

SUBJECT CODE NO:- P-8176
FACULTY OF ENGINEERING AND TECHNOLOGY
M.E. (CSE/SE) Examination May/June 2017
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 section A & section B each.

Section A

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| Q.1 | a) Enlist and explain the steps involved in systematic approach of performance evaluation. Illustrate with the help of a case study. | 10 |
| | b) What is synthetic and real workload? Explain any three types of test workloads in detail. | 10 |
| Q.2 | a) Explain windows XP architecture with respect to Disk and memory management. | 10 |
| | b) Explain different workload characterization techniques. | 10 |
| Q.3 | a) Explain Linux architecture with respect to task structure and process table. | 10 |
| | b) Explain commonly used performance metrics with suitable example. | 10 |

Section B

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| Q.4 | a) Define system and system environment. Explain different components of a system. | 10 |
| | b) Define chi-square tests. Test the following sequence of numbers for uniformity using chi-square test. 0.594, 0.928, 0.515, 0.055, 0.507, 0.351 0.262, 0.797, 0.788, 0.442, 0.097, 0.798, 0.277, 0.127, 0.474, 0.825, 0.007, 0.182, 0.929, 0.852. | 10 |
| Q.5 | a) Explain model verification & validation. | 10 |
| | b) Define model of system, With appropriate examples. Explain different types of models. | 10 |
| Q.6 | a) Discuss the process of validation & calibration of models in brief. Explain the Input-output validation using historical input data in detail. | 10 |
| | b) Explain in detail the Linear Congruential Generator for random number with suitable examples. | 10 |