Test / Exam Name: Ch6 - Lines And Angles	Standard: 9th	Subject: Mathematics
Student Name: _____	Section: _____	Roll No.: _____

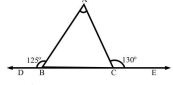| Questions: 26 | Time: 01:45 hh:mm | Marks: 50 |

Instructions

1. New section on new page
2. Rough work at the last page should be in proper manner too
3. Honesty is the best policy.

Q1. The complement of (90º - a) is: **1 Mark**

A aº **B** -aº **C** 90º + a **D** 90º - a

Q2. Side BC of △ABC has been produced to Don left-hand side and to Eon right-hand side such that ∠ABD = 125° and∠ACE = 130° then ∠A =? **1 Mark**

A 55° **B** 50° **C** 75° **D** 65°

Q3. The sum of all the angles of a quadrilateral is: **1 Mark**

A 400º **B** 180º **C** 360º **D** 320º

Q4. In the adjoining figure, l ∥ m then ∠x is equal to: **1 Mark**

A 56º **B** 51º **C** 66º **D** 61º
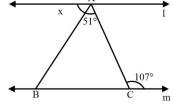
Q5. In figure, if lines l and m are parallel, then x = **1 Mark**

A 20° **B** 45° **C** 65° **D** 85°

Q6. **Directions:** In the following questions, the Assertions (A) and Reason(s) (R) have been put forward. Read both the statements carefully and choose the correct alternative from the following: **1 Mark**

Assertion: A line segment is a part of a line with two end - points.

Reason: A line can be extended from both side

A Both Assertion and Reason are correct and Reason is the correct explanation for Assertion. **B** Both Assertion and Reason are correct and Reason is not the correct explanation for Assertion.

C Assertion is true but the reason is false. **D** Both assertion and reason are false.

Q7. Write the complement of the following angles: **1 Mark**
77°

Q8. Find the comlement of the following angle. **1 Mark**
$\frac{2}{5}$ of a right angle.

Q9. Fill in the blank so as to make the following statements true: **1 Mark**
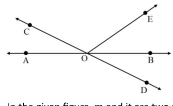If one angle of a linear pair is acute, then its other angle will be _____ .

Q10. The following statements are true (T) and which are false (F)? **1 Mark**
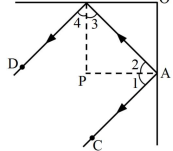If two adjacent angles are equal, then each angle measures 90°.

Q11. Fill in the blank in the following to make the statement true: **1 Mark**
If two parallel lines are intersected by a transversal, then each pair of corresponding angles are _____.

Q12. For what value of x + y in Fig. will ABC be a line? Justify your answer. **1 Mark**

Q13. The following statements are true (T) and which are false (F)? Give reasons. **1 Mark**
If two parallel lines are intersected by a transversal, then the interior angles on the same side of the transversal are equal.

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SECTION-B
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Q14. If l, m, n are three lines such that l ∥ m and n ⊥ l, prove that n ⊥ m. **2 Marks**

Q15. If the angles (2x - 10)° and (x - 5)° are complementary angles, find x. **2 Marks**

Q16. In figure, find the value of x. **2 Marks**
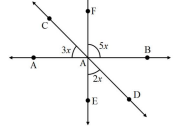
Q17. For what value of x will the lines l and m be parallel to each other? **2 Marks**
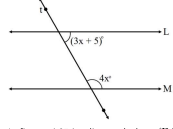
Q18. In figure, ACB is a line such that ∠DCA = 5x and ∠DCB = 4x. Find the values of ∠DCA and ∠DCB. **2 Marks**
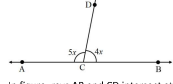
Q19. In figure, rays AB and CD intersect at O. Determine y when x = 60°. **2 Marks**
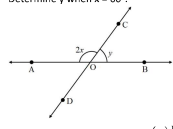
Q20. In figure, ∠1 = 60° and ∠2 = $\left(\frac{2}{3}\right)^{rd}$ of a right angle. Prove that l∥m. **3 Marks**

Q21. In the adjoining figure, AOB is a straight line. Find the value of x. Also, find ∠AOC, ∠COD and ∠BOD. **3 Marks**
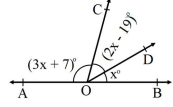
Q22. In figure, lines AB and CD intersect at O. If ∠AOC + ∠BOE = 70° and ∠BOD = 40°, find ∠BOE and reflex ∠COE. **3 Marks**
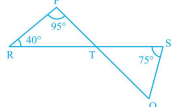

Q23. In the given figure, m and it are two plane mirrors perpendicular to each other. Show that the incident ray CA is parallel to the reflected ray BD. **3 Marks**
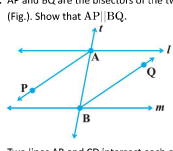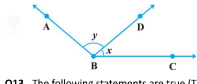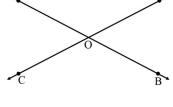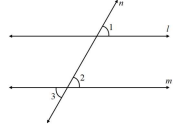

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SECTION-C
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Q24. In Fig. if lines PQ and RS intersect at point T, such that ∠PRT = 40° ∠RPT = 95° and ∠TSQ = 75°, find ∠SQT **4 Marks**

Q25. AP and BQ are the bisectors of the two alternate interior angles formed by the intersection of a transversal t with parallel lines l and m (Fig.). Show that AP∥BQ. **4 Marks**

Q26. Two lines AB and CD intersect each other at a point O such that ∠AOC : ∠AOD = 5 : 7. Find all the angles. **5 Marks**