

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

INTRA SEMESTER ASSESSMENT TEST - I  
B.COM. SEMESTER I  
JULY 2013

MATHEMATICAL TECHNIQUES

Duration: 30 minutes

Marks: 10

Answer the following :

1. Is  $p \rightarrow (\sim q \rightarrow p)$  a tautology? (2 marks)
2. Write the following in symbolic notation:  
"If he works hard then he will be successful. He was not successful.  
Therefore he did not work hard". (2 marks)
3. If the truth values of  $p, q, r, s$  are T, T, F, T respectively then find the  
truth value of  $(r \leftrightarrow \sim s) \wedge (p \vee \sim q)$ . (2 marks)
4. Write the power set of A if  $A = \{2, 4, 6\}$  (2 marks)
5. If  $A = \{x/2x^2 - 5x + 3 = 0\}$  and  $B = \{6, -1\}$  then  
is  $A = B$ ? Give reasons. (2 marks)

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