 140 cm?

SECTION D

Question numbers 23 to 30 carry 4 marks each.

- 23. Neethu's mother gave her $\gtrless 3x^2y + xy^2$ and father gave her $\gtrless 5x^2y + 2xy^2$. Out of this total money she spent $\gtrless 4x^2y xy^2$ on her birthday party. How much money is left with her?
- 24. (a) Manu's father's age is 6 years more than three times Manu's age. Find Manu's age, if his father is 39 years old.
 - (b) Solve the equation: $2x \frac{7}{2} = \frac{13}{2}$
- 25. The diagonals of a rhombus measure 40 cm and 30 cm. Find its perimeter.
- 26. By selling a chair for ₹ 1440, a shopkeeper loses 10 %. At what price did he buy it?
- 27. In the given figure, Show that \triangle AOC $\cong \triangle$ BOD.



- 28. A circular pond is surrounded by a 2 m wide circular path. If outer circumference of circular path is 44 m, find the inner circumference of the circular path. Also find area of the path.
- 29. Find the value of :

a)
$$\left(-\frac{1}{5}\right) + 2\frac{4}{3}$$
 b) $\frac{3}{13} \div \left(\frac{-4}{65}\right)$

30. Construct a right angled \triangle ABC, where m \ge B = 90⁰, BC = 7.6 cm and AC = 9.8 cm.