

## 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

1. Find  $x$ :  $\frac{1}{x} + \frac{2}{x} = 3$ 
  - (a) 1
  - (b)  $\frac{2}{3}$
  - (c)  $\frac{1}{3}$
  - (d) 3
2. 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.
  - (a) 16 km/h
  - (b) 18 km/h
  - (c) 20 km/h
  - (d) 22 km/h
3. Solve for  $t$ :  $5t - 3 = 3t - 5$ 
  - (a) 5
  - (b) -2
  - (c) -1
  - (d) 4
4. The angles of a triangle are  $(x + 10)^\circ$ ,  $(2x - 30)^\circ$  and  $x^\circ$ . Find  $x$ .
  - (a) 30
  - (b) 40
  - (c) 50
  - (d) 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)  $\frac{1}{7}$

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

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