### **Quadrant IV– Assessment (Module – wise)**

**Programme: Bachelor of Science** 

**Subject: Mathematics** 

Paper Code: MTC105

Paper Title: Algebra

Unit: 1

Module Name: Two Step subgroup test

Module No: 9

Name of the Presenter: Ms. Namrata Naik (Assistant Professor)

#### MCQ

**Completion type (fill-in-the-blanks)** 

Short Answer – I (short notes - say 20 to 50 words)

Short Answer – II (extended – say 50 to 100 words)

Matching type

#### Numerical/Problems to Solve

- I. Apply two step subgroup test to check if
  - i.  $\{4n | n \in \mathbb{Z}\}$  is a subgroup of  $\mathbb{Z}$ .
  - ii.  $H = \{A_{n \times n} | A \text{ is a diagonal matrix and } |A| \neq 0 \}$  is a subgroup of  $GL(n, \mathbb{R})$ .

## Self-reflection

# Create something new (higher order cognition)