Roll No.						

Total No. of Pages: 03

Total No. of Questions: 10

MBA (Sem. - 4)

MANAGING SOFTWARE PROJECTS

Subject Code: MBA-943-18

M Code: 78025

Date of Examination : 07-01-2023

Time: 3 Hrs.

Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

- 1. SECTION-A is COMPULSORY consisting of EIGHT questions carrying TWO marks each.
- 2. SECTIONS-B consists of FOUR Sub-sections : Units-I, II, III & IV. Student has to attempt any ONE question from each Sub-section carrying EIGHT marks each.
- 3. SECTION-C is COMPULSORY carrying TWELVE marks.

SECTION-A

- 1. Write briefly:
 - a) What is a prototyping model?
 - b) What is meant by project management?
 - c) What is software quality management?
 - d) What is six sigma approach?
 - e) What is web engineering?
 - f) What is computer aided software engineering?
 - g) What is a RAD Model?
 - h) What is meant by Risk Mitigation?

SECTION-B UNIT-I

- 2. Discuss in detail the software development process? Explain by citing examples
- 3. Write notes on:
 - a) Software process models
 - b) How to choose an appropriate project development methodology?

UNIT-II

- 4. Write notes on:
 - a) Software Metrics
 - b) Risk Analysis
- 5. Write notes on:
 - a) Software Project Planning
 - b) Project Planning Infrastructure

UNIT-III

- 6. Discuss the role and relevance of software quality assurance and management. Explain by citing examples.
- 7. Write notes on:
 - a) Software reliability
 - b) SQA Plan

UNIT-IV

- 8. Discuss the need to understand project management concepts to handle special software project
- 9. Write notes on:
 - a) Software Project Management Standards
 - b) Component based software engineering

SECTION-C

10. Case Study

Cisco used to follow the Waterfall methodology. Cisco used to have separate focus teams responsible for design, build, test, and deploy. Defects were many, and deadlines were being frequently missed. People were working overtime.

Once they switched to Agile modelling in 2015, here's what happened.

Cisco created three ARTs (Agile Release Trains) for:

- Capabilities
- Defects/fixes
- Projects

Every day, the team had a 15 -minute meeting to determine work items. With Agile Process, they attained greater transparency: each team knew what the other teams were doing and teams were able to manage themselves, promoting accountability through status updates/awareness.

Results

Once Cisco started following the Agile methodology, started to release often, and introduced Continuous Integration (CI), they got:

- A 40% decrease in critical and major defects.
- A 16% decrease in DRR (Defect Rejected Ratio).
- A 14% improvement in DRE (Defect Removal Efficiency) thanks to CI and more interaction between international teams.
- There is no more overtime, and the product increment is delivered on time.

Case Study Based Question

Discuss how Cisco implemented Agile Approach and explain in detail the benefits of implementing the Agile Approach

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.