Roll No. | | | | | | | |

H

TBC–403

B. C. A. (Fourth Semester)

Mid Semester EXAMINATION, 2017

SOFTWARE ENGINEERING

Time : 1:30 Hours] [*Maximum Marks : 50*

Note : (i) This question paper contains two Sections.

(ii) Both Sections are compulsory.

Section—A

1. Fill in the blanks/True-False : (1×5=5 Marks)

   (a) Full form of SRS is _____.

   (b) Use case is used for documenting requirements _____.

   (c) Waterfall model is most appropriate when requirements are _____.

   (d) We use _____ diagram to analyze a requirement from data perspective.

   (e) Data flow diagram is used to analyze a function of a software_____.

2. Attempt any *five* parts : (3×5=15 Marks)
   (a) Discuss the evolving role of software.
   (b) Define software engineering.
   (c) Briefly explain the importance of software.
   (d) Explain any *three* problems of software engineering.
   (e) Explain any *three* design principles.
   (f) Differentiate between Top down and Bottom up approach.

Section—B

3. Attempt any *two* parts of choice from (a), (b) and (c). (5×2=10 Marks)
   (a) Discuss the different phases of software development life cycle.
   (b) Explain the Waterfall model; also explain its advantages and disadvantages.
   (c) Explain Spiral model with the help of a diagram.

4. Attempt any *two* parts of choice from (a), (b) and (c). (5×2=10 Marks)
   (a) Explain SRS with its characteristics.
   (b) Explain SRS components in details.
   (c) Define coupling and cohesion and their use in determining software design strength.

5. Attempt any *two* parts of choice from (a), (b) and (c). (5×2=10 Marks)
   (a) Write short notes on the following :
      (i) Abstraction
      (ii) Modularization
   (b) Explain functional versus object oriented design.
   (c) Differentiate between validation and verification.