Subject – Mathematics

Class – VI

Set - 1

TIME: - 3 Hrs.   **M.M.:- 80**

Instructions:-

(i) Read all question carefully before attempting them.
(ii) All questions are compulsory.
(iii) Marks are allotted against questions.
(iv) Write the answers against the space provided.
(v) Write neatly and clearly.

<u>SECTION – A</u>

Answer the following: **(1 X 5 = 5)**

Que.1. The greatest number that will divide 10 and 18 is.

Que.2. Write the number of faces of a cuboid.

Que.3. What will be the HCF of two consecutive odd numbers?

Que.4. Write the greatest negative integer.

Que.5. Find the smallest digit that should replace * to make 67*19 divisible by 3.

<u>SECTION – B</u>

Answer the following: **(2 X 10 = 20)**

Que.6. Using properties of whole numbers, find the value of

$$13457 \times 105 - 13457 \times 5$$

Que.7. There are 550 students in a school, out of which 250 are girls. Find the ratio of girls to boys.

Que.8. Arrange the integers in descending order: 24, -11, -1, 0, 15

Que.9. With the same centre O, draw two circles with radii 3cm and 5cm.

Que.10. Find the ratio of the following in simplest form:

(a) 3 kg to 2000 gm
(b) 3 hours to 75 minutes

Que.11. Divide 40 chocolates between John and Bob in the ratio of 3:2.

Que.12. Find the product of the smallest prime number and smallest composite number.

Que.13. Emma pays Rs1500 to her piano teacher and Rs.750 to donation club every month. Find the total amount paid by her in one year.

Que.14. Check whether the two ratios form a proportion or not:

(i) 6 : 8 and 12 : 16;   (ii) 24 : 28 and 36 : 48

Que.15. Tanvi bought a notebook for Rs.8 $\frac{3}{4}$ and a pen for Rs.10 $\frac{2}{5}$. How much money should she pay to the shopkeeper?

SECTION – C

Answer the following: **(3 X 5 = 15)**

Que.16. Adrian bought 50 dozen pencils at Rs.80 a dozen. Out of these, 20 pencils were found broken. He sold the remaining pencils at Rs.8 each pencil. Find his gain or loss percent.

Que.17. A dealer bought 18 chairs at Rs.550 per chair. He sold 12 of them at Rs.650 per chair and the remaining chairs at Rs.500 per chair. Find his gain or loss percent.

Que.18. Use number line and add the following integers:

(a) 9 + (-6)
(b) 5 + (-11)
(c) (-1) + (-7)

Que.19. Peter plans to cover the floor of his room with square tiles of side 50 cm each. If the floor is 20m long and 15m wide. Find the number of tiles required to cover the floor of the room.

Que.20. A merchant had Rs.80290 with him. He placed an order for purchasing 50 ceiling fans for Rs.1200 each. How much money will remain with him after the purchase?

SECTION – D

Answer the following: (4 X 10 = 40)

Que.21. The sum of two numbers is 55 and the H.C.F and L.C.M of these numbers are 5 and 120 respectively, then, find the sum of the reciprocals of the numbers.

Que.22. Find the least number which when divided by 6, 15 and 18 leave remainder 5 in each case.

Que.23. Match the solution of the equations:

(a) $x + 6 = 36$ (1) 12

(b) $3x - 7 = 35$ (2) 240

(c) $\frac{a}{6} = 40$ (3) 14

(d) $4b = 48$ (4) 30

Que.24. The traffic lights at three different road crossings change after every 48 seconds, 72 seconds and 108 seconds respectively. If they change simultaneously at 8 a.m., at time will they change simultaneously again?

Que.25. Using suitable properties, find the product of the followings:

(a) 854×102 (b) 738×103 (c) 1005×168 (d) 258×1008

Que.26. Draw a circle of radius 4 cm. Draw any two of its chords. Construct the perpendicular bisectors of these chords. Where do they meet?

Que.27. John sold two digital cameras at $3,000 each. On one he gains 20% and on the other he loses 20%. What percent does he gain on the whole transaction?

Que.28. From one sheet of thick wood 6 pages of paper can be made. How many pages can be made with 75000 sheets of wood? If in one book there are 150 pages, how many books can be made with the help of these pages?

Que.29. Convert 9/7 : 8/3 into whole number ratio i.e., to ratio in simple form.

Que.30. Draw a line segment of length 12.8cm. Using compasses, divide it into four equal parts. Verify by actual measurement.