

**2017**

Full Marks - 40

Time - 3 hours

The figures in the right-hand margin indicate marks

Answer *all* questions

1. What are the various advantages of software life cycle models ? Explain the waterfall model with a diagram and function of its various phases. 10

OR

- a) What is SRS and its purpose ? Discuss the characteristics of SRS. 5
  - b) What is software requirement ? What are the various types of requirements ? Explain each type in brief. 5
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2. a) Define user interface design and explain the issues related to user interface design. 5
  - b) What are the principles to be followed for specifying and designing efficient data structures ? 5

OR

[ 2 ]

a) Define architectural design. What are the functions followed by architectural design? Explain. 5

b) What is software testing? Explain the V-model of software testing. 5

3. a) Define various types of software maintenance. 3

b) What is software maintenance life cycle? Explain each phase of maintenance life cycle. 7

OR

a) What is project scheduling and its principles? What are the various factors that delay project schedule? 5

b) Explain people capability maturity model (P-CMM). 5

4. a) What do you mean by Cost estimation? What are the various project resources to be estimated? Write down the benefits of software cost estimation process. 5

[ 3 ]

b) What is organic, embedded and semi-detached projects? Explain cocomo with respect to all three types of projects in brief. 5

OR

a) What is software quality assurance and its objectives? Explain software quality assurance activities. 5

b) Discuss ISO 9001, 9002, 9003 for software quality evaluation and write down the ISO 9000 quality standards. 5

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