

Professional Course Examination, November/December 2019

(5th Semester)

BACHELOR OF COMPUTER APPLICATIONS

Course : BCA 504

(Software Project Management)

Full Marks : 75

Time : 3 hours

(PART : A—OBJECTIVE)

(Marks : 25)

The figures in the margin indicate full marks for the questions

SECTION—A

(Marks : 15)

Tick (✓) the correct answer in the brackets provided :

1×10=10

1. A ____ is a set of activities which are networked in an order and aimed towards achieving the goals of a project.
 - (a) project ()
 - (b) process ()
 - (c) project management ()
 - (d) project cycle ()
2. The project life cycle consists of
 - (a) understanding the scope of the project ()
 - (b) objectives of the project ()
 - (c) formulation and planning various activities ()
 - (d) All of the above ()

3. Which of the following is/are the component(s) of risk management?
 - (a) Risk Assessment ()
 - (b) Risk Control ()
 - (c) Risk Ranking ()
 - (d) All of the above ()
4. In size-oriented metrics, metrics are developed based on the
 - (a) number of functions ()
 - (b) number of user inputs ()
 - (c) number of lines of code ()
 - (d) amount of memory used ()
5. Creating a list of all the activities that the project is thought to involve is
 - (a) product-based approach ()
 - (b) hybrid approach ()
 - (c) activity approach ()
 - (d) process approach ()
6. Which of the following provide useful measures of software quality?
 - (a) Correctness, maintainability, integrity, usability ()
 - (b) Reliability, maintainability, integrity, sales ()
 - (c) Correctness, maintainability, size, satisfaction ()
 - (d) Correctness, performance, integrity, usability ()
7. Actual Cost of Work Performed (ACWP) – Budgeted Cost of Work Scheduled (BCWS) is equal to
 - (a) schedule variance ()
 - (b) budget variance ()
 - (c) cost variance ()
 - (d) performance variance ()
8. Which of the following is/are the responsibility/responsibilities of the project manager?
 - (a) Budgeting and cost control ()
 - (b) Allocating resources ()
 - (c) Tracking project expenditure ()
 - (d) All of the above ()
9. Which one of the following is not included in McCall Product transition quality factors?
 - (a) Reliability ()
 - (b) Reusability ()
 - (c) Portability ()
 - (d) Interoperability ()

10. _____ makes decision alone but gives subordinates latitude in implementation.

- (a) Directive autocrat () (b) Permissive autocrat ()
(c) Directive democrat () (d) Permissive democrat ()

Indicate whether the following statements are *True (T)* or *False (F)* by putting a Tick (✓) mark : 1×5=5

1. Configuration management is the tool for changing a process.
(T / F)
2. The COCOMO model takes into account different approaches to software development, reuse, etc.
(T / F)
3. Software quality and functionality must be measured indirectly.
(T / F)
4. Staff costs represent expenditure that an organization incurs, which cannot be directly related to individual projects or jobs including space, rental, interest charges.
(T / F)
5. The team leader should be aware of the need to assess continually the training needs of their team members.
(T / F)

SECTION—B

(Marks : 10)

Answer the following questions :

2×5=10

1. What is software project management?
2. What is meant by quality management?
3. What are the advantages of project scheduling?
4. What is earned value?
5. Mention the two factors of Herzberg's theory.

(PART : B—DESCRIPTIVE)

(Marks : 50)

The figures in the margin indicate full marks for the questions

1. (a) Describe the application and its advantages of Gantt Chart. 6
(b) Explain the 4P's of Software Project Management. 4
OR
(c) Explain the stepwise planning activities for a project with neat diagram. 10
2. (a) Illustrate all the levels of COCOMO model. 10
OR
(b) Differentiate between size-oriented chart and functional-oriented chart. 6
(c) What are the objectives of Formal Technical Reviews (FTR)? 4
3. (a) Describe the models for software product quality. 10
OR
(b) Explain the classification of software metrics. 10
4. (a) Explain the seven categories of resources in software project management. 7
(b) What are the importances of resource allocation in project management? 3
OR
(c) Explain the various steps involved in change control process. 6
(d) What are the priority lists for deciding the levels of monitoring in project management? 4
5. (a) Why do we need leadership? Analyze the position power in leadership. 2+8=10
OR
(b) Explain the Oldham-Hackman job characteristics model. 6
(c) Identify the software quality characteristics of ISO 9126. 4
