

GVM's GGPR College of Commerce & Economics,
Farmagudi- Ponda, Goa.
B.Com (Semester I) Intra Semester Assessment (ISA) I- Test,
July 2019
COMMERCIAL ARITHMETIC - I

Duration: 30 minutes

Marks: 10

- Q1. Let p: It is Sunday.
q: It is holiday. Write the following statements in symbolic form. (1)
- If it is holiday then it is Sunday.
 - If it is not Sunday then it is not holiday.
- Q2. State whether the following sentences are statements in logic. (1)
- Are you ok?
 - 2 is an even number.
- Q3. Prepare truth table for the statement $(\sim p \vee \sim q)$. (1)
- Q.4 Construct truth table to verify that $\sim(\sim p) \equiv p$. (1)
- Q.5 Let p: Ponda is in Goa. q: Goa is in India. (1)
Write down the following statements in verbal form.
- $p \rightarrow \sim q$
 - $q \rightarrow \sim p$.
- Q.6 If $X = \{x/x \in \mathbf{N}, 1 \leq x \leq 10\}$
 $A = \{2x/x \in \mathbf{N}, 1 \leq x \leq 5\}$, $B = \{1,2,4,5,7,9\}$
Verify that $(A \cup B)^c = A^c \cap B^c$ (2)
- Q.7 If A is the set of letters in the word BELLOW
B is the set of letters in the word ELBOW.
Is $A = B$? justify your answer. (1)
- Q.8 $X = \{a, b, c, d, e, f, g, h, i, j\}$
 $A = \{a, c, d, j\}$, $B = \{b, c, d, e, f, j\}$
Show that $(A - B)^c = A^c \cup B$ (2)