

AU-208

B.C.A. Part-III (Semester-V) Examination

SOFTWARE ENGINEERING

Paper—5ST3

Time : Three Hours]

[Maximum Marks : 60

N.B. :— (1) **All** questions are compulsory.

(2) Assume suitable data wherever necessary.

(3) Draw well labelled diagram wherever necessary.

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|--------|--|---|
| 1. (a) | What is software engineering ? Explain the software characteristics. | 6 |
| (b) | Explain the spiral model for software engineering. | 6 |

OR

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|--------|---|---|
| 2. (a) | Explain the Waterfall model for software engineering. | 6 |
| (b) | Explain in detail software requirement analysis. | 6 |
| 3. (a) | Explain various issues in software cost estimation. | 6 |
| (b) | Explain the terms : | |
| (1) | Software project planning | |
| (2) | Risk management. | 6 |

OR

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|--------|---|---|
| 4. (a) | Explain in detail COCOMO model. | 6 |
| (b) | What is size estimation in software development ? | 6 |
| 5. (a) | What is the need of problem partitioning ? Explain with suitable example. | 6 |
| (b) | Explain the terms : | |
| (1) | Top-Down design | |
| (2) | Bottom-Up design. | 6 |

OR

6. (a) What are the various symbols in ER diagram ? Explain it with suitable example. 6
(b) Why decision tree is necessary ? Explain. 6
7. (a) Describe system documentation in detail. 6
(b) What is software project management ? Explain. 6

OR

8. (a) Explain in detail OO programming and its advantages. 6
(b) Explain in detail resource management. 6
9. (a) Explain software quality management in detail. 6
(b) Explain the following terms :
(i) Quality Control (QC)
(ii) Quality Assurance (QA). 6

OR

10. (a) Explain tools and techniques of software quality management. 6
(b) Explain software quality parameters with their definitions. 6