

Roll No.

BCA-403(N)

B. C. A. (Fourth Semester)
EXAMINATION, May, 2017

(New Course)

Paper Third

SOFTWARE ENGINEERING

Time : Three Hours] [Maximum Marks : 75

Note : Attempt questions from all Sections as directed.

Inst. : The candidates are required to answer only in serial order. If there are many parts of a question, answer them in continuation.

Section—A

Note : All questions are compulsory. 3 each

1. (A) What is Computer Systems Engineering ? How is it different from software engineering ?
- (B) Give an example of an inconsistent functional requirement.
- (C) Give the IEEE definition of software engineering.
- (D) Give the outline structure of SRS.
- (E) What are the basis methods of cost findings ? Name them.

- (F) What are the *three* main areas where interface design is focused ?
- (G) What are source code tools ?
- (H) What are the differences between static and dynamic structure of a code ?
- (I) Define test case.

Section—B**(Long Answer Type Questions)**

Note : Attempt any *two* questions.

- 2. (a) Explain the nature of software and also explain software life cycle model in detail. 8
- (b) List the reasons of software crisis. 4
- 3. (a) Describe the different types of non-functional requirements which may be placed on a system. 8
- (b) What is data dictionary ? 4
- 4. Write the SRS for development of a computer based airline reservation system. 12
- 5. (a) What is the difference between integrated help and add on help ? Discuss in detail by taking suitable example. 8
- (b) List the guidelines for good design. 4

Section—C**(Long Answer Type Questions)**

Note : Attempt any *two* questions.

- 6. (a) Define structured design. How is it related to DFD ? 6

[3]

- (b) What is the basic objective of the functional decomposition to structured design ? 6
7. (a) What is Cohesion ? What problems are likely to arise if a module has low cohesion ? 8
- (b) What design methodologies are used in system design ? 4
8. (a) What is the importance of documentation in coding phase ? Explain in details. 6
- (b) What is the difference between coding standard and coding guideline ? 6
9. (a) What is the difference between verification and validation ? 6
- (b) Define Testing. List and describe the various testing techniques briefly. 6