

KATHMANDU UNIVERSITY
End Semester Examination [C]
April, 2023

Marks Scored:

Level : B.Arch.

Year : IV

Exam Roll No. :

Time: 30 mins.

Course : CIEG 403

Semester: I

F.M. : 10

Registration No.:

Date

09 APR 2023

SECTION "A"

[20Q. × 0.5 = 10 marks]

Encircle the most appropriate alternative from each set of choices.

1. From the project cost curve, it is evident that a delay in a project increases the total cost, which can be attributed to the increase in.....
 - a. a direct cost
 - b. an Indirect cost
 - c. a markup price
 - d. an overhead cost
2. Which of the following one is the characteristic of a government-owned company established under the company act 2063?
 - a. Day to day management by government.
 - b. Not managed by Board of directors.
 - c. Not accountable to Parliament.
 - d. Separate legal entity.
3. In CPM, the floats are important for.....
 - a. Resource estimation
 - b. Resource organization
 - c. Resource allocation and levelling
 - d. Resource monitoring
4. Democratic management is one of the characteristics of.....
 - a. Private Limited Company
 - b. Partnership
 - c. Sole Proprietorship
 - d. Public organization
5. Unlimited liabilities exist in.....
 - a. Public company
 - b. Corporation
 - c. Joint stock company
 - d. Partnership
6. In Single Stage Two envelop procedure, you will open the bid documents in the following manner on the bid opening day.....
 - a. First Technical and then Priced bids
 - b. Priced bids only
 - c. First Priced bids and then technical bids
 - d. Technical Bids only
7. One of the criteria to measure the current financial soundness of bidders is that their net worth of the last 3 to 5 years should be positive. Here, net worth means.....
 - a. Total assets - Total Liabilities
 - b. Total liabilities - Total assets
 - c. Total capital - Total Expenditure
 - d. Total turnover - Total liabilities
8. Continuous improvements in quality with cultural change are the essence of.....
 - a. Quality Assurance (QA)
 - b. Quality Control (QC)
 - c. Total quality management (TQM)
 - d. ISO system guidelines
9. How many personnel, units, or department are controlled horizontally by a manager in any organization is called.....
 - a. Span of control
 - b. Responsibility
 - c. Authority
 - d. Chain of command

10. Advance payment to the contractor provided to the contractor is repaid by deducting
 - a. on incremental basis from the bills
 - b. from the final bill only
 - c. proportionately from every certified bill
 - d. as per Engineer's discretion
11. Which of the following specification is a part of a contract?
 - a. General specification
 - b. Standard specification
 - c. Manufacture's specification
 - d. Particular specification
12. In construction, where the exact amount of materials, their types and availability are not certain, the following type of contract is appropriate.....
 - a. Lump-sum contract
 - b. Cost plus percentage
 - c. Percentage rate contract
 - d. item rate contract
13. If you are required to prepare subgrade, subbase, and base for the airport runway, and taxiways, you will prefer the following equipment.....
 - a. Wheel dozer
 - b. Wheel loader
 - c. Grader
 - d. Loader with backhoe
14. In Earned Value Analysis if the Schedule Variance is positive, it signifies the project is.....
 - a. on the schedule
 - b. within the budget
 - c. behind the schedule
 - d. ahead of schedule
15. In Line of balance planning, if inclined lines are more inclined towards the X-axis during monitoring, then we can immediately conclude that the project is.....
 - a. Ahead of schedule
 - b. Project is over budgeted
 - c. Behind the schedule
 - d. Project is under budgeted
16. Risk in a project can be evaluated as the product of.....
 - a. Probability of occurrence and impact
 - b. past data and prediction
 - c. Exposure and occurrence
 - d. internal and external risks
17. If the priced bid is front-loaded and severely unbalanced, the owner may take performance security up to 8%. Here, a front-loaded priced-bid means.....
 - a. the quantities of initial items are higher
 - b. all quantities are higher.
 - c. the rates of initial items are higher
 - d. quantities and rates are higher
18. If the consultant does not issue detailed drawings to the contractor in time which affects the intended completion date of a project, then it is treated as.....
 - a. compensation event
 - b. contract frustration
 - c. default of the owner
 - d. Force majeure
19. As per SBD of PPMO, if dispute is not settled by amicable settlement the party can refer to the Arbitration within.....
 - a. 15 days
 - b. 30 days
 - c. 35 days
 - d. 45 days
20. Reviewing the data of accidents in a construction site from any sources reveal that the highest accident occurs due to falling from height and the second cause is.....
 - a. Collapse or overturn
 - b. Natural calamities
 - c. Striking by moving or falling object
 - d. contact by electricity

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SECTION "B"

Attempt *ALL* questions.

1. Elaborate your view on the importance of construction management in a life cycle of an infrastructural development project. [6]
2. Briefly mention the planning technique or process you would carry out as a Construction project manager. [6]
3. "Quality costs a bit more, but lack of quality costs even more." and "quality is not a grade" elaborate your perspective with examples concerning a construction project. [3+3]
4. What do you understand by project monitoring? How do you monitor an ongoing construction project, and what documents (for time, cost, and quality) would you refer to? [6]
5. Draw a CPM network from the following information and find out critical path and find out total floats, free floats, and independent floats. [3+4=7]

S.N.	Activity	Duration (Weeks)	Predecessor (activities)	Successor (Activities)
1	Activity A	5	-	D, E
2	Activity B	8	-	F
3	Activity C	10	-	G
4	Activity D	4	A	F
5	Activity E	3	A	H
6	Activity F	4	B, D	H
7	Activity G	2	C	H
8	Activity H	2	E, F, G	-

6. Write short notes on *ANY THREE* of the following: [3×3=9]
 - a. Principle of writing specification.
 - b. Causes of accidents at site.
 - c. The role of an owner in construction project.
 - d. Conditions of contract under which construction contract can be terminated by either party (as per the SBD of PPMO).