

Prepared by: Dr. Tariq Hanif

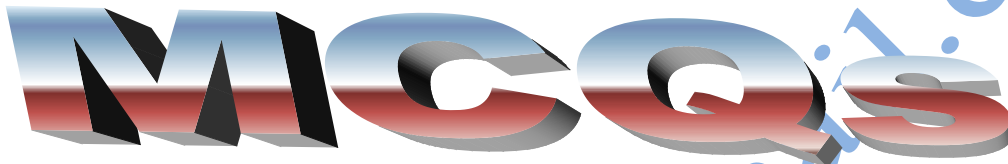
Finalterm-13

For more help @:

Email: qirathanif@gmail.com

Website: drqirathanif.jimdo.com

Cell# 03037300008



1. Identify the category of people who do actual work on software development.

Customers

Seniors managers

Project managers

**Practitioners**

2. Rapid prototyping is particularly helpful in projects where the requirements are \_\_\_\_ to specify

Easy

**Difficult**

Already available

All of given

3. As a project manager, you perform two primary activities to manage risks for software project:

Risk Analysis, Risk identification

Risk quantification, Risk identification

**Risk Analysis, Risk management**

Risk management, Risk quantification

4. Quality planning process outputs are quality management plan, \_\_\_\_

Operational definition

Checklists, and

Inputs to other processes

All of the given

5. All given below are the problems that affect software projects except:

Product-related problems

Technology-related problems

**Procedure-related problems**

People-related problems

6. These all are outputs of Initiating Process except

Project Manager Assignments

Constraints

**Selection Criteria 134**

Assumptions

7. \_\_\_\_\_ identifying, documenting, and assigning project roles, responsibilities, and reporting relationships.

Quality Planning

Communications Planning

**Organizational Planning 139**

Staff Acquisition

8. Scope determination task is performed in phase

**Project initiation 78**

Project closedown

Project planning, control, and tracking

Product implementation

9. Enhancement maintenance is also known as \_\_\_\_\_

Corrective maintenance

Perfective maintenance

**Adaptive maintenance 413**

Preventive maintenance

10. During the project management process, the development phase focuses on \_\_\_\_\_

What

When

Change

**How 144**

11. Which of the following does not help in meeting project deadlines?

Proper planning and analysis in making the schedule

Allowing people who will not be involved in the development work of the project (e.g. marketing department of an organization) to make the schedule

Good negotiation skills which help to arrive at realistic project schedules in the first place

12. Which of the following is not a good habit to make people and teams more effective?

Being proactive

Anticipate and plan for problems and inevitable changes in projects

Seeking to be understood first and then to understand

Beginning with the end in mind

13. CSOM stands for \_\_\_\_\_

**Computer system operator's manual 172**

Computer system offered manual

Discipline of the Project Manager to control project schedules

Computer software operator's manual

Computer system obvious manual

14. Using an EFFORT RATIO for each type of change in \_\_\_\_\_ is necessary.

Fuzzy logic sizing

Function point sizing

**Changing sizing 227**

Standard component sizing

15. Why is a change control board necessary?

**To approve or reject changes to the project plan 177**

To approve or reject change requests when required

To approve or reject changes to the WBS

To approve or reject the selection of project team resources

16. Which of the following is better to be created before working on a project plan?

User manual

Test plan

Status report

WBS

17. WBS is not-----

The WBS should contains 100% of the work defined by the scope or contract

Development of WBS should involve the entire project team

**A listing of tasks or activities 249**

Should captures all deliverables (Internal, External, Interim) in terms of work to be completed

18. You need to define the steps in such a way that they are distinct, homogeneous tasks for which you can estimate resource requirements in component \_\_\_\_ .

**Activities 296**

Nodes

Network

Critical path

19. Before requirements can be analyzed, modeled, or specified they must be gathered through a/an \_\_\_\_

**Elicitation process 98**

Interviewing

Meeting

Both Interviewing and Meeting

20. The distinguishing characteristics of a software product are \_\_\_\_

Cyclomatic complexity and cohesion

Function points and lines of code

Function points only

**Cyclomatic complexity and cohesion, Function points and lines of code 118**

21. The project development plan is one of the first formal documents produced by the project. Within this document, the project manager describes in detail that how \_\_\_\_

**The project will be developed, these resources will be used, what resources will be required? 149**

How the project will be developed?

What resources will be required?

How these resources will be used?

22. This is rather like renting a car the customer pays for the time that the car is used, and for any other expenses such as insurance and gasoline is example of \_\_\_\_

Fixed price

**Cost-plus 158**

Fixed price and Cost-plus

None of given

23. Effective project managers \_\_\_\_\_

**Lead by example 86**

Are visionary

Are good motivators, communicators, supports team members

Lead by example, are visionary and are good motivators, communicators, supports team members

24. Lessons learned are important to document because an organization can use them to improve future projects and the Project Management process. Therefore, in project closing procedures, it is helpful to review the -----

Checklists for risk identification

WBS

Original contract

Both WBS and Original contract

25. Watts Humphrey in his book, \_\_\_\_\_ the Software process, has said, "*If you don't know where you are, a map won't help.*"

Magazine

**Managing 222**

Book of

Both Magazine and Book of

26. Before an estimate can be made, the project planner must understand the scope of the software to be built and generate an estimate of its \_\_\_\_\_

Cost

**Size 226**

Both Cost and Size

Neither Cost nor Size

27. In \_\_\_\_\_ the planner develops estimates of the information domain.

**Function point sizing 227**

Standard component sizing

Change sizing

Change sizing and Standard component sizing

28. If you are using MS-Project or a similar project management software application, you may encounter the WBS as a \_\_\_\_\_ with indents to show structure.

