

**BACHELOR OF COMPUTER  
APPLICATIONS (BCA) (REVISED)**

**Term-End Examination**

**June, 2022**

**BCS-051 : INTRODUCTION TO SOFTWARE  
ENGINEERING**

*Time : 3 Hours*

*Maximum Marks : 100*

*Weightage : 75%*

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**Note :** *Question No. 1 is compulsory and carries 40 marks. Attempt any **three** questions from the rest.*

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1. (a) Develop an SRS for 'Online Banking System'. Make necessary assumptions. Follow IEEE SRS format. 15

- (b) What is function oriented design of software system ? Explain its advantages and disadvantages. 8
- (c) Which software development model is suitable for developing 'Online Examination System' ? Justify your selection. Also explain the selected model. 7
- (d) What is coupling ? How is it different from cohesion ? 5
- (e) Briefly explain cost of software quality. 5
2. (a) Draw the context diagram and first level DFD for 'Online Banking System'. 10
- (b) What is software maintenance ? Explain any *two* types of software maintenance in detail. 10
3. (a) Draw use-case diagram for 'Library Management System'. Make necessary assumptions. 10
- (b) Draw GANTT chart for development of 'Online Banking System'. 10

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4. (a) Draw structure chart for online shopping system. 10
- (b) Explain unit testing and module testing with the help of suitable example for each. 10
5. (a) Write short notes on the following : 10
- (i) PERT chart
- (ii) Project Planning
- (b) What is verification ? How is it different from validation ? Briefly explain any *four* principles of software testing. 10