21314

3 Hours/100 Marks   Seat No.

Instructions : (1) **All** questions are **compulsory**.
               (2) Illustrate your answers with **neat** sketches **wherever** necessary.
               (3) Figures to the **right** indicate **full** marks.
               (4) Assume suitable data, **if necessary**.
               (5) Use of Non-programmable Electronic Pocket Calculator is **permissible**.
               (6) Mobile Phone, Pager and any other Electronic Communication devices are **not permissible** in Examination Hall.

                                                        MARKS

1. A) Attempt **any three**.   **12**

     a) Write a note on current trends of software development.

     b) Explain testing strategy for object oriented architecture.

     c) State four causes of failed software projects.

     d) Briefly explain ISO 9001 : 2000 software quality standards.

   B) Attempt **any one**.   **6**

     a) State and describe six communication principles.

     b) Describe seven distinct functions of requirement engineering.

2. Attempt **any four**.   **16**

   a) Describe a simple DFD for cash withdrawal by an account holder from Savings Bank.

   b) State and describe any four characteristics of a testable software.

   c) State decomposition technique and list its types. Explain one type in detail.

   d) Describe the failure curve for software and list any four software characteristics.

   e) What is the meaning of planning ? State four planning principles.

   f) Describe in brief four level testing process in test execution.

P.T.O.

3. Attempt **any four**.   **16**

   a) State any four sources of Change in change Management.

   b) Describe smoke testing.

   c) Describe relationship between effort and delivery time using a graph in project scheduling.

   d) Enlist four recommended guidelines to avoid schedule failure.

   e) Describe SQA and activities involved.

4. A) Attempt **any three**.   **12**

   a) Describe software estimation.

   b) What is meant by automated debugging ? How it assists in isolating software errors ?

   c) Describe the waterfall model of process development.

   d) Differentiate any four points differentiate between Black box and White box testing.

   B) Attempt **any one**.   **6**

   a) Describe CMMI technique.

   b) Explain personal software process model.

5. Attempt **any two**.   **16**

   a) Describe the steps in developing an activity diagram with an example.

   b) Describe project risks, technical risks and business risks.

   c) What is evolutionary process model and describe any one model.

6. Attempt **any four**.   **16**

   a) Describe Top-down integration testing.

   b) Describe with an examples generic and customised software.

   c) Describe the process used for assessing Risk Impact.

   d) State and give the meaning of four MeCall's quality factors.

   e) Justify why testing is also termed as a quality control measure.

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