

(2 ½ Hours)

[Total Marks: 75]

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

Q. 1 Attempt ANY FOUR from the following: (20M)

- (a) What is software testing? Explain objectives of software testing.
- (b) Differentiate between Quality Assurance and Quality Control
- (c) Define Quality .Explain McCall's Quality factors of Software.
- (d) Explain V and V model of software testing.
- (e) Explain the role of testing in each phase of SDLC.
- (f) What is review? List and explain its types.

Q. 2 Attempt ANY FOUR from the following: (20M)

- (a) What are Test Case Design principles and techniques
- (b) What is Black Box testing and its types? Explain decision table technique.
- (c) What is test execution? Why it is important and its activities
- (d) What is White Box testing and its types? Explain flow graph notation.
- (e) Difference between alpha testing and beta testing.
- (f) Explain Statement Coverage Testing

Q. 3 Attempt ANY FOUR from the following: (20M)

- (a) Discuss in detail about defect life cycle.
- (b) Explain pareto diagrams with an example.
- (c) Write a short note on cause and effect diagram.
- (d) List and explain various challenges faced by SQA.
- (e) Write a short note on ISO 9000 standards.
- (f) Explain in detail Statistical Software Quality Assurance.

Q. 4 Attempt ANY FIVE from the following: (15M)

- (a) Explain different types of errors?
- (b) Discuss Software Testing Strategy.
- (c) How to measure quality cost.
- (d) Explain the concept of software inspection.
- (e) What is regression testing?
- (f) State the major goals of SQA.
