6 SEM TDC DSE CAP (CBCS) 2 (NH)

2024

(May)

COMPUTER APPLICATION

(Discipline Specific Elective)

(For Non-Honours)

Paper: DSE-2

(Software Engineering)

Full Marks: 53
Pass Marks: 21

Time: 3 hours

The figures in the margin indicate full marks for the questions

- 1. Answer the following as directed: 1×8=8
 - (a) Define software failure.
 - (b) What is the use of software testing?
 - (c) When is the prototype model most suitable for use in software development?

(d) Acceptance testing is performed by user.

(State True or False)

(e) Boundary value analysis is a black-box testing method.

(State True or False)

- (f) SRS is written by
 - (i) system developer
 - (ii) system tester
 - (iii) system analyst
 - (iv) user

(*Choose the correct answer)

- (g) Which of the following is not a software development life cycle model?
 - (i) Waterfall
 - (ii) Prototyping
 - (iii) Spiral
 - (iv) Linear

(Choose the correct answer)

- (h) What is the primary goal of requirement engineering in software development?
 - (i) To design the user interface
 - (ii) To gather, document and manage requirement
 - (iii) To write code
 - (iv) To perform software testing
 (Choose the correct answer)

2. Answer any six from the following questions: $3\times6=18$

- (a) What are the drawbacks of waterfall model?
- (b) What is software development life cycle (SDLC)?
- (c) Differentiate between unit testing and integration testing.
- (d) What is the use of UML in software development?
- (e) Explain in brief about black-box testing.
- (f) What is the need for data dictionary? Explain briefly.
- (g) What is boundary value analysis? Explain briefly.
- **3.** Answer any *three* from the following questions: 9×3=27
 - (a) What are the common challenges faced during software development? Explain.
 - (b) Explain the phases involved in the prototyping model.

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(Continued)

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(Turn Over)

- (c) What are the stages of the project management process and how are they applied in software development?
- (d) What is SRS? Explain the characteristics of an SRS document.

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