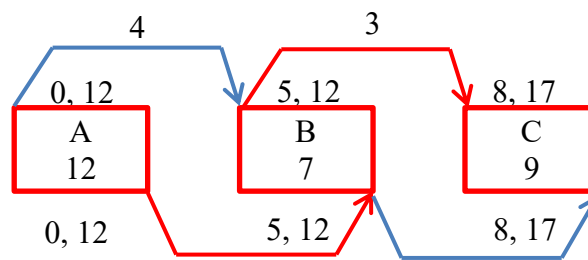


Test Bank for Project Management in the Construction Industry 1st Mubarak

1. Precedence Networks can accommodate (check the incorrect answer):

- a. Overlapping activities
- b. Lags
- c. Fast-tracking
- d. Reducing overhead expenses

2. In the network below:



2.A. The project will take:

- a. 17 days
- b. 21 days
- c. 23 days
- d. 26 days

2.B. The critical relationships are:

- e. Both SS relationships
- f. Both FF relationships
- g. The SS between A and B and FF between B and C
- h. The FF between A and B and SS between B and C

3. Resource leveling in construction projects includes:

- a. Labor and Materials.
- b. Labor and Equipment.
- c. Materials and Equipment.
- d. Materials and overhead.

4. Resource allocation is:

- a. Assigning the required resources for each activity, in the required amount and timing
 - b. Procuring the required resources for the project
 - c. Optimizing the resource usage
 - d. Prioritizing the resource usage among activities based on their criticality
5. The concept of resource leveling works by:
- a. Reducing the amounts of resources allocated to some activities.
 - b. Starting activities on their late start dates.
 - c. Shifting non-critical activities within their available float.
 - d. Limiting the amount of resources any activity can obtain.
6. A project is to be built in downtown Chicago. Which materials management theory you should lean towards:
- a. Just in time
 - b. Inventory buffer
 - c. Critical Path
 - d. Theory of relativity
7. Moving non-critical activities within their total float may affect (check the incorrect answer):
- a. Resource daily usage profile
 - b. Cash flow
 - c. Project completion date
 - d. Successors' float
8. The data date is:
- a. The date all information was entered in the computer.
 - b. The date the scheduler produces new reports.
 - c. The date as of which all progress on a project is reported
 - d. The date actual work took place
9. To know if the project is on schedule, the contractor must compare:
- a. The as-built schedule with the schedule of values
 - b. The as-planned schedule with the baseline budget
 - c. The as-built schedule with the baseline schedule
 - d. The cost variance with the schedule variance
10. When updating the schedule, an activity with original duration = 10 days, had actual duration = 5 days and % complete = 35%. Assuming no change in productivity, you are supposed to:
- a. Adjust the remaining duration to accommodate the remainder of the work

- b. Remaining duration stays = 5 days
 - c. Leave it to the software
 - d. Change the % complete to be 50%
11. The owner must practice project monitoring which include these tasks except one:
- a. Monitoring work progress,
 - b. Comparing it to baseline budget and schedule,
 - c. Detecting variances: quantities and causes,
 - d. Taking a corrective action wherever and whenever necessary
12. During a schedule update, the project completion date shifted earlier by 2 days. Assuming no activity was deleted and no change in work calendars, this date shift may be attributed to:
- a. A critical activity got performed in shorter than the original duration
 - b. A non-critical activity got performed in shorter than the original duration
 - c. A non-critical activity got performed in longer than the original duration
 - d. A non-critical activity used its float
13. In earned value analysis (EVA), we found: BCWP = \$32,600, BCWS = \$29,650, and ACWP = \$33,900. The project is:
- a. Behind schedule and overbudget
 - b. Behind schedule and underbudget
 - c. Ahead of schedule and overbudget
 - d. Ahead of schedule and underbudget
14. A project with the critical path (A) = 235 days, and the next critical path (B) = 233 days. An activity on path B was delayed by 5 days while there was no delay on path A. The project expected duration is:
- a. 233 days
 - b. 235 days
 - c. 238 days
 - d. 240 days
15. In project controls, we monitor:
- a. Cost and quality
 - b. Cost and schedule
 - c. Schedule and quality
 - d. Quality and safety
16. For progress payments, we need to calculate percent complete for:
- a. Activities
 - b. Work packages

