SA-I (CLASS-VI) 9/2012

SUBJECT : MATHEMATICS

Time : 3 hrs. **M.M. : 80**

General Instructions :

(i) All questions are compulsory.

(ii) Read all questions very carefully.

(iii) Questions 1 to 10 carry one 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. Write the successor of 6,58,239.

Q2. How many lines can be drawn passing through one point?

Q3. Find the equivalent fraction of $\frac{2}{7}$ having denominator 56.

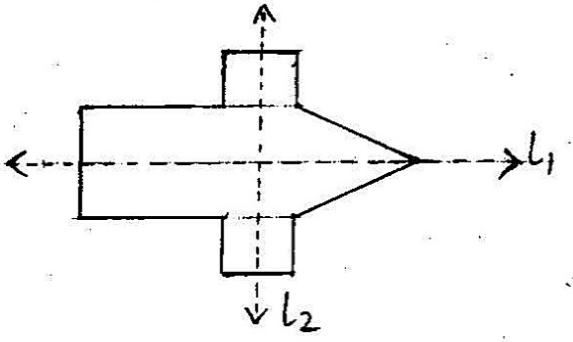
Q4. Which is the smallest whole number?

Q5. If A, B, C are three points on a line such that AB = 5cm, BC = 3cm and AC = 8cm, which one of them lies between the other two?

Q6. Write the additive identity of a whole number.

Q7. Express $\frac{15}{7}$ as a mixed fraction.

Q8. For the given figure, which one is the mirror line l_1 or l_2.



Q9. Insert commas suitably and write the name according to International System of numeration for : 28 310 563

Q10. Find all the multiples of 12 upto 100.

Q11. What fraction of the day is 4 hours?

Q12. Solve using number line : 3×6

Q13. Find the number of right angles truned through by the hour hand of a clock when it goes from

(a) 2 to 8 (b) 1 to 10

Q14. Draw a figure and label suitably for :

(i) Line p contains X and Y but not Z.

(ii) Two angles such that they have three points in common.

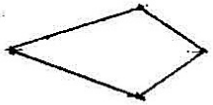
Q15. Using divisibility test, determine whether 5,06,19,283 is divisible by 11 or not.

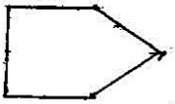
Q16. Consider the letters of English alphabets A to Z. List among them the letters with only horizontal line of symmetry.

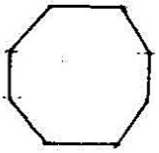
Q17. Write the Roman Numeral for :

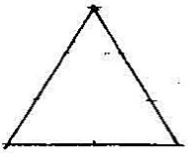
(a) 56 (b) 92

Q18. Name each polygon :

(a) 

(b) 

(c) 

(d) 

Q19. Using distributive property, find : 4325×125

Q20. Give reasons for the following :

(a) A rectangle can be thought of as a special parallelogram

(b) Squares, rectangles, parallelograms are all quadrilaterals.

Q21. Three boys step off together from the same spot. Their steps measure 63cm, 70cm and 77cm respectively. What is the minimum distance each should cover so that all can cover the distance in complete steps?

Q22. Draw a circle with centre O and any radius and mark :

(i) a sector (ii) a segment

(iii) a point in its exterior

Q23. In a class A of 35 students, 30 passed in first class; in another class B of 42 students, 36 passed in first class. In which class was a greater fraction of students getting first class?

Q24. Estimate the difference :

5631 – 385 using general rule.

Q25. Name the type of following triangles :

(a) ΔPQR such that PQ = 6.5 cm, QR = 5 cm and RP = 4cm

(b) ΔXYZ such that XY = YZ = XZ = 4 cm

(c) ΔABC with $m\angle B = 90°$ and AB = BC

Q26. Find HCF of 14, 44 and 38.

Q27. On a graph paper, draw the following :

(a) A quadrilateral with both horizontal and vertical lines of symmetry

(b) A triangle with exactly two lines of symmetry

Q28. Write the number of lines of symmetry of :

(a) Circle (b) Scalene Triangle

(c) Rhombus

Q29. Find the answer by suitable rearrangement :

(a) $2 \times 275 \times 50$ (b) $239 + 600 + 161$

Q30. Kamal takes $2\frac{1}{3}$ minutes to complete a 100m race. Bhavya takes $\frac{5}{4}$ minutes to do the same. Who takes less time and by what fraction?

Q31. Draw a quadrilateral ABCD. Name :

(i) two pairs of opposite sides

(ii) two pairs of opposite angles

(iii) two pairs of adjacent sides

(iv) two pairs of adjacent angles

Q32. Find the least number which when divided by 3, 18 and 21 leave remainder 7 in each case.

Q33. Which direction will you face if you start facing

(i) west and make $\frac{3}{4}$ of a revolution clockwise?

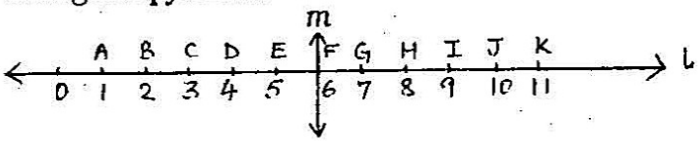
(ii) east and make $\frac{1}{2}$ of a revolution anti-clockwise?

(iii) north and make $1\frac{1}{2}$ of a revolution clockwise?

(iv) south and make one full revolution?

Q34. (a) Write the number of faces, edges and corners of a triangular pyramid.

(b)



Study the line l is $\perp$ to line m

(i) is BF = FJ

(ii) Are these true?

(a) AD > IK

(b) CE = GI

(c) DF > GK