

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI
Hanuman Vyayam Prasarak Mandals's
College of Engineering & Technology, Amravati
Course: Information Technology
BE Four year Semester (Information technology) Summer 2020 Exam
Subject: 7IT05 MODELING & SIMULATION
Assignment for ONLY BACKLOG STUDENTS

Instructions

- 1) Solve ANY TWO Questions**
- 2) Each Question Carries 10 marks**

QI) Solve the following

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|---|---|-----|
| 1 | Define System | 1 M |
| 2 | Write the equation of cobweb model. | 1 M |
| 3 | Draw Clean and neat System Dynamic Diagram. | 2 M |
| 4 | Explain i)Batch Arrival ii)Batch Service | 2 M |
| 5 | What is internal Validity and face validity? | 2 M |
| 6 | Explain i) GENERATE ii) EXECUTE iii) MARK iv) QUEUE blocks of GPSS. | 2 M |

Q II) Solve the following

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|---|--|-----|
| 1 | Explain System postulation | 2 M |
| 2 | Write down the equations of distributed lag model for calculation of growth in national consumption. | 2 M |
| 3 | Define Exponential Decay Model. | 2 M |
| 4 | Explain i) Balking and Reneging | 1 M |
| 5 | What is antithetic sampling? | 1 M |
| 6 | Enlist types and their subtypes of simulation language. | 2 M |

QIII) Solve the following

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|---|---|-----|
| 1 | Explain System Analysis | 2 M |
| 2 | In CSMP III Explain i) DELT ii) PRDEL iii) FINTIM | 2 M |
| 3 | Explain i)Stochastic Activity ii)Deterministic Activity | 2 M |
| 4 | Explain i)Queues in Tandem ii)Multiple Queues | 2 M |
| 5 | What is adaptive forecasting? | 1 M |
| 6 | Explain i) SCAN ii) SEEK iii) SEIZE blocks of GPSS | 1 M |

QIV) Solve the following

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|---|--|-----|
| 1 | Name three or four principal entities, attributes and activities if you were to simulate the operation of Gasoline filling station | 2 M |
| 2 | Explain Hybrid computers | 2 M |
| 3 | Write down the execution steps of the Rejection Method | 2 M |
| 4 | Explain: i)Dummy activity ii)Nodes in a Network | 2 M |
| 5 | Explain subsystem Validity. | 1 M |
| 6 | Explain i) TABULATE ii) TERMINATE iii) TEST blocks of GPSS | 1 M |