

203 / TUBec (M) / Software Eng. / (05)

Q.P. Code :03204

[Time: - 2½ Hours]

[Marks: 75]

Please check whether you have got the right question paper.

- N.B:
1. All questions are compulsory.
 2. Figures to the right indicate full marks.
 3. Illustration in depth answers and diagrams will be appreciated.
 4. Mixing of sub-questions is not allowed.

1. Attempt the following (Any Three)

- A) What are the internal & external responsibilities of project manager?
- B) Discuss the phases in project management process.
- C) Explain the steps of change management process.
- D) What is software metric? Explain their role.
- E) Write note on WBS.
- F) State the basic steps in COCOMO suppose 'Inventory module' for medical shop has to be designed. The requirements indicate the system is small & size estimated for different sub modules is as follows:
Date Entry & update 1.2 KLOC,
Data Access 1.0 KLOC, Reports 0.8 KLOC
Other cost drivers are as follows:
Complexity Low 0.88, storage very high 1.21 Experience high 0.91.
Calculate effort adjustment factor & initial effort estimate.

15

2. Attempt the following (Any Three)

- A) Which functionalities are needed from configuration management process?
- B) What is SCI? Explain its life cycle.
- C) Explain in brief risk assessment activity.
- D) Explain the levels of CMM process.
- E) What is CASE? What is the role of CASE tools?
- F) List the phases of Unified process. What are the objectives of these phases?

15

3. Attempt the following (Any Three)

- A) Discuss the 'Six sigma' with respect to quality assurance.
- B) Define terms: Cash, failure, Test plan, Error seeding, Test driver.
- C) What are the chalanges /issues associated with testing?
- D) Discuss the phases of static testing.
- E) Discuss the need of test case specifications.
- F) Explain the life cycle of defect.

15

4. Attempt the following (Any Three)

- A) What are the major objectives of black box testing?
- B) Discuss advantages & disadvantages of boundary value analysis?

15

TURN OVER

- C) How graph matrix is usefull in basis path testing?
- D) Describe in brief testing strategies.
- E) Explain any five quality dimensions of web applications.
- F) Consider following function code draw a flow graph, also find basic path calculate cyclomatic complexity.

```

Public void update()
{If (upd = 'yes')
    update record()
    Exit()
else
    if (upd = 'Reset')
    clear()
    else
    exit()
}

```

5. Attempt the following (Any Three)

- A) Write a note of on Functions Point Metric.
- B) List any five risk items from top Ten risk items, also suggest management techniques to handle it.
- C) Explain following testing types: Unit Testing, Performance Testing.
- D) Explain the Process of Website Testing
- F) Write a note on Agile Development.
- F) Discuss the advantages, disadvantages of white box testing.