# HALF YEARLY [2018-19] 

CLASS VII

## SUBJECT: MATHEMATICS

MAX. MARKS: $\mathbf{8 0}$
CLASS: VII

## General Instructions:

(i). All questions are compulsory.
(ii). This question paper contains $\mathbf{3 0}$ questions divided into four Sections A, B, C and D.
(iii). Section A comprises of 6 questions of $\mathbf{1}$ mark each. Section B comprises of 6 questions of 2 marks each. Section C comprises of 10 questions of $\mathbf{3}$ marks each and Section D comprises of 8 questions of 4 marks each.
(iv). Use of Calculators is not permitted

## SECTION - A

1. Find the mean of the first five whole numbers.
2. Write equations for the statements: One fourth of $m$ is 3 more than 7 .
3. Express 4 kg 8 g in kg .
4. Express 7 rupees 7 paise as rupees using decimals.
5. Ashish studies for 4 hours, 5 hours and 3 hours respectively on three consecutive days. How many hours does he study daily on an average?
6. Find the ratio of 30 days to 36 hours.

## SECTION - B

7. Find the values of the angles $a, b, \mathrm{c}$ and $d$ in the given figure lines $l\|m, p\| q$ :

8. In the above right sided figure, find x and y .
9. The population of a city decreased from 25,000 to 24,500 . Find the percentage decrease.
10. Harmeet purchased 3.5 kg of potatoes at the rate of Rs. 13.75 per kg. How much money should she pay in nearest rupees?
11. If $\triangle \mathrm{ABC}$$\triangle \mathrm{PQR}$ under the correspondence $\mathrm{ABC} \leftrightarrow \mathrm{RQP}$, write all the corresponding congruent parts of the triangles.
12. Write two integers which are smaller than -5 but their difference is - 5 .

## SECTION - C

13. Find the value of $x$ in the following figures:

(i)


14. The ages in years of 10 teachers of a school are:
$32,41,28,54,35,26,23,33,38,40$
(i) What is the age of the oldest teacher and that of the youngest teacher?
(ii) What is the range of the ages of the teachers?
(iii) What is the mean age of these teachers?
15. In the below figure, $\mathrm{AB}=\mathrm{AC}$ and AD is the bisector of $\angle \mathrm{BAC}$. Prove that (i) $\triangle \mathrm{ADB} \square$$\triangle \mathrm{ADC}$ (ii) $\angle \mathrm{B}=\angle \mathrm{C}$

16. In the adjoining figure, name the following pairs of angles.
(i) Obtuse vertically opposite angles
(ii) Adjacent complementary angles
(iii) Adjacent angles that do not form a linear pair

17. Raju's father's age is 5 years more than three times Raju's age. Find Raju's age, if his father is 44 years old.
18. Juhi sells a washing machine for Rs 13,500 . She loses $20 \%$ in the bargain. What was the price at which she bought it?
19. Find $3 / 4$ of
i) $\quad 36$
ii) 64
iii) 120
20. Find the values of the angles $x, y$, and $z$ in each of the following:

(i)

21. An elevator descends into a mine shaft at the rate of $6 \mathrm{~m} / \mathrm{min}$. If the descent starts from 10 m above the ground level, how long will it take to reach - 350 m .
22. Saili plants 4 saplings, in a row, in her garden. The distance between two adjacent saplings is $\frac{3}{4} \mathrm{~m}$. Find the distance between the first and the last sapling. 4

## SECTION - D

23. In a class test containing 15 questions, 4 marks are given for every correct answer and ( -2 ) marks are given for every incorrect answer. (i) Gurpreet attempts all questions but only 9 of her answers are correct. What is her total score? (ii) One of her friends gets only 5 answers correct. What will be her score? (iii) What you will do to get good marks?
24. In the below figure, ray AZ bisects $\angle \mathrm{DAB}$ as well as $\angle \mathrm{DCB}$.
(i) State the three pairs of equal parts in triangles BAC and DAC.
(ii) Is $\triangle \mathrm{BAC}$$\triangle \mathrm{DAC}$ ? Givereasons.
(iii) Is $\mathrm{AB}=\mathrm{AD}$ ? Justify your answer.
(iv) Is CD = CB? Give reasons.

25. A girl is 28 years younger than her father. The sum of their ages is 50 years. Find the ages of the girl and her father.
26. Anil deposited Rs. 20,000 for saving as a fixed deposit in a bank at the rate of $10 \%$ per annum. Find the amount he will get after 5 years. What are the benefits of savings?
27. In a test (+5) marks are given for every correct answer and ( -2 ) marks are given for every incorrect answer. (i) Radhika answered all the questions and scored 30 marks though she got 10 correct answers. (ii) Jay also answered all the questions and scored ( -12 ) marks though he got 4 correct answers. How many incorrect answers had they attempted?
28. In the morning, a milkman filled $5 \frac{1}{2} \mathrm{~L}$ of milk in his can. He sold to Renu, Kamla and Renuka ${ }_{4}^{3}$ L each; to Shadma he sold ${ }_{\frac{7}{8}}^{7} \mathrm{~L}$; and to Jassi he gave $1 \frac{1}{2} \mathrm{~L}$. How much milk is left in the can?
29. Find the unknown length $x$ in the following figures

(i)

(ii)
30. The performance of students in 1st Term and 2nd Term is given. Draw a double bar graph choosing appropriate scale and answer the following:

| Subject | English | Hindi | Maths | Science | S.Science |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1st Term (M.M. 100) | 62 | 72 | 88 | 81 | 73 |
| 2nd Term (M.M. 100) | 70 | 65 | 95 | 85 | 75 |

(i)In which subject, has the child improved his performance the most?
(ii) In which subject is the improvement the least?
(iii) Has the performance gone down in any subject?.

