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## School of Business

Integrated Bachelor of Business Administration - Master of Business Administration  
Semester End Examination - Nov 2023

Duration : 180 Minutes  
Max Marks : 100

### Sem IX - MBBA6007 - Decision Modelling with Spreadsheets

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Define what simulation is in the context of modeling and analysis. K1 (2)
- 2) Describe the importance of model verification and validation in simulation to ensure the accuracy and reliability of the results. K2 (4)
- 3) Can you explain the concept of agent-based modeling and why it's important to understand its use cases? K2 (6)
- 4) How can decision analysis with spreadsheets be used in workforce planning and resource allocation to meet business demands effectively? K3 (9)
- 5) Apply queuing models to optimize the checkout process in a supermarket to reduce customer waiting times. K3 (9)
- 6) Discuss the ethical considerations involved in decision analysis with spreadsheets, particularly in scenarios with potential social or environmental impacts. K5 (10)
- 7) Discuss the advantages and disadvantages of using decision modeling software specifically designed for complex scenarios compared to spreadsheets. K4 (12)
- 8) Discuss the role of decision analysis with spreadsheets in financial risk management and its contribution to overall business resilience. K5 (15)
- 9) How can you evaluate the success of optimizing call center operations using queuing analysis? K5 (15)
- 10) Create a queuing model to analyze and optimize the patient flow in a healthcare clinic, ensuring timely appointments and reduced waiting times. K6 (18)