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School of Computing Science and Engineering

Bachelor of Technology in Computer Science and Engineering

Mid Term Examination - May 2024

Duration : 90 Minutes

Max Marks : 50

Sem VI - R1UC606C - Algorithms for Game DevelopmentGeneral 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) Explain the major categories of reserved word in lua? K2 (2)
- 2) List three use of love.draw() method? K1 (3)
- 3) Explain the rules for declaring lua identifiers. K2 (4)
- 4) a.Explain the differences between normal loop , and game loop in lua K2 (6)
b. Write a program to accept book name , author name and MRP of book from the user. Calculate discount amount and selling price of book. Allow the discount amount 15% of book incase MRP>600
- 5) Implement a simple collision detection between two objects using lua and love. K3 (6)
- 6) (a)Design a Game for random number guess using lua(b) Implement a method to find the factorial of a given number. K3 (9)
- 7) Create simple Lua program named "DiceGame.lua" that simulates rolling two dice and calculating the total. K4 (8)
- 8) (a)Analyze the advantages and disadvantages of using Lua as the primary scripting language in a game engine compared to other scripting languages.(b)Describe the difference between local and global variables in Lua. K4 (12)

OR

- Compare a Lua coroutine to handle timed events with events handler, such as spawning power-ups at intervals. K4 (12)