- c. Assemblies
- d. The project

17. A contractor agreed to excavate 50,000 CY of common earth in 10 days for a total fee of \$200,000.

17.A. After 4 days, his percent complete was 45%. Assuming equal daily production, is he:

- a. On schedule
- b. Ahead of schedule
- c. Behind schedule
- d. Almost done

17.B. If actual cost so far is \$96,000, is he:

- a. On budget
- b. Overbudget
- c. Underbudget
- d. Can't tell till he finishes

18. In the general case when we start accelerating projects:

- a. Direct cost increases while indirect cost decreases.
- b. Direct cost decreases while indirect cost increases.
- c. Both direct and indirect costs increase.
- d. Both direct and indirect costs decrease

19. "Least Cost Duration" is:

- a. The duration where project direct cost is minimum
- b. The duration where project indirect cost is minimum
- c. The duration where project total cost is minimum
- d. The cost associated with minimum project duration

20. Recovery schedule is a:

- a. A schedule prepared by the contractor to recover lost costs
- b. A schedule prepared by the contractor to recover lost resources
- c. A schedule prepared by the contractor to recover lost time
- d. A schedule prepared by the contractor to finish earlier than originally planned

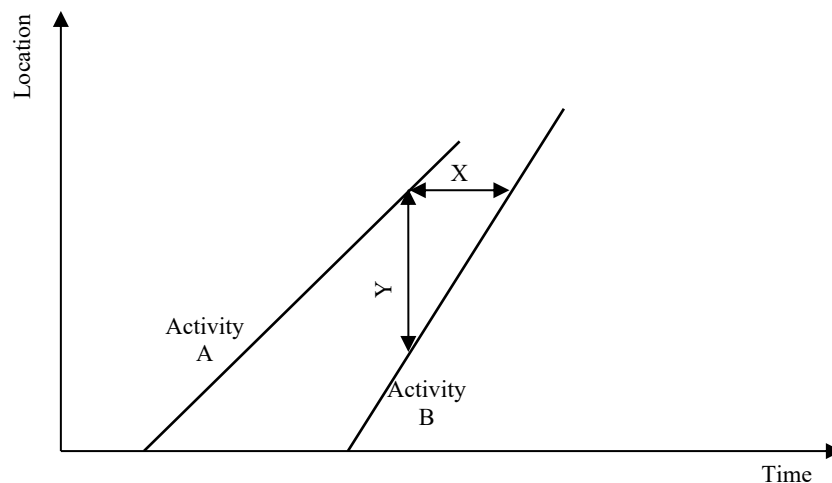
21. Owners may ask the contractor to accelerate schedule in these cases: Check the incorrect one:

- a. To make sure contractor's finish date meets their deadline
- b. To respond to market demand / maximize profit
- c. For the convenience of the public
- d. To avoid penalties (liquidated damages) and/or get early finish bonus

22. The scheduler shortened the critical path by one day, but the project completion date did not change, why?

- a. There was not enough float in that path
- b. There is another critical path of equal length
- c. The scheduler needs to level the resources first
- d. There must be an error in the calculations

23. In the graph below,



23.A. What do we call the variable X?

- a. Lead
- b. Lag
- c. Distance buffer
- d. Time buffer

23.B. What does the slope of the line for activity A represent?

- e. Distance buffer
- f. Time buffer
- g. Production rate for activity A
- h. Duration of activity A

24. When an owner, in a cost-plus-fee contract, demands a GMP (guaranteed maximum price) from the general contractor, this can be called as:
- a. Risk allocation
 - b. Risk elimination
 - c. Risk mitigation
 - d. Risk shifting
25. A risk in the context of construction risk management is:
- a. A threat
 - b. An opportunity
 - c. A goal
 - d. A threat and an opportunity
26. The change order becomes an official part of the contract documents after the approval of:
- a. The owner
 - b. The General Contractor
 - c. The designer, A/E
 - d. The project manager
27. The owner adds two additional levels to a 10-story building. The contractor's Change Order claim is based on:
- a. Differing site conditions.
 - b. Design errors/omissions.
 - c. Unusual weather conditions.
 - d. Changes in owner's requirements
28. Which one of these is not classified as force majeure:
- a. Hurricane.
 - b. Flood.
 - c. Job site accident
 - d. Earthquake
29. A form of dispute resolution starts before disputes arise:
- a. Mediation.
 - b. Arbitration.
 - c. Negotiation.
 - d. Dispute review boards (DRB)
30. A form of dispute resolution that is not voluntary to the disputing parties:
- a. Mediation.

