

**Goa Vidyaprasarak Mandal's
Gopal Govind Poy Raiturcar College of Commerce and Economics
Farmagudi, Ponda- Goa.**

B.C.A. UGC-CCFUP (Semester-I) Intra Semester Assessment (ISA-I) Test August 2023

Minor-1 MAT-111 ELEMENTARY MATHEMATICS

Duration: -30 Minutes

Marks: 10

Instruction: All the questions are compulsory.

Q1) Define Null set. Give an example. (01)

Q2) Convert the following compound statements to symbolic form. (02)

- i) $\triangle ABC$ is an equilateral triangle if all sides are equal.
- ii) Geeta is practical but not lazy.

Q3) Let $U = \{0,1,2,3,4,5,6,7,8,9\}$, $A = \{2,4,6,8\}$, $B = \{2,3,5,7\}$. Find (02)

- i) $(A \cup B)'$
- ii) $A \oplus B$

Q4) A computer company must hire 20 programmers to handle system programming jobs and 30 programmers for application programming. Of those hired, 5 are expected to perform jobs of both types. How many programmers must be hired? (02)

Q5) Construct the truth table for $(p \wedge \sim q) \rightarrow (\sim p \vee q)$ (03)
