

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION-SEP-2018

M.Tech - 1st Semester

COURSE CODE: 10M11CE113

MAX. MARKS:15

COURSE NAME: Construction Planning and Control

COURSE CREDITS: 03

MAX. TIME: One Hour

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

Q1.(i) Which of these is not one of the constraints of a project?

(0.5 X 7 = 3.5)

(a) Scope (b) Resources (c) Team (d) Budget

(ii) Which of the following is not correct about initial phase of a project?

- (a) The cost associated at the beginning of the project is highest.
- (b) Stakeholders have maximum influence during this phase
- (c) The highest uncertainty is at this stage of the project.
- (d) All the above statements are correct.

(iii) Which of the following is not an example of formal communication?

(a) Contract (b) email (c) Project status report (d) Status meeting

(iv) Which of the following is the most important element of Project Management Plan that is useful in HR Planning process?

- (a) Risk Management activities
- (b) Quality Assurance activities
- (c) Activity Resource requirements
- (d) Budget Control activities

(v) Which of the following types of Organizational Charts can be BEST used to track project costs?

- (a) Hierarchical-type Organizational Chart
- (b) Organizational Breakdown Structure
- (c) Resource Breakdown Structure
- (d) Responsibility Assignment Matrix

(vi) A schedule activity may begin 10 days before the predecessor activity finishes. This is an example of?

- (a) Finish-to-Start (b) Start-to-Finish
- (c) Start-to-Start (d) Finish-to Finish

(vii) Sap Consultancy is planning to buy ten desktops for \$1500 each from a leading computer store. Which type of contract will get signed in this case?

- (a) Purchase Order
- (b) Cost plus Fee
- (c) Fixed cost
- (d) Time and Material

Q2. Draw a network for the activities as listed below. Determine total float, free float and critical path. (6.5)

Activity	Description	Immediate Predecessor	Duration (Hours)
A	Receive raw materials	-	0.5
B	Bolt cutting	A	1.0
C	Transfer Machine (series of drilling and cutting operations)	B	1.5
D	Transfer Machine (barrels)	B	1.4
E	Barrel pinning	D	1.2
F	Shackle groove cutting	B	0.8
G	Shackle Bending	F	1.0
H	Insert shackle into body	C,E,G	0.4
I	Insert barrel into body and test key set	H	1.4
J	Packaging of padlock	I	0.5

Q3. Construct a network based on the activity descriptions below. Show all your work. Label activities in the network by their activity letters and node numbers. Remove any redundant dependencies and label dummy activities DUMMY1, DUMMY2, etc.

- Activities H, R2, T1 start the project.
- Activity T2 can start when Activities H, E1 and S are completed.
- Activity E1 also depends on Activity R2.
- Activity X follows Activity H and precedes Activity L.
- Activity E is preceded by Activities T2 and P1.
- The predecessors to Activity G are Activities L, T2 and P1.
- The successors to Activity T1 are Activities E1, S, W and D2.
- Activity P1 cannot begin until Activity W is finished.
- Activity P2 and F follow Activities W and D2, and precede Activities E and R1.
- Activity O2 depends on T2 and P1, and precedes Activity L.

(5)