Total No. of Printed Pages:1

SUBJECT CODE NO:- P-8195
FACULTY OF ENGINEERING AND TECHNOLOGY
M.E.(CSE/SE) Examination MAY/JUNE-2016
Performance Analysis & Simulation
(Revised)

[Time: Three Hours] **[Max Marks:80]**

"Please check whether you have got the right question paper."

N.B i) Attempt any two questions from each section.
ii) Assume suitable data, if necessary and state it clearly.

Section A

Q.1 a) Explain any 10 common mistakes observed frequently in performance evaluation projects. 10
b) Explain different criteria and considerations involved in correct section of an evaluation technique. 10

Q.2 a) What is the difference between real workload and synthetic workload? Explain different types of test workloads that are used to compare computer systems. 10
b) With a neat diagram explain the basic components of a simulation model of LAN. 10

Q.3 a) Describe in detail the different workloads considered for the performance evaluation of the operating systems. 10
b) Explain the oracle architecture structure. 10

Section B

Q.4 a) With a neat diagram explain the steps in simulation study. 10
b) State the test procedure for kolmogorov-smirnov test. Given the five numbers, 0.44, 0.81, 0.14, 0.05, and 0.93. Perform a test for uniformly using the kolmogorov-smirnov test with a level of significance α of 0.05 (critical value of D from table is 0.565). 10

Q.5 a) What is the test for independence for random numbers? Explain the gap test with an appropriate example. 10
b) Explain in detail the verification of simulation model. 10

Q.6 a) What is face validity? Explain the calibration and validation of models. 10
b) Explain linear congruential method for generating random numbers. Also use linear congruential method to generate a sequence of 3 random numbers with $X_0 = 27$, $a = 17$, $c = 43$, $m = 100$. 10