17681

BRAINWARE UNIVERSITY

Term End Examination 2025-2026
Programme – MCA-2024
Course Name – Software Project Management
Course Code - MCA30302A
(Semester III)

Full Marks : 60 **Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question) 1 x 15=15

1. *Choose the correct alternative from the following :*

(i) Which model focuses on building a working version of the system early?
a) Spiral Model b) RAD Model
c) Prototyping Model d) Incremental Model

(ii) What does RAD stand for?
a) Rapid Automated Design b) Rapid Application Development
c) Recursive Agile Development d) Ready Application Delivery

(iii) Identify the significance of the software life cycle in development.
a) To avoid design completely b) To randomly allocate tasks
c) To structure the development process d) To assign tasks without planning

(iv) Recognize the importance of recovery plans in project continuity.
a) To delay tasks b) To resolve conflicts among team members
c) To bring delayed tasks back on schedule d) To reassign the entire team

(v) Recognize the function of information-gathering tools.
a) To create visual charts b) To understand user needs and system requirements
c) To prepare installation manuals d) To debug applications

(vi) Identify the use of brainstorming in requirements analysis.
a) Writing source code b) Exploring multiple user requirements and ideas
c) Conducting usability testing d) Creating project backups

(vii) Choose the method that ensures SQA procedures are correctly followed.
a) Audit b) Design
c) Unit test d) Integration

(viii) Select the principle emphasized in the clean room methodology.
a) High-speed development b) Rapid user testing
c) Defect prevention through formal methods d) Database optimization

(ix) Select the tool used to visually schedule and track project tasks over time.

a) PERT Chart
b) Decision Tree
c) Gantt Chart
d) Entity Relationship Diagram

(x) Select the leadership style best suited for managing cross-functional teams.

a) Autocratic
b) Micromanaging
c) Democratic
d) Indifferent

(xi) What does it mean when tracking meetings consistently show the same delays?

a) The project is on time
b) Delays are not being addressed properly
c) Requirements are perfect
d) There's no need for meetings

(xii) Which strategy improves data collection accuracy during requirement analysis?

a) Avoiding user involvement
b) Combining interviews with observation
c) Using only online forms
d) Relying on developer assumptions

(xiii) Choose the attribute that strengthens decision tables as a logical evaluation tool.

a) Use of colors
b) Systematic handling of multiple conditions
c) Speed of coding
d) Developer comfort

(xiv) Identify a valid rationale for applying black box testing.

a) It evaluates internal code logic
b) It checks inputs and expected outputs without knowing internal code
c) It allows code reuse
d) It ignores validation

(xv) Select a primary evaluation criterion used in feasibility studies.

a) Color scheme
b) Technical feasibility
c) Module count
d) Number of screens

Group-B

(Short Answer Type Questions) 3 x 5=15

2. Define the term Software Development Process. (3)
3. Employ a PERT chart to identify project risks and potential delays. (3)
4. Explain the purpose of schedule work meetings in project tracking. (3)
5. Analyze how effective tracking meetings contribute to project success. (3)
6. Evaluate the effectiveness of using Decision Trees versus Decision Tables in complex decision-making. (3)

OR

Justify the need for both verification and validation in the development testing process. (3)

Group-C

(Long Answer Type Questions) 5 x 6=30

7. Discuss how improving process discipline contributes to software quality and project success. (5)
8. Apply the concept of top-down planning to outline a schedule for a mid-sized software project. (5)
9. Compare the communication approaches of an authoritative leader and a democratic leader in software teams. (5)
10. Distinguish between functional and non-functional product requirements with examples. (5)
11. Critique the role of system integration testing in identifying interface-level defects. (5)
12. Design a Software Quality Assurance Plan for a small-scale web application project. (5)

OR

Formulate a checklist for conducting effective formal technical reviews (FTRs). (5)

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