| 3E1205 |

B.Tech. III Sem. (Main) Examination, April/May - 2022
Artificial Intelligence & Data Science
3AID4-07 Software Engineering
AID, CAI, CS, IT

Time : 3 Hours Maximum Marks : 70

Instructions to Candidates:

Attempt all ten questions from **Part A**. All five questions from **Part B** and three questions out of **Five** questions from **Part C**.

Schematic diagrams must be shown wherever necessary. Any data missing may suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

Use of following supporting material is permitted during examination (As mentioned in form No.205)

PART - A
(Word limit 25) (10×2=20)

1. Explain the maintance phase of software life Cycle Model.
2. Differentiate Testing and Debugging.
3. Differentiate between LOC and FP estimation.
4. Identify Requirement analysis task?
5. Discuss process specification?
6. Discuss the characteristics of Good Design?
7. Describe effort estimation?
8. List the design principles.
9. What is Data modeling in software engineering?
10. List the stages of object oriented Design.

PART - B
(Word limit 100) (5×4=20)

1. Describe software requirement specification in detail?
2. Define COCOMO estimation model in brief.
3. Discuss data and control flow Diagram in detail.
4. Explain Design fundamental in brief.
5. Explain class and object relationships by using an examples.

PART - C
(Answer any three)   (3×10=30)

1. Evaluate all the stages of software life cycle model in a live project.
2. Judge the role of risk analysis in project.
3. Design a finite state Automation machine and explain the working of FSM.
4. Evaluate Data 'architecture' and procedural Design in 'Software Design'.
5. Evaluate the object oriented Design concept in object oriented Analysis.