- b. Arbitration.
- c. Negotiation.
- d. Litigation

31. A mechanic's lien is:

- a. A guarantee of payment to contractors and others who put labor and/or materials in the project
- b. A guarantee of payment for government taxes
- c. A guarantee of payment of the HVAC system
- d. A guarantee of payment to the lender

32. One of these is NOT a phases of project close-out:

- a. Construction close-out
- b. Contract / fiscal close-out
- c. Contractor's close-out
- d. Building dry-in

33. Substantial Completion is a stage when:

- a. The project reached 90% completion
- b. The budget allocated is depleted
- c. The project shell (outside) is completed
- d. The project reached the point where it can be utilized for the purpose it was intended for.

34. Risk register is:

- a. A list of all hazards in the project that may result in death or injury to workers
- b. A checklist of potential risks developed during the risk identification phase of risk management
- c. A log for anything that goes wrong, such as accidents, in the project
- d. A list of workers with previous record of alcohol or substance abuse

35. Who owns the float in a construction schedule?

- a. The owner unless the contractor demands it in the contract.
- b. The contractor unless the owner demands it in the contract.
- c. The contractor, always.
- d. The owner, always

36. According to the Construction Management Association of America, CMAA:

(check the incorrect answer):

- a. Risk should be assigned to the party who can best control it.

- b. Risk should be assigned to the party who can bear the risk at the lowest cost.
 - c. Risk should be initially distributed between the general contractors and subcontractors
 - d. Risk should be assigned to the Owner when no other party can control the risk or bear the loss.
37. Total Quality Management (TQM): (check the incorrect answer)
- a. consists of organization-wide efforts
 - b. involves all members of the organization
 - c. is project-specific
 - d. is an organization culture
38. Kaizen means:
- a. continuous improvement
 - b. measurement of quality
 - c. excellence
 - d. customer service
39. Quality in the context of construction contracts is:
- a. Conformance to specifications
 - b. A measure of goodness
 - c. A degrees of excellence
 - d. A measure of durability of the product
40. Quality control for the project construction must be practiced by:
- a. The owner
 - b. The designer
 - c. The general contractor
 - d. The project management consultant
41. A non-conformance report (NCR) is:
- a. A document to manage works that have been performed not in accordance with specifications
 - b. A document to manage works that have endangered personnel and/or structures
 - c. A document to show time variance
 - d. A document to show budget variance
42. Cost of quality conformance include two basic types:
- a. Appraisal and prevention cost
 - b. Direct and indirect cost

- c. Materials and labor
 - d. Upgrade and maintenance
43. An HSE program aims at protection of (check the wrong answer):
- a. Risks to personnel on site; employees or 3rd party
 - b. Project objectives, mainly cost and time
 - c. Structures and temporary structures on site
 - d. Equipment and materials on site
44. One of these is NOT a phases of project close-out:
- a. Construction close-out
 - b. Contract / fiscal close-out
 - c. Contractor's close-out
 - d. Substantial completion
45. Project managers need soft skills such as (check the incorrect one):
- a. Time management
 - b. Quality management
 - c. Negotiations
 - d. Team building
46. Emotional intelligence implies (check the incorrect one):
- a. Understanding and controlling own emotions
 - b. Understanding and being able to influence others' emotions
 - c. Disregarding emotions when dealing with others
 - d. Putting logic in control when making decisions
47. The company's leadership is contemplating a new management system. They are not sure if it works well. What is your recommendation?
- a. Go ahead and implement it, anyway
 - b. Go ahead and implement it, but if results are negative, cancel it and go back to old system
 - c. Do a pilot study first
 - d. Wait till you hear more from other organizations that implemented it