ITL Public School
Summative Assessment 1(2014-15)

Date: 26.09.2014   **Class: VII**

Mathematics – Set A

Time: 3 hrs   **M. M: 30**
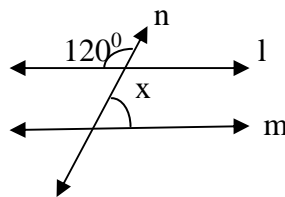
General Instructions:
1. *Read the question paper carefully and answer legibly.*
2. *All questions are compulsory.*
3. *The question paper consist of 31 questions divided into four sections A,B,C and D*
4. *Section A comprises of 4 question of 1 mark each, section B comprises of 6 questions of 2 marks each, Section C comprises of 10 questions of 3 marks each and Section D comprises of 11 questions of 4 marks each*
5. *Use of calculators is not permitted.*

Section – A

Q1. Find the complement of 65°.   1
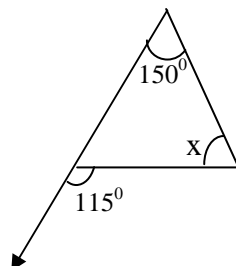
Q2. Write $4p - 5 = 7$ in statement form.   1

Q3. Write a pair of negative integers whose difference is -8.   1

Q4. Find $\frac{1}{2}$ of $2\frac{3}{4}$.   1

Section – B

Q5. Find 3 rational numbers between $\frac{-2}{5}$ and $\frac{-1}{3}$.   2

Q6. Solve $3l - 5 = 7$.   2

Q7. The side of an equilateral triangle is 4.5cm. Find its perimeter.   2

Q8. Smriti deposits Rs. 5000 in her bank account and withdraws Rs. 2500 from it, the next day. If   2
      withdrawal of amount from the account is represented by a negative integer, then how will
      you represent the amount deposited? Find the balance in Smriti's account after withdrawal.

Q9. Find the value of x, if $l \parallel m$ 2

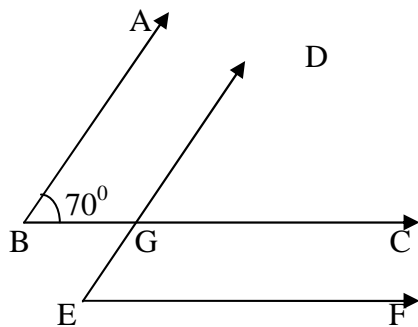Q10. Find the value of x.   2

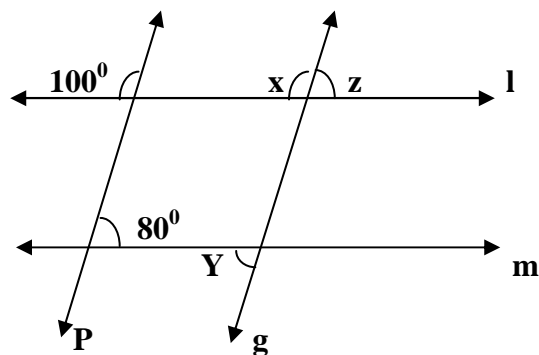### Section – C

Q11.
      a) Arrange the following in ascending order : $\frac{-2}{7}, \frac{-2}{3}, \frac{-2}{5}$ 1 ½

      b) Represent $\frac{-5}{3}$ on the number line.   1 ½

Q12. 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. 3

Q13. A die is thrown. Find the probability of : 3
  a) getting an even number on the top.
  b) getting a natural number on the top.
  c) getting a 7 on the top.

Q14. After simplifying put appropriate sign in the box. 3

$36 + (-24) - 15$ $\qquad$ $36 - (-24) + (-15)$

Q15. In a class of 40 students, $\frac{1}{5}$ of the total number of students like to study English, $\frac{2}{5}$ of the total number like to study Mathematics and the remaining students like to study Science. 1 + 2
  a) How many students like to study English?
  b) How many students like to study Science?

