

Total No. of Questions : 5]

SEAT No. :

PC-1156

[Total No. of Pages : 2

[6317]-103
S.Y. B.B.A. (CA)
CA - 303 : Software Engineering
(2019 Pattern) (Semester - III) (CBCS)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagrams must be drawn wherever necessary.*

Q1) Attempt any Eight of the following:

[8 × 2 = 16]

- a) Define software engineering.
- b) Name McCall's quality factors.
- c) Define the term "Software Testing."
- d) What is reverse engineering?
- e) What is a Data Dictionary?
- f) Define the term "Software Development Life Cycle" (SDLC).
- g) What is coupling in software design?
- h) Define 'SRS'.
- i) Define open and closed system.
- j) Define operational feasibility.

Q2) Attempt any four of the following:

[4 × 4 = 16]

- a) Discuss different types of software testing and explain how they are performed.
- b) Describe the concept of Software Maintenance and Software Re-Engineering.
- c) Explain the stages of the V&V Model and the activities carried out in each stage.
- d) Explain why understanding user requirements is crucial in software development. Describe two methods used to gather these requirements.

P.T.O.

- e) Explain advantages and disadvantages of Waterfall Model.

Q3) Attempt any Four of the following: [4 × 4 = 16]

- a) Explain Prototyping Model in detail.
b) What is Data Dictionary? Explain its various elements.
c) Explain characteristics of software.
d) What are the requirement gathering techniques? List out all the techniques and explain any two in detail.
e) Draw Decision Tree for following:
A Co-operative bank grants loan under following conditions.
i) If customer has account with bank and has no loan outstanding loan will be granted.
ii) If customer has account but some amount is outstanding from previous loans, loan will be granted under special management approval.
iii) Reject loan applications in all other cases.

Q4) Attempt any Four of the following: [4 × 4 = 16]

- a) Draw First Level DFD for ATM Management System.
b) Design Screen Layout for creating user account on internet. (With personal details, User-id, Password, save, cancel etc.)
c) Maxwell is trading company which sells various consumables to its dealers, On receiving enquiry from dealers, the company sends quotation to dealer. The dealer then sends order to company. If stock is available then the order acceptance is sent to dealer.
- Draw E-R Diagram.
d) Define software process and software product. Distinguish between them.
e) Define software maintenance. Explain types of software maintenance.

Q5) Write a short note on any Two of the following : [2 × 3 = 6]

- a) Structured Chart
b) Types of Cohesion
c) Validation and Verification Testing.

