

**Goa Vidyaprasarak Mandal's**  
**Gopal Govind Poy Raiturcar College of Commerce & Economics**  
**Farmagudi - Ponda, Goa**  
**B.C.A. UGC-CCFUP (Semester I) Intra Semester Assessment (ISA) I-Test, August 2024**  
**MAT-111 - Elementary Mathematics**  
**Duration : 30 minutes** **Marks : 10**

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- Q1. Answer any two of the following : (2M)[CO1][BL1]
- a) Define a statement in logic.
  - b) Define a compound statement.
  - c) Name the method of writing a set by giving the properties of its elements.
  - d) Name the method of writing a set by writing the elements of that set.
- Q2. Answer any four of the following : (8M)[CO1][BL1]
- i) Recall D Morgan's Laws.
  - ii) Recall the truth table for 'if and only if'.
  - iii) Find the truth table for the statement  $\sim (p \wedge q) \leftrightarrow q$ .
  - iv) Find the elements of the set  $\{x \in \mathbb{N} \mid 1 \leq x^2 \leq 64\}$
  - v) Find the truth table for the statement  $(\sim p \vee q) \rightarrow \sim q$

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