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BCS-051

BACHELOR OF COMPUTER

APPLICATIONS

(BCA) (REVISED)

Term-End Examination

December, 2025

BCS-051 : INTRODUCTION TO SOFTWARE

ENGINEERING

Time : 3 Hours

Maximum Marks : 100

Weightage : 75%

***Note :** Question No. 1 is compulsory and carries*

*40 marks. Attempt any **three** questions*

from the rest.

1. (a) Develop SRS for Online Assignment Submission and Evaluation System for a University. Use IEEE format for SRS. Make necessary assumptions. 20
- (b) What is an object ? Explain application logic object with an example. Also, explain specifications of static object. 10
- (c) What is structured analysis ? Explain. 5
- (d) Explain the principles of software testing. 5
2. (a) Explain Waterfall Model with the help of a suitable diagram. List advantages and disadvantages of this model. 10

- (b) Draw a sample Gantt chart for an online examination system. Make necessary assumptions. 10
3. (a) Explain System testing and Regression testing. 10
- (b) What is the need of software maintenance ? Briefly explain different types of software maintenance. 10
4. (a) What is Software Configuration Management (SCM) ? Explain SCM activities briefly. 10
- (b) What is a DFD ? What are the components of DFD ? Draw first two levels of DFDs for Online Assignment Submission and Evaluation System. Make necessary assumptions. 10

5. Write short notes on the following : $4 \times 5 = 20$

- (a) Reverse Engineering
- (b) Capability Maturity Model (CMM)
- (c) Debugging
- (d) Use-case diagram

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