**1. Consider the following statements:**

Ans:

X = 3

X = 9

Stack TOP = 7

13

4

7

**2. Consider the following statements:**

Ans:

X = 45

X = 23

X = 5

Stack element 10 14 34 5

**3. Evaluate the following postfix expressions:**

**a. 8 2 + 3 \* 16 4 / - =**

Ans : 26

**b. 12 25 5 1 / / \* 8 7 + - =**

Ans : 45

**c. 70 14 4 5 15 3 / \* - - / 6 + =**

Ans : 8

**d. 3 5 6 \* + 13 - 18 2 / + =**

Ans : 29

**4. Convert the following infix expressions to postfix notations:**

**a. (A + B) \* (C + D) – E**

Ans : AB + CD +\*E-

**b. A - (B + C) \* D + E / F**

Ans : ABC +CD-/E+F\*G-

**c. ((A + B) / (C - D) + E) \* F – G**

Ans : AB + CD - /E+f\*G-

**d. A + B \* (C + D) - E / F \* G + H**

Ans : ABCD+\*+ef/g\*-H+

**5. Write the equivalent infix expression for the following postfix expressions:**

**a. A B \* C +**

Ans : ABC\*+

**b. A B + C D - \***

Ans : ABCD+\*-

**c. A B – C – D \***

Ans : AB-C-D\*

**6. What is the output of the following program?**

Ans :

Winter Spring Summer Fall cold Warm Hot.

**8. What is the output of the following program?**

Output:

10 20 30 40 50

**9. What is the output of the following program segment?**

Ouput:

10

50 25 10

25