

## **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 04

### Code: 2026/Simple Equations/07/04

- Find  $x$ :  $\frac{1}{x} + \frac{2}{x} = 3$ 
  - 1
  - $2/3$
  - $1/3$
  - 3
- A boat goes downstream and covers a distance in 4 hours while it covers the same distance upstream in 5 hours. If the speed of the stream is 2 km/h, find the speed of the boat in still water.
  - 16 km/h
  - 18 km/h
  - 20 km/h
  - 22 km/h
- Solve for  $t$ :  $5t - 3 = 3t - 5$ 
  - 5
  - 2
  - 1
  - 4
- The angles of a triangle are  $(x + 10)^\circ$ ,  $(2x - 30)^\circ$  and  $x^\circ$ . Find  $x$ .
  - 30
  - 40
  - 50
  - 60

5. If  $7(y + 3) - 2(y - 5) = 5(y + 6)$ , how many solutions exist?

- (a) 0
- (b) 1
- (c) 2
- (d) Infinite

6. A number plus its two-thirds is equal to 35. The number is:

- (a) 15
- (b) 21
- (c) 25
- (d) 30

7. If  $x - \frac{x-1}{2} = 1 - \frac{x-2}{3}$ , find  $x$ .

- (a)  $1/5$
- (b)  $3/11$
- (c)  $7/5$
- (d)  $11/7$

8. The width of a room is three-fourths of its length. If the perimeter is 70m, find the length.

- (a) 10m
- (b) 20m
- (c) 30m
- (d) 40m

9. Verify which value of  $y$  satisfies  $5y - 2 = 18$ :

- (a) 1
- (b) 2
- (c) 3

(d) 4

10. Sum of three consecutive integers is 51. The middle integer is:

- (a) 15
- (b) 16
- (c) 17
- (d) 18

11. Solve  $z$ :  $0.25(4z - 3) = 0.05(10z - 9)$

- (a)  $1/5$
- (b)  $2/7$
- (c)  $3/5$
- (d)  $7/11$

12. If  $x$  is a natural number and  $2x + 1 < 5$ , find the solution set.

- (a)  $\{1\}$
- (b)  $\{1, 2\}$
- (c)  $\{0, 1\}$
- (d)  $\{0, 1, 2\}$

13. Express as equation: "Adding 7 to one-third of  $z$  gives 12."

- (a)  $7 + \frac{z}{3} = 12$
- (b)  $\frac{z}{3} + 7 = 12$
- (c)  $7 + \frac{1}{3}z = 12$
- (d)  $\frac{1}{3}(z + 7) = 12$

14. If  $\frac{3n+2}{n-1} = \frac{3}{2}$ , find  $n$ .

- (a)  $-1/5$
- (b)  $-5/11$
- (c)  $-7/3$

(d) 1/7

15. A number consists of two digits. The digit at the tens place is twice the digit at the units place. If the sum of the digits is 9, find the number.

- (a) 36
- (b) 63
- (c) 45
- (d) 54