Seat No. : __

NG-102

November-2018

B.C.A., Sem.-V

SEC-301(1) : Software Project Management

Time : 2:30 Hours] **[Max. Marks : 70**

1. (A) Answer the following :

(1) Explain activities covered by Software Project Management along with SDLC. 7

(2) What is stakeholder ? List and explain types of stakeholders. 7

OR

(1) Explain Step-1 (Identify Project scope and objectives) of project planning in detail. 7

(2) Write a note on Cost-Benefit analysis and Cash flow forecasting. 7

(B) Attempt any **four** : 4

(1) _____ is a planned activity.

(a) Project (c) Software

(b) Program (d) None of these

(2) SDLC stands for _____.

(a) Software Development Life Cycle

(b) Structure Development Life Cycle

(c) Software Design Life Cycle

(d) Structure Design Life Cycle

(3) Forecast of inflation rates tends to be _____.

(a) Certain (c) (a) and (b)

(b) Uncertain (d) None of above

(4) _____ cost includes staff costs.

(a) Setup cost (c) Operational cost

(b) Development cost (d) Common cost

(5) Some products are handed over to the clients at the end of project are called _____.

(a) Product (c) Deliverables

(b) Program (d) All of above

(6) PFD stands for _____.

(a) Project Flow Diagram (c) Product Flow Diagram

(b) Program Flow Diagram (d) Project Flow Design

2. (A) Answer the following.

(1) List and explain eight core Atem principles. 7

(2) Explain various software effort estimation techniques. 7

OR

(1) Write a brief note on Waterfall model. 7

(2) What is "Estimating by Analogy" ? Find Euclidean Distance for the following : 7

Module	Input	Output
A	9	15
B	10	14

New module C requires 8 inputs and 12 outputs. Which of module A or B is the closest analogy in terms of Euclidean Distance ?

(B) Attempt any **four** : 4

(1) Waterfall model can be expanded into _____.

(a) W-Process model (c) Incremental model

(b) Spiral model (d) V-Process model

(2) Each loop of spiral is called _____.

(a) Stage (c) Phase

(b) Circle (d) loop

(3) Later increments might require modifications to earlier increment. This is called _____.

(a) Software Breakage (c) Time-Boxing

(b) Gold Plating (d) None of these

(4) DSDM stands for _____.

(a) Dynamic System Development Method

(b) Design System Development Method

(c) Dynamic Structure Development Method

(d) None of these

(5) Effort = ___*_____

(a) Productivity, constant

(b) System size, Productivity Rate

(c) Size, constant

(d) Constant, effort

(6) KLOC stands for _____

(a) Kilo Lines of Code (c) Knowledge Length of Code

(b) Thousand Lines of Code (d) None of these

3. (A) Answer the following : 7

(1) Construct a network diagram for following. Find critical path and total project duration.

Activity	Preceding Activity	Duration(Week)
A	–	10
B	–	14
C	A	8
D	A	7
E	B	5
F	B	10
G	C	9
H	D, E	11
I	G, H	5

(2) Explain risk planning in detail. 7

OR

(1) Describe the rules for formulating a network diagram. 7

(2) What is risk ? Describe categories of risk. 7

(B) Attempt any **three** : 3

(1) In a network diagram, time moves from _____.

(a) Right to Left (c) Top to Bottom

(b) Left to Right (d) Bottom to Top

(2) PERT stands for _____.

(a) Programme Evaluation & Review Technique

(b) Project Evaluation & Review Technique

(c) Programme Examination & Review Technique

(d) Project Examination & Review Technique

(3) The difference between total float and free float is called

(a) Float (c) Interfering Float

(b) Free Float (d) None of above

(4) An uncertain event or condition that has positive or negative effect on a project is called _____.

(a) Cause (c) Effort

(b) Effect (d) Risk

(5) Risk Exposure = *

(a) EV, AC

(b) Size, Effort

(c) Cause, Effect

(d) Potential damage, Probability of occurrence

4. (A) Answer the following :

(1) Explain nature of resources. 7

(2) What is earned value analysis ? List and explain methods of it. 7

OR

(1) Write a note on Fixed Price Contract in detail. 7

(2) List methods of Visualizing Progress. Explain any two in detail. 7

(B) Attempt any **three** : 3

(1) _____ is a secondary resource.

(a) Money (c) Space

(b) Time (d) Labour

(2) A very jagged slip lines indicates need for _____

(a) Today cursor (c) Implementation

(b) Rescheduling (d) None of these

(3) SPI = _____.

(a) EV-AC (c) EV/PV

(b) EV/AC (d) EV-PV

(4) _____ system is created for specifically one customer.

(a) Off-the-shelf (c) Bespoke

(b) COTS (d) None of these

(5) The total service time divide by the number of failure is called _____.

(a) Availability (c) Failure on demand

(b) Support Activity (d) Mean time between failures