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TEST-3 EXAMINATION- JUNE -2016

B.Tech VI Semester

COURSE CODE: 10B22CI621 MAX. MARKS: 35

COURSE NAME: Information Systems

COURSE CREDITS: 04 MAX. TIME: 2 HRS

Note: *All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

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1. Answer the following briefly **[3x10 = 30 marks]**

i. A manufacturer produces items some of which turn out defective. These items are formed into batches of 150. Past experience indicates that 80% of the batches produced are of good quality and 20% are of bad quality. Furthermore, there is a 5% chance of an item of a good batch being defective and 25% chance of an item of a bad batch being defective. These items are then used in an assembly, and ultimately their quality is determined before the final assembly leaves the plant. The manufacturer can either screen each item and replace defective items at a total average cost of ₹100 per item or use the items directly without screening. If the latter action is chosen, the cost of rework is ultimately ₹ 1000 per defective item. The manufacturer wants to minimize the cost. Model the decision problem in a decision tree and suggest whether to screen the items or not.

ii. Show the steps followed by the two-phase commit protocol for the case of a global abort.

iii. Write a SAAJ based SOAP code for a math square service that takes an integer value and returns its square. Also create the client component that would request for this service.

iv. Explain with suitable example how buffer overflow could cause a security threat.

v. Based on the real life case studies of Management Information Systems comment on the 'consequences of lack of funding for MIS projects'.

vi. Explain how the 'Social Presence' and 'Reduced Cues' theories are contradictory but both very important to growth of Computer Mediated Communication.

vii. Why is it that an e-Governance application cannot have a global significance?

viii. Who are the digital natives? Briefly explain any two new skills common to digital natives.

ix. Differentiate between the technological requirement for developing MIS, DSS and EIS.

x. Explain the state of 'FLOW' in terms of IT skill.

2. Write Short notes on: **[5x1 = 5 Marks]**

i. Typical features of Web 3.0

ii. Open vs Closed development

iii. Crowd labour vs Crowd co-creation

iv. Confidentiality vs Consistency

v. Backcompatiblity obstacle to success of 3D internet