Q16. Find the mean, median and mode of the given data : 2, 14, 16, 12, 14, 14, 16, 14, 10, 14, 17 3

Q17. Anwar thinks of a number. If he takes 7 away from $\frac{5}{2}$ of the number, the result is 23. Find the number. 3

Q18. ABCD is a quadrilateral. Show that $AB + BC + CD + DA > AC + BD$ 3

Q19. In the given figure the arms of two angles are parallel. If $\angle ABC = 70^0$ then find $\angle DGC$ and $\angle DEF$. 3

Q20. Find the value of x, y, z if $l \parallel m$ and $p \parallel g.$ 3
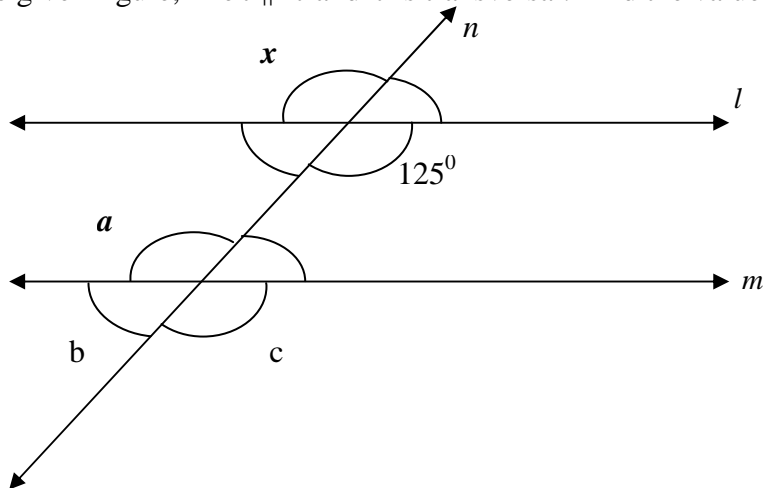

Section – D

Q21. A tree is broken at a height of 5m from the ground and its top touches the ground at a distance of 12m from the base of the tree. Find the original height of the tree. 4

Q22. The performance of a student in 1st term and 2nd term is given. Draw a double bar graph choosing appropriate scale and answer the following: 4

SUBJECT	ENGLISH	HINDI	MATHS	SCIENCE	S. SCIENCE
I Term	75	72	90	85	83
II Term	80	75	97	89	85

What quality of the child is depicted through the graph?

Q23. In the given figure, line *l* ‖ *m* and *n* is transversal. Find the value of *x, a, b and c .* 4

Q24. a) Solve : $16 + 4(m+2) = 0$ 3 + 1
b) Construct an equation starting with $x = 3$.

Q25. a) Each side of a regular polygon is 2.5cm in length. The perimeter of the polygon is 12.5cm. Find the number of sides of the polygon. 3 + 1
b) How much less is 30.2 km than 45.5 km?

Q26. In a class test containing 20 questions, 5 marks are given for every correct answer, (-2) marks are given for every incorrect answer and zero for not attempting any question. 2 + 2
a) Gurpreet attempts all questions but only 10 of her answers are correct. What will be her score?
b) One of her friends attempted 10 questions but gets only 5 answers correct. What will be her score?

Q27. Seema reads $\frac{1}{3}$ part of a book in 1 hour. 2 + 2

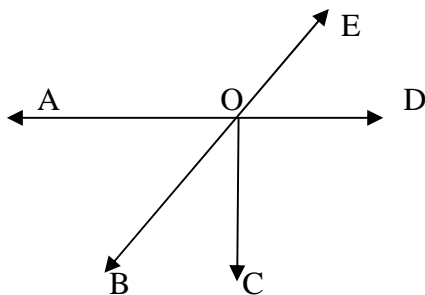a) How much part of the book will she read in $2\frac{2}{3}$ hours?

b) How much time will she take to read the whole book?

Q28. A certain freezing process requires that room temperature be lowered from 40ºC at the rate of 5ºC every hour. Find the room temperature 10 hours after the process begins. 4

Q29. The three angles of a triangle are in the ratio 1:2:3. Find the three angles. 4

Q30. Name the following pairs of angles : 4
 a) Vertically opposite angles.
 b) Adjacent complementary angles.
 c) Linear pair.
 d) Equal supplementary angles.

Q31. Find the value of : 2 + 2

a) $\left[\frac{9}{2} \times \left(\frac{-7}{4} \right) \right] + \left[(-4) \div \frac{2}{3} \right]$

b) $\left[\frac{5}{63} - \left(\frac{-6}{21} \right) \right] \div \left[\frac{5}{3} + \frac{3}{5} \right]$