SA-I (CLASS-VI) 9/2014

SUBJECT : MATHS

Time : 3 hrs MM : 80

General Instructions :

i) All questions are compulsory.

ii) Read all questions very carefully.

iii) Questions 1 to 10 carry 1 mark each.

iv) Questions 11 to 18 carry 2 marks each.

v) Questions 19 to 28 carry 3 marks each.

vi) Questions 29 to 34 carry 4 marks each.

Q1. Fill in the blanks :

(a) 1 crore = _____ thousands

(b) 1 million = _____ hundreds

Q2. Express 24 as the sum of two odd primes.

Q3. Write the Roman Numeral for 72.

Q4. Write the predecessor of : 608030.

Q5. Insert commas suitably and write the name according to Indian system of numeration : 26350819.

Q6. Draw a rough figure and label suitably :

$\overleftrightarrow{OX}$ and $\overleftrightarrow{OY}$ meet at 0.

Q7. Which is the smallest whole number?

Q8. Write the number of faces of a cube and cylinder.

Q9. Draw a number line and locate the points on it :

$\frac{2}{7}, \frac{8}{7}, \frac{1}{7}, \frac{7}{7}$

Q10. Write the additive identity of a whole number.

Q11. Make the greatest and the smallest 4-digit number by using any one digit twice : 3, 0, 7.

Q12. Draw rough diagram of two angles such that they have four points in common.

Q13. Express $7\frac{2}{3}$ as improper fraction.

Q14. State which whole number is on the left of the other number on the number line and give reason :

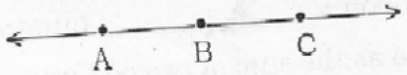
9623410, 10080030

Q15. Write geometrical shape of :

(a) A birthday cap. (b) A basket ball.

Q16. Write all the factors of 52.

Q17. Name the line given in all possible (six) ways, choosing only two letters at a time from the three given :



Q18. Which direction will you face if you start facing east and make $\frac{3}{4}$ of a revolution clockwise?

Q19. Shivam's office is $1\frac{2}{3}$ km from his house. He walks $\frac{3}{4}$ km and covers the remaining distance by autorickshaw. How much distance he travels by autorickshaw? What is the importance of physical exercise?

Q20. Using number line solve :

(a) $9 - 3$ (b) 4×3

Q21. Find the first three common multiples of 3, 4 and 12.

Q22. Draw any circle. Mark and name the following :

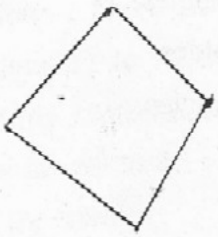
(a) A sector (b) A segment

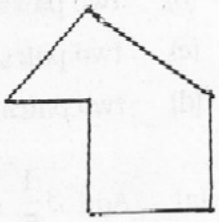
(c) A radius

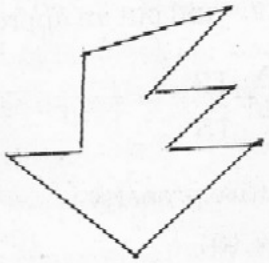
Q23. Onions are packed in sacks each weighing 18kg 500g. How many such sacks can be loaded in a truck with a carrying capacity of 111 kg?

Q24. Find the smallest 4-digit number which is divisible by 18, 24 and 32.

Q25. Name each polygon :

(a) 

(b) 

(c) 

Q26. Find the equivalent fraction of $\frac{12}{18}$ having :

(a) denominator 36

(b) numerator 4

Q27. Name the types of following triangle :

(a) ΔABC with $m\angle B = 90°$

(b) ΔXYZ with $m\angle X = 30°$, $m\angle Y = 70°$ and $m\angle Z = 80°$.

(b) ΔPQR such that $PQ = QR = PR = 6$ cm.

Q28. Write a digit in the blank space so that the number formed is divisible by 11 :

92 ____ 389.

Q29. Give a rough estimate (by rounding off to nearest hundreds) and also a closer estimate (by rounding off to nearest tens) :

$$383 + 1566 + 429$$

Q30. Draw a rough sketch of a quadrilateral ABCD. State :

(a) two pairs of opposite sides

(b) two pairs of opposite angles

(c) two pairs of adjacent sides

(d) two pairs of adjacent angles

Q31. (a) Add $3\frac{1}{5}$ and $2\frac{1}{3}$.

(b) Compare the fractions and put an appropriate sign:

$$\frac{5}{6} \text{ and } \frac{13}{15}$$

Q32. (a) Solve using distributive property :

$$2631 \times 101$$

(b) Using divisibility test, determine if the number is divisible by 6 :

$$3852162$$

Q33. Three drums containing diesel have capacities 240l, 165l and 205l. Find the maximum capacity of a container which can measure the diesel of three drums when used an exact number of times.

Q34. Find the number of right angles turned through by the hour hand of a clock when it goes from :

(a) 2 to 8 (b) 9 to 12

Also draw a figure to show the movement of hour hands on the clock.