

## B.C.A. Sem.-5 Examination

SEC-301

## Software Project Management

March-2025

Time : 2-30 Hours]

[Max. Marks : 70

Q.1 Answer the following

(A) Explain activities covered by Software Project Management. (7)

(B) Explain Step-3 (Analyse Project Characteristics) of project planning in detail. (7)

OR

(A) Explain Step-4 (Identify project products and activities) of project planning in detail.

(B) Write difference between software projects and other types of project along with activities covered by Software Project Management.

Q.2 Answer the following

(A) What is a prototype? Explain its types with advantages and disadvantages. (7)

(B) The following details are about previously developed software modules. (7)

Module	Input	Output
A	8	17
B	5	10

A new module C requires 7 Input and 15 Output.

Which of the module (A,B) is the closet analogy in terms of Euclidean Distance?

OR

(A) Explain Spiral model in detail.

(B) Explain various software effort estimation techniques.

Q.3 Answer the following

(A) Construct a network diagram for the given activities. Find critical path and total project duration. (7)

Activity	Preceding Activity	Duration Week)
A	-	3
B	A	4
C	A	2
D	B	5
E	C	1
F	C	2
G	D,E	4
H	F,G	3

(B) What is Risk ? Describe categories of risk. (7)

OR

(A) Explain risk planning in detail.

(B) Describe the rules for formulating a network diagram.

Q.4 Answer the following

(A) What is earned value analysis? List and explain its methods. (7)

(B) Write notes on Gantt Chart. (7)

OR

(A) List types of contracts. Explain any one in detail.

(B) Explain categories of resource.

(P.T.O)

Q.5 Attempt the following: ( any seven out of twelve)

- (1) A Forecast of inflation rate tends to be \_\_\_\_\_.
- (a) Certain (b) Uncertain  
(c) a and b (d) None of the above
- (2) A \_\_\_\_\_ is a planned activity.
- (a) Program (b) Meetings  
(c) Project (d) None of the above
- (3) PFD stands for \_\_\_\_\_.
- (a) Program Flow Diagram (b) Product Flow Diagram  
(c) Project Flow Diagram (d) None of the above
- (4) Putting more people on a late job makes it later is known as \_\_\_\_\_.
- (a) Parkinson's law (b) Weinberg's Law  
(c) Brook's Law (d) None of the above
- (5) \_\_\_\_\_ model can be expanded into V-Process model.
- (a) Spiral (b) Waterfall  
(c) Incremental delivery (d) None of the above
- (6) Effort = \_\_\_\_\_ \*
- (a) Size, Constant (b) Constant, effort  
(c) System Size, Productivity rate (d) None of the above
- (7) KLOC stands for \_\_\_\_\_.
- (a) kg. line of code (b) Thousand lines of code  
(c) Knowledge length of code (d) None of the above
- (8) DSDM stands for \_\_\_\_\_.
- (a) Dynamic Structure Development method  
(b) Design System development Method  
(c) Dynamic System Development Method  
(d) None of the above
- (9) Function Point Analysis initially developed by \_\_\_\_\_.
- (a) Barry Boehm (b) Edward Yourdan  
(c) Allan Albrecht (d) None of the above
- (10) The difference between earliest start date and latest start date of an activity is called \_\_\_\_\_.
- (a) Float (b) Free Float  
(c) Availability (d) None of the above
- (11) Risk Exposure \_\_\_\_\_ \*
- (a) size, effort (b) EV, AC  
(c) Potential Damage, Probability of occurrence (d) None of the above
- (12) Schedule variance SV \_\_\_\_\_.
- (a) EV- AC (b) EV / AC  
(c) EV / PV (d) None of the above