

Mid-West University
Examinations Management Office
End Semester Examinations -2080

Bachelor level/ B.Sc CSIT / 6th Semester

Time: 3 hours

Subject: Simulation and Modeling (COM461)

Full Marks: 60
Pass Marks: 30

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

Group A

[3x8=24]

Long Answer Questions (Any Three)

- 1) Explain the phases of simulation study.
- 2) Define Digital Analog Simulator. Explain its application areas.
- 3) Discuss types of Simulation language.
- 4) What are the steps in model building? Explain. Draw a necessary diagram.

Group B

[5x4=20]

Short Answer Questions (Any Five)

- 5) When to use Simulation? Explain.
- 6) What are the principles used in modeling?
- 7) Define System Environment. Describe Replication of run.
- 8) Explain Monte Carlo Simulation method.
- 9) Explain Simulation Run Statistics.
- 10) What is a Feedback System?

Group C

[8x2=16]

Very Short Answer Questions

- 11) What is a mathematical model?
- 12) Write any two advantages of Simulation.
- 13) Differentiate between point and interval estimator.
- 14) Differentiate between verification and validity.
- 15) Write the application areas of GPSS.
- 16) What is the necessity of differential equation?
- 17) Write any four-control statement in GPSS.
- 18) Define Deterministic activities with example.

THE END