R20

II B. TECH II SEMESTER REGULAR EXAMINATIONS, JULY - 2022
SOFTWARE ENGINEERING
(CSE-ARTIFICIAL INTELLIGENCE AND DATA SCIENCE)

Time: 3 hours   Max. Marks: 70

Note: Answer **ONE** question from each unit **(5 × 14 = 70 Marks)**
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UNIT-I

1. a) Explain the difference between generic and customized software. [7M]

   b) Illustrate RUP and Agile Process models with neat sketch. [7M]

(OR)

2. a) Define software engineering and explain its challenges. [7M]

   b) What are the activities of phased software life cycle? Explain. [7M]

UNIT- II

3. a) What are the four essential elements of effective software project management? Explain. [7M]

   b) Explain the various activities of project panning. [7M]

(OR)

4. a) With a neat diagram explain the project life cycle. [7M]

   b) What are the advantages of the function point analysis? How does a function point overcome the limitations of the LOC based measurement? [7M]

UNIT-III

5. a) With a neat diagram explain the requirements engineering process. [7M]

   b) Explain the structure of Software Requirements document. [7M]

(OR)

6. a) Compare and contrast Data oriented and Object-oriented Analysis. [7M]

   b) Define Data Flow diagram. What are various symbols used in DFD? And Draw the DFD for cash withdrawal from an ATM. [7M]

UNIT-IV

7. a) Enumerate the characteristics of a good software design. [7M]

   b) Differentiate between function-oriented and object-oriented methodologies with suitable examples. [7M]

(OR)

8. a) Explain the Software design concepts and principles. [7M]

   b) Compare and contrast the traditional coding process and Test- [7M]
      driven development process.

UNIT-V

9. a) What is black box testing? Explain the technique specifying [7M]
      rules and its usage with the help of an example.

   b) Explain various software quality factors. [7M]

(OR)

10. a) What are the most popular debugging approaches? Explain. [7M]

    b) Explain the different categories of software maintenance. [7M]

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