

1058

P.G. Diploma in Computer Applications
Second Semester
PGD-2103: Software Engineering

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt five questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I-IV.

x-x-x

UNIT – I

- I. Explain in detail components of software engineering. List any five skills which a software engineer should possess. (12)
- II. What do you mean by life cycle model? List the characteristics of Spiral model which make it distinct from waterfall model. (12)

UNIT – II

- III. What is project scheduling important? Discuss any two scheduling techniques along with the criteria of adopting them for a project. (12)
- IV. Describe COCOMO model with its relevant equations. Explain various attributes of cost drivers used in COCOMO model. (12)

UNIT – III

- V. List characteristics of design concepts that provide necessary framework for implementation identify the reasons behind design failures and suggestions for remedies. (12)
- VI. What are the rules that an ER diagram must follow? Draw ER diagram for the given situation-An account' is a relationship between 'customer' and 'bank'. A 'customer' has a name. A 'bank' has a branch A 'customer' may have more than one 'account' of different type of balance. (12)

UNIT – IV

- VII. What are the general principles for effective testing? Justify the statement: Black-box testing and white-box testing techniques are not mutually exclusive. (12)
- VIII. What is the difference between Quality Assurance, Quality Control and Testing? List the factors affecting software quality. (12)

UNIT – V

- IX. Answer the following:-

- a) Characteristics of a good SRS
- b) Types of software maintenance
- c) Benefits of risk management

(3x4)

x-x-x