

KATHMANDU UNIVERSITY
End Semester Examination
February/March, 2018

Marks Scored:

Level: B. E.

Year : IV

Course : CIEG 403

Semester : I

Exam Roll No. :

Time: 30 mins.

F. M. : 10

Registration No.:

Date

MAR 12 2018

SECTION "A"

[20 Q. × 0.5 = 10 marks]

1. If project is crashed, In CPM network re-planning,
a) Critical Path becomes Non-Critical. b) Numbers of Floats increase
c) Other non-critical paths may become critical d) Resources allotted become redundant
2. Project's indirect cost increases:
a) With increase in time b) With decrease in time.
c) With direct cost d) Inversely with time
3. The organization with separate legal entity is:
a) Dept. Undertakings b) Sole proprietorship
c) Partnership d) Public enterprises
4. Organization structure with long Chain of Commands is the characteristic of:
a) Matrix organization b) Project organization
c) Joint Venture d) Functional organization
5. Specification can be defined as a set of requirements to be satisfied by a design, material, product, or service. The set of requirements should be:
a) Implied needs b) Explicit in nature
c) Of highest standard d) Logical in nature
6. If the owner does not have enough capital or does not intend to invest on project, the best way to get the project done is:
a) Management Contract b) Turn-key contract
c) BOT contract d) Lump-sum contract
7. Reactive approach in quality Management is known as:
a) Quality Control b) Quality Assurance
c) Total Quality Management d) ISO
8. Quality control cost consists of:
a) Preventive + appraisal Cost b) Preventive + failure cost
c) Appraisal + internal failure cost d) External failure cost
9. Quality improvement through cultural change is:
a) QAP b) QC
c) TQM d) ISO
10. Which of the followings is not the responsibility of Project Engineer?
a) Interpreting the contract b) Enforcing the contract
c) Making timely payment to contractor d) Controlling time, cost and quality

11. In government offices project progress monitoring is generally done on:
a) Yearly basis
b) Semester basis
c) Monthly basis
d) Trimester basis
12. While opening the bids, it was found that a bid document is not accompanied by bid-bond. Later you as a member of bid evaluation committee, will:
a) Not evaluate
b) Accept the bid
c) Reconsider the bidder
d) Ask bidder to submit bid-bond
13. During bid-opening you first open:
a) Bid modification Letter
b) Bid-withdrawal letter
c) All the bids
d) Bid as per submission sequence
14. Assume that you have to excavate the hard soil with small bushes and stumps and move the soil up to 90 meters to fill downhill to prepare outdoor stadium. If you have to choose one equipment, you will choose:
a) Grader
b) Excavator
c) Scraper
d) Bulldozer
15. You are working at moderately undulating building site extended up to 850 m × 200 m to construct 5 building blocks with 4 storey heights. If you need to choose one crane for transporting and hoisting materials and equipment as quickly as possible then you will choose:
a) Crawler Crane
b) All Terrain Crane
c) Tower Crane
d) Hoisting Machine
16. Anything that has potential to cause harm is called:
a) Hazard
b) Risk
c) Disaster
d) Accident
17. Following issue may also lead to the claim and dispute in construction:
a) Construction defect rectification by contractor
b) Quality beyond specification
c) Quality tests expense as per QAP
d) Ambiguity and loophole in contract
18. An assertion of a right, claim or demand on one side and repudiation thereof by another is called:
a) Claim
b) Arbitration
c) Dispute
d) Claim substantiation
19. Generally dispute Resolution Committee consists of:
a) 7 members
b) 5 members
c) 3 members
d) 2 members
20. The process of stepping up the production or generation from the initial trial production to the acceptable designed capacity is called:
a) Production Evaluation
b) Commissioning
c) Production testing
d) Start-up

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Time : 2 hrs. 30 mins.

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SECTION "B"

Attempt *ALL* questions:

1. Describe about the project life cycle. Why do you think 'Implementation Phase' is important in project life cycle? [5]
2. What do you understand by Project Management? If three activities Earthwork, stone soling and PCC for pipe laying take 15 days, 9 days and 6 days respectively (total 30 days in series) what will be the Earliest Completion time of these works if Stone soling can be started 7 days immediately after the start of Earthwork and PCC can be started 5 days after the start of Stone Soling? Also prepare CPM net work. [5]
3. What do you understand by quality cost? Explain with graph/ charts about the relationships among different types of quality cost? [5]
4. What do you understand by Monitoring? A project was scheduled for 9 months. During monitoring after 6 months you are provided information as below (Rs. in lakhs), what would be your evaluation on the basis of Earned Value Analysis? (support your evaluation with 'variances', 'indices'). Also find out 'Estimated Budget at completion'. [2+5]

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
BCWS	15	30	35	40	50	50	55	35	20
BCWP	10	35	35	35	45	45			
ACWP	15	35	30	40	45	50			

5. You are a member of 'Procurement Committee' as well as 'Bid Evaluation Committee'. Describe sequentially how you will carry out 'bid opening' and 'bid evaluation' in procurement process. [5]
6. What do you mean by risk? How will you evaluate/analyze risks and manage them (with examples) in construction project? [5]
7. Write short notes on *ANY FOUR* of the followings. [8]
 - a) Liquidity damage and Defect Liability Period.
 - b) Role of an Engineer as a Technical Officer.
 - c) Types of cranes in construction.
 - d) Management contract.
 - e) Cash flow capacity or liquid asset (of a bidder)

