QP – 419

V Semester B.C.A. Degree Examination, March/April 2022
(Y2K14 – CBCS (F+R))
COMPUTER SCIENCE
BCA 502 : Software Engineering

Time : 3 Hours Max. Marks : 100

Instruction : *Answer **all** Sections.*

SECTION – A

I. Answer **any ten** questions. **Each** question carries **two** marks. **(10×2=20)**

1) Define Requirement Engineering Process.
2) What are the two types of software products ?
3) What is feasibility study ?
4) What is system procurement ?
5) Define coupling. Name the two types of coupling.
6) What are the characteristics of GUI ?
7) What is user interface prototyping ?
8) What is RGM ? Mention two types of RGM.
9) What is defensive programming ?
10) What is functional testing ?
11) What are the major activities of project management ?
12) What is alpha and beta testing ?

SECTION – B

II. Answer **any five** questions. **Each** question carries **five** marks. **(5×5=25)**

13) Explain spiral model with a neat diagram.
14) What are the characteristics of SRS document ?

P.T.O.

15) What are the benefits of developing a prototype early in software process ?

16) Explain object, object class and inheritance with an example.

17) Explain design principles.

18) Give the classification of failures with an example.

19) Distinguish between white box and black box testing.

20) Write a note on quality assurance.

SECTION – C

III. Answer **any three** questions. **Each** question carries **fifteen** marks. **(3×15=45)**

21) a) Explain different phases of SDLC. **[8+7]**

b) Explain system design process.

22) a) Describe two types of prototyping with advantages and disadvantages. **[8+7]**

b) Describe in detail, the design quality.

23) a) What is coupling ? Explain any three types of coupling. **[7+8]**

b) Explain the function oriented design.

24) a) Discuss software reliability and hardware reliability. **[8+7]**

b) Write a note on verification and validation model.

25) a) Explain COCOMO model in detail. **[9+6]**

b) Explain the contents of Test Plan Template.

SECTION – D

IV. Answer **any one** question. **(1×10=10)**

26) Explain waterfall model with a neat diagram. Mention its merits and demerits.

27) Write a short note on : **(5+5)**

a) Risk Management.

b) Program Analysis tools.