V Semester B.C.A. Degree Examination, November/December 2018
(CBCS) (F + R) (2016-17 and Onwards)
COMPUTER SCIENCE
BCA 502 : Software Engineering

Time : 3 Hours
Max. Marks : 100

Instruction : Answer all Sections.

SECTION – A

I. Answer any ten questions. (10x2=20)
   1) What is software product? Name two types of software product.
   2) Define system engineering.
   3) What is feasibility study?
   4) Define prototype model.
   5) What is coupling? Name two types of coupling.
   6) What are OOD and OOP?
   7) What are the advantages of GUI?
   8) Define Test case.
   9) Differentiate between verification and validation.
   10) Define equivalence class partitioning.
   11) Define quality assurance.
   12) Define project management.

SECTION – B

II. Answer any five questions. (5x5=25)
   13) Write a note on risk management.
   14) Describe system procurement process.
   15) Explain the IEEE structure of SRS document.
   16) Explain evolutionary and throw-away prototyping.
   17) Describe design principles.
   18) Write a note on reliability growth modeling.
   19) Explain the contents of test plan.
   20) Write a note on quality control.

P.T.O.
SECTION – C

III. Answer any three questions. \( (3\times15=45) \)

21) a) Explain the different phases of SDLC.
   b) Explain system design process with a diagram. \( (8+7) \)
22) Explain the requirement engineering process. \( 15 \)
23) a) Explain function oriented design.
   b) Explain different styles of user system interaction. \( (8+7) \)
24) a) Explain different types of cohesion.
   b) Explain software reuse. \( (8+7) \)
25) a) Describe clean room software development process.
   b) Explain different types of software maintenance. \( (8+7) \)

SECTION – D

IV. Answer any one question. \( (1\times10=10) \)

26) Explain spiral model with a neat diagram. Mention its merits and demerits.
27) Explain COCOMO model in detail.