| BCS-051 |

BACHELOR OF COMPUTER APPLICATIONS
(BCA) (Revised)

Term-End Examination

June, 2017

□4489

BCS-051 : INTRODUCTION TO SOFTWARE ENGINEERING

Time : 3 hours *Maximum Marks : 100*

(Weightage : 75%)

Note : Question number 1 is compulsory and carries 40 marks. Attempt any three questions from the rest.

1. (a) Develop SRS for an "Online Railway Reservation System". Make necessary assumptions. Follow IEEE SRS format. 15

   (b) What is Waterfall Model ? Explain whether this model is suitable for developing a Railway Reservation System or not. 10

   (c) What are static objects ? Explain with the help of an example. 5

   (d) Differentiate between Black Box Testing and White Box Testing, with the help of suitable examples for both types of testing. 10

2. (a) What is debugging ? Briefly explain any four debugging strategies. *10*

(b) Draw the first two levels of DFDs for an "Online Railway Reservation System". Make the necessary assumptions required. *10*

3. (a) Draw a Gantt chart for the development of an "Online Railway Reservation System". *10*

(b) What is the need of software maintenance ? Explain different types of software maintenance. *10*

4. (a) In Object Oriented Design, how are necessary utility objects identified ? Explain with the help of an example. *10*

(b) Define the term 'Software Quality'. Also, briefly explain McCall's software quality factors. *10*

5. Write short notes on any *four* of the following : *4×5=20*

(a) Data Dictionary

(b) Capability Maturity Models (CMM)

(c) Software Metrics

(d) Use Case Diagram

(e) Project Planning