U.G. 6th Semester Examination 2022 COMPUTER SCIENCE (Honours)

Paper Code : DC-13 [Software Engineering]

Full Marks : 25

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

Group - A

- 1. Answer any *six* questions from the following:
 - (a) What is heuristic project estimation technique?
 - (b) What is the software development life cycle?
 - (c) What are the disadvantages of the waterfall model?
 - (d) What is coupling?
 - (e) Differentiate between Function oriented design and Object-oriented design.
 - (f) Define DFD?
 - (g) Mention any two objectives of the feasibility study phase of software development.
 - (h) What is software maintenance?

Group - B

Answer any *two* questions. $10 \times 2=20$

- 2. (a) Explain different categories of software development projects according to the COCOMO estimation model with examples?
 - (b) How effort and development time is calculated in Basic COCOMO?
 - (c) Explain the Spiral SDLC model with its advantages and disadvantages? 4+2+4=10
- 3. (a) Differentiate between White-box and Black-box testing.
 - (b) Discuss the characteristics of a good SRS document briefly.

2×6=12

Time : Two Hours

(c) Draw the DFD of the Hospital Management System upto level-2.

3+3+4=10

- 4. (a) What do you mean by software quality? Discuss various quality attributes of software.
 - (b) Distinguish between software verification and validation. 2+5+3=10