

University of Mumbai

Examination First Half 2022 under cluster __ (Lead College: ())

Examinations Commencing from 17th May 2022 to 30th May 2022

Program: CIVIL ENGINEERING

Curriculum Scheme: Rev2016

Examination: BE Semester VIII

Course Code: CE-C802 and Course Name: Construction Management

Time: 2-hour 30 minutes

Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks (2 Marks each)
1.	The feasibility study is carried out in which phase of project life cycle?
Option A:	Initiation
Option B:	Planning
Option C:	Organizing
Option D:	Clean up
2.	Which management function involves setting goals & objectives and creating specific plans for completing them?
Option A:	Planning
Option B:	Organizing
Option C:	Controlling
Option D:	Leading
3.	The shortest possible time in which an activity can be achieved under ideal circumstances is known as _____
Option A:	Most likely time
Option B:	Optimistic time
Option C:	Expected time
Option D:	Pessimistic time
4.	Which activity is having positive float value?
Option A:	Super Critical Activity
Option B:	Special Activity
Option C:	Sub Critical Activity
Option D:	Critical Activity
5.	The difference between the maximum time available and the actual time needed to perform an activity is known as _____
Option A:	Free float
Option B:	Independent float
Option C:	Total float
Option D:	Half float
6.	Cost slope is defined as.....
Option A:	Cost required to complete the activity in minimum time
Option B:	Cost required for the activity
Option C:	Time required to crash the activity
Option D:	Cost required to crash the activity by unit time

7.	Find out critical path															
	<table border="1"> <thead> <tr> <th>Activity</th> <th>Succeeding Activity</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B, C</td> <td>12</td> </tr> <tr> <td>B</td> <td>D</td> <td>13</td> </tr> <tr> <td>C</td> <td>D</td> <td>14</td> </tr> <tr> <td>D</td> <td>--</td> <td>15</td> </tr> </tbody> </table>	Activity	Succeeding Activity	Time	A	B, C	12	B	D	13	C	D	14	D	--	15
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Option A:	A-B-D															
Option B:	A-C-D															
Option C:	A-B-C-D															
Option D:	B-C-D															
8.	While crashing a network, which activity having following characteristic is to be crashed first?															
Option A:	Critical activity with maximum cost slope															
Option B:	Non - Critical Activity with minimum cost slope															
Option C:	Non- Critical activity with Maximum cost slope															
Option D:	Critical activity with minimum cost slope															
9.	Which of the following costs is not direct cost of the Project?															
Option A:	Material Cost															
Option B:	Office Expenses															
Option C:	Labor wages															
Option D:	Hiring Charges of Machines															
10.	Ensuring the safety, health and welfare of the employees is the primary purpose of which labour Act?															
Option A:	Payment of wages Act,															
Option B:	Minimum Wages Act															
Option C:	Factories Act															
Option D:	Industrial disputes Act															

Q2 (20Marks)	Solve any Two Questions out of Three (10 marks each)																																	
A	<p>Following data is associated with a small Project. Draw Project Network. Identify Critical path & compute Project duration. Calculate Event times, Activity Times & all types of floats associated with activities</p> <table border="1"> <thead> <tr> <th>Activity</th> <th>M</th> <th>N</th> <th>P</th> <th>Q</th> <th>R</th> <th>S</th> <th>T</th> <th>V</th> <th>W</th> <th>X</th> </tr> </thead> <tbody> <tr> <td>Preceding Activity</td> <td>-</td> <td>-</td> <td>M</td> <td>N</td> <td>P</td> <td>N</td> <td>S</td> <td>P</td> <td>Q, T</td> <td>R, W</td> </tr> <tr> <td>Duration (days)</td> <td>7</td> <td>5</td> <td>10</td> <td>5</td> <td>8</td> <td>6</td> <td>5</td> <td>4</td> <td>10</td> <td>5</td> </tr> </tbody> </table>	Activity	M	N	P	Q	R	S	T	V	W	X	Preceding Activity	-	-	M	N	P	N	S	P	Q, T	R, W	Duration (days)	7	5	10	5	8	6	5	4	10	5
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B	What is Life Cycle of Project? Explain all the phases involved in it.																																	
C	What is Site Layout? Explain the factors affecting the preparation of Site Layout																																	

Q3 (20 Marks)	Solve any Two Questions out of Three (10 marks each)																																												
A	Find out Optimum cost & Optimum duration for the following project data. Indirect Cost of Project = Rs 2000/ day																																												
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B	What is an updating of Project? Explain stepwise procedure of updating of a network.																																												
C	Explain Gantt bar chart in detail with an example along with its limitations																																												

Q4 (20 Marks)	Solve any Two Questions out of Three (10 marks each)																																								
A	A small Project consist of nine activities & time estimates are given below.																																								
	a) Draw Project Network																																								
	b) Find expected duration, Standard deviation & variance of all activities																																								
	c) Find out duration of project corresponding to 85 % probability																																								
	d) What is the probability of completing the project in 22 days?																																								
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C	Explain: - 1) Role of inspection in Quality Control 2) Workmen Compensation Act																																								