

GVM's G.G.P.R. COLLEGE OF COMMERCE AND ECONOMICS
FARMAGUDI, PONDA - GOA

INTRA SEMESTER ASSESSMENT TEST - I
JULY 2014
B.COM. SEMESTER I

MATHEMATICAL TECHNIQUES

Duration: 30 minutes

Marks: 10

Answer the following :

(2 marks each)

1. If the statements p, q, r, s are assigned truth values F, T, T, F respectively, then find the truth value of

$$[(p \wedge \sim r)] \leftrightarrow [(q \vee \sim s) \rightarrow p]$$

2. List all the subsets of $P = \{x, y, z\}$

3. Write the following argument in symbolic notation:

'If she works hard then she will be successful. She was not successful.

Therefore she did not work hard.'

4. Draw a Venn diagram for (i) $A \cup (B \cap C)$.

(ii) $(A \cap B) \cup (A \cap C)$

5. Are the statements $p \rightarrow q$ and $\sim p \vee q$ logically equivalent?

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