

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

Term-End Examination

December, 2020

**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) What is SRS ? Explain properties of good SRS. Develop SRS for an 'online shopping system.' Make necessary assumptions using IEEE SRS format. 20
- (b) Draw use case diagram for 'Online Shopping System.' 10

- (c) Describe the Waterfall model. Explain the nature of problems for which Waterfall model of software development is suitable. Also briefly explain demerits of Waterfall model. 10
2. (a) Draw first two levels of DFDs for 'Online Shopping System'. Make necessary assumptions. 10
- (b) Draw a Gantt chart for the development of an 'Online Shopping System'. 10
3. (a) What is acceptance testing ? Briefly explain alpha and beta testing. 10
- (b) Define the terms 'Coupling' and 'Cohesion'. Briefly explain the meaning of 'highly cohesive' system. Is there any relation between 'coupling' and 'cohesion' ? Explain briefly. 10
4. (a) Write a short note on Software Metrics. 10
- (b) Draw structure chart for 'Online Shopping System'. 10

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5. (a) What is data dictionary ? How is data dictionary created ? Explain with the help of an example. 10
- (b) What is class diagram ? Draw a class diagram for 'Online Shopping System'. 10