

Total No. of Questions : 5]

SEAT No. :

P3345

[6027]-22

[Total No. of Pages : 5

F.Y.M.C.A. (Management Faculty)
IT-22 : SOFTWARE PROJECT MANAGEMENT
(2020 Pattern) (Semester - II)

Time : 2½ Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Draw neat labeled diagrams wherever necessary.*
- 3) *Calculator is allowed.*

Q1) Multiple Choice Questions.

[20×½=10]

- a) COCOMO stands for.
 - i) Composition Cost Model
 - ii) Common Control Model
 - iii) Constructive Cost Model
 - iv) Consumed Cost Model
- b) Delphi method is used for
 - i) Judgemental forecast
 - ii) Time series forecast
 - iii) Associative model
 - iv) All are the correct
- c) Abbreviation of the term SRS
 - i) Software Resource System
 - ii) Software Requirement Synopsis
 - iii) Software Requirement Syllabus
 - iv) Software Requirement Specification
- d) Which is a software configuration management concept that helps us to control change without seriously impeding justifiable change?
 - i) Baselines
 - ii) Source code
 - iii) Data model
 - iv) None of the mentioned

P.T.O.

- e) Which of the following option is used to measure the size of a user story for an Agile project?
- i) Story points
 - ii) Function points
 - iii) Velocity points
 - iv) Work breakdown points
- f) Which of the following is not a Software Configuration Management Activity?
- i) Configuration item identification
 - ii) Risk management
 - iii) Release management
 - iv) Branch management
- g) The project life cycle consists of ____.
- i) Understanding the scope of the project
 - ii) Objectives of the project
 - iii) Formulation and planning various activities
 - iv) All are Correct
- h) Following is (are) the components(s) of risk management...
- i) Risk Assessment
 - ii) Risk Control
 - iii) Risk Ranking
 - iv) All are Correct
- i) MS Project is a project management software program developed and sold by
- i) Sun Microsystems
 - ii) Microsoft
 - iii) Google
 - iv) Amazon
- j) _____ is not an agile method
- i) Waterfall
 - ii) Crystal
 - iii) Scrum
 - iv) Extreme Programming
- k) Which command creates an empty git repository in the specified directory?
- i) git init
 - ii) git log
 - iii) git reset
 - iv) none of the above
- l) How much time does each iteration in agile methodology take?
- i) 1-2 weeks
 - ii) 2-3 weeks
 - iii) 1-4 weeks
 - iv) 1-2 months

- m) Which one of the following can help you in creating a Schedule for the project even with the provided constraints?
- i) MS Word
 - ii) MS Excel
 - iii) MS Project
 - iv) MS PowerPoint
- n) CMM stands for _____.
- i) Capability Movement Model
 - ii) Construction Maturity Model
 - iii) Capability Maturity Model
 - iv) Constructive Maturity Model
- o) The working culture of an agile team is
- i) Collective
 - ii) Collaborative
 - iii) Connective
 - iv) Contemplative
- p) Git is a _____.
- i) Localized version control system
 - ii) Distributed version control system
 - iii) Centralized version control system
 - iv) None of the above
- q) In Risk management process what makes a note of all possible risks that may occur in the project?
- i) Identification
 - ii) Categorize
 - iii) Manage
 - iv) Monitor
- r) Function Point Analysis(FPA) count is developed by _____.
- i) Bary Bohem
 - ii) Alan Albrecht
 - iii) Pressman
 - iv) None of the above
- s) Which of the following is not the level of CMM?
- i) Defined
 - ii) Analysis
 - iii) Managed
 - iv) Optimizing
- t) Select the option that suits the Manifesto for Agile Software Development:
- i) Working software
 - ii) Individuals and Interactions
 - iii) Customer collaboration
 - iv) All of the above

Q2) a) Write Risk Management Process by considering any project you came across w.r.t. Risk Identification, Risk Analysis and Risk Mitigation. [6]

b) Explain use of MS Project to track agile project progress. [4]

OR

a) Consider a project with the following functional units. [6]

- | | | |
|----------------------------------|---|----|
| i) Number of User Inputs | = | 15 |
| ii) Number of User Outputs | = | 21 |
| iii) Number of User Enquires | = | 10 |
| iv) Number of User Files | = | 15 |
| v) Number of External Interfaces | = | 19 |

In addition to above, system requires significant

Data Communication (05)

Performance is very Critical (03)

Designed Code may be Moderately Reusable (04)

Complex Processing (04)

Other Complexity factors are treated as Average.

Compute the functional point for the project

b) Explain the benefits of agile project management in brief. [4]

Q3) a) A new project with estimated 325 KLOC system has to be developed. For the development of the project following things also required. [6]

- Volatility of the virtual machine environment is low (0.87)
- Product Complexity is High (1.15)
- Virtual machine experience is high (1.07)
- Complexity of the product is Extra High (0.90)
- Use of software tools is very high (0.83)
- Remaining all drivers are treated as Nominal.

Calculate ;

- Effort
- Development time
- Average staff size
- Productivity of the product

b) Explain Agile Manifesto in detail. [4]

OR

- a) “Splendid Holidays”, one of the distinguished service providers of International and Domestic Tour & Travel. Due to their reliable and flexible services, they have earned a large number of customers across the nation. They want to upgrade their ERP software. As a product owner you have to identify all possible epic, Features and User Stories for the same. [6]
- b) Differentiate : Agile project management v/s Traditional project management. [4]
- Q4)** a) Explain the roles of scrum master, product owner and development team. [6]
- b) Write a short note on GitHub. [4]
- OR
- a) Demonstrate value-driven development with suitable example. [6]
- b) “Team management drives productivity by getting employees to work better”. Justify. [4]
- Q5)** a) Explain the process to plan and execute iteration in agile with suitable example. [6]
- b) Highlight upon Project Management Process. [4]
- OR
- a) Explain the process of Retrospective, Making Team Decisions and Closing out Retrospective. [6]
- b) “CMM strives to assist organizations in improving the quality of their software development through implementation of processes”. Comment. [4]

