General Instructions:

1. This question paper consists of **15 multiple-choice questions (MCQs)**.
2. Each question carries **1 mark**. The maximum marks for this test are **15**.
3. The total time allowed to complete this test is **20 minutes**.
4. All questions are compulsory.
5. Each question has **four options (A), (B), (C), and (D)**. Only one option is correct.
6. Students must choose the **most appropriate option** for each question.
7. No marks will be deducted for incorrect answers.
8. Calculators and other electronic devices are **not permitted**.
9. Rough work should be done neatly in the space provided (if any).
10. Read each question carefully before answering.

Test Paper 05

Code: 2026/Simple Equations/07/05

1. Solve for x: $\frac{3x+4}{2-6x} = -2$

   (a) $\frac{1}{3}$

   (b) $\frac{2}{5}$

   (c) $\frac{8}{9}$

   (d) $\frac{4}{11}$

2. A number is divided into two parts such that one part is 10 more than the other. If the parts are in ratio 5:3, find the number.

   (a) 40

   (b) 50

   (c) 60

   (d) 80

3. If $5(x-3) = 3(x-5)$, find x.

   (a) 1

   (b) 2

   (c) 3

   (d) 0

4. The sum of the ages of three people is 90 years. Ten years ago, the ratio of their ages was 1:2:3. Find their present ages.

   (a) 15, 30, 45

   (b) 20, 30, 40

   (c) 25, 30, 35

   (d) 30, 30, 30

5. If $\frac{y}{2} - \frac{1}{4} = \frac{y}{3} + \frac{1}{2}$, find y.

   (a) $\frac{9}{2}$

   (b) $\frac{3}{7}$

   (c) $\frac{4}{11}$

   (d) $\frac{3}{11}$

6. "The difference between a number and its square root is 0." This equation is true for which value of x?

   (a) 0

   (b) 1

   (c) 2

   (d) 3

7. A rectangle's length is 3 times its width. If the length is decreased by 5 units and the width is increased by 5 units, the area remains the same. Find the length.

   (a) 10

   (b) 7.5

   (c) 12.5

   (d) 25

8. Solve: $15(y - 4) - 2(y - 9) + 5(y + 6) = 0$

   (a) 1

   (b) 2

   (c) 3

   (d) 4

9. If $m - \frac{m-1}{2} = 1 - \frac{m-2}{3}$, find m.

   (a) 1/3

(b) 7/5

(c) 3/11

(d) 4/13

10. The price of 3 tables and 2 chairs is Rs 1900. If a table costs Rs 100 more than a chair, find the cost of a table.

(a) 300

(b) 400

(c) 420

(d) 600

11. If $\frac{x}{2} = 7$, then $2x - 5$ is:

(a) 9

(b) 11

(c) 13

(d) 23

12. Which method involves replacing the variable with numerical values to find the solution?

(a) Trial and Error

(b) Substitution

(c) Elimination

(d) Graphical

13. Solve: $0.5x + \frac{x}{3} = 0.25x + 7$

(a) 8

(b) 16

(c) 11

(d) 12

14. The sum of two numbers is 95. If one exceeds the other by 15, find the smaller number.

    (a) 30

    (b) 35

    (c) 40

    (d) 45

15. If $x + 7 = 12$, what must be subtracted from both sides to isolate x?

    (a) 7

    (b) 5

    (c) 12

    (d) 19