**Vertical list 246**

Horizontal list

Both Vertical list and Horizontal list

Neither Vertical list nor Horizontal list

29. \_\_\_\_\_ is an activity that distributes estimated effort across the planned project duration by allocating the effort to specific software engineering tasks

Software project scope

Software project planning

**Software project scheduling 284**

Both Software project scope and planning

30. To create a schedule, you can use project management tool \_\_\_\_\_

Gantt charts

Network-scheduling techniques

**Both Gantt charts, Network-scheduling techniques 285**

Neither Gantt charts nor Network-scheduling techniques

31. An activities list is typically shown in this ways.

**It can be shown as an outline or it can be graphically presented 257**

It can be graphically presented

Neither it can be not shown as an outline nor be graphically presented

It can be shown as an outline

32. \_\_\_\_\_ is /are basic network-scheduling techniques

PERT

CPM

**Both PERT and CPM 296**

Neither PERT nor CPM

33. \_\_\_\_\_ is the process by which changes to the Project's scope, deliverables, timescales or resources are formally defined, evaluated and approved prior to implementation.

Change control

Change scope

**Change Management 332**

Both Change control and Change scope

34. This problem is discussed by \_\_\_\_\_, in which he/they conclude that complete objectivity in quality assessment cannot be achieved

Ververs

Wesselius

**Wesselius and Ververs 358**

Neither Wesselius nor Ververs

35. Quality assurance consists of the \_\_\_\_\_ function of management.

Auditing

Reporting

**Auditing or reporting 361**

Neither Auditing nor reporting

36. One of the more recent developments in quality assurance is the realization that quality is \_\_\_\_\_ attribute that either exists or does not exist.

**Not a binary 366**

A binary

Exponential

Both binary and exponential

37. Project management includes numerous activities, including \_\_\_\_\_

Resource allocation

Risk management and estimation

**Resource allocation, Planning, Risk management and estimation 370**

Planning

38. A task is an activity that has a defined \_\_\_\_\_

Start date

End date

**Start and end dates 370**

Neither Start date nor End date

39. Using Microsoft Project 2000, you can create \_\_\_\_\_ types of standard reports

**Two 397**

Three

Four

Nine

40. The implementation plan NOT contain the activity\_\_\_\_\_

Resource List

Software Components for Installation

Data Migration

**Training Schedule 405**

1. To deliver expected results in software project management, you carry out the successive process \_\_\_\_\_.

Studying the feasibility of the project

Planning to meet the requirement

Executing the plan

**All of the given 70**

2. The theory of that 85 percent of the cost of quality is a management problem is attributed to

Deming

Kaizen

**Juran**

Crosby

3. Most software project manager's practice a lot of management techniques that are of doubtful authenticity are called

Project management tools

**Project management myths 81**

Project management thumb rules

Project management fundamentals

4. To access the constraints feature in Microsoft Project 2000, you perform the \_\_\_\_\_ steps

Ten

Four

Six

**Eight 379**

5. Requires too much effort for stringent documentation-in every phase is drawback of \_\_\_\_\_

The Prototyping Model

The RAD Model

**The Waterfall Model 164**

The Spiral Model

6. It is also preferable in \_\_\_\_\_ to create a prototype for every deliverable that LMN Inc. might deem necessary to receive client feedback.

The RAD Model

The Waterfall Model

**The Spiral Model 168**

The Prototyping Model

7. Using the intermediate COCOMO technique effort is calculated in \_\_\_\_\_

Five-step Process



Two-step process

**Three-step process 234**

Four-step process

8. WBS is not -----

**A listing of tasks or activities 249**

Should have at least 2 levels: Level 1 defines 100% of the service/product/result; Level 2 defines the deliverables in terms of work (groupings)

Project Management (and sub-contract management) at Level 2.

The deliverables in the WBS must match the scope or contract (WBS should not contain work that is not defined in the scope – Scope should not describe work not contained in the WBS)

9. Why is a change control board necessary?

**To approve or reject changes to the project plan 177**

To approve or reject change requests when required

To approve or reject changes to the WBS

To approve or reject the selection of project team resources

10. Cost overruns have plagued the introduction of a new factory assembly line at your company and your project's approved cost baseline has been exceeded. What should you do next?

Request more funds from the customer

Request more funds from plan.

Update the WBS.

Issue a budget update

You can create a WBS by following \_\_\_\_\_ steps

Two

**Three 275**

Four

Five

12. Dividing a software project into phases helps you in managing the \_\_\_\_\_ involved in the software project.

Complexities

Uncertainties

**Complexities, Uncertainties 66**

Size

13. To manage the project plan effectively you monitor the \_\_\_\_\_

Project plan

Periodic performance status reports

Requests for change

**Project plan, Periodic performance status reports, Requests for change 76**

14. Insufficient identification is a

Technology-related problem

**Process-related problem 86**

People-related problem

Product-related problem

15. Unstructured and hurried software development is a

Technology-related problem

Product-related problem

**Process-related problem 87**

People-related problem

16. Effective project managers \_\_\_\_\_

**Lead by example 86**

Are visionary

Are good motivators, communicators, supports team members

Lead by example, are visionary and are good motivators, communicators, supports team members

17. Before an estimate can be made, the project planner must understand the scope of the software to be built and generate an estimate of its \_\_\_\_\_

Cost

**Size 226**

Both Cost and Size

Neither Cost nor Size

18. In \_\_\_\_\_ the planner develops estimates of the information domain.

**Function point sizing 227**

Standard component sizing

Change sizing

Change sizing and Standard component sizing

19. If you are using MS-Project or a similar project management software application, you may encounter the WBS as a \_\_\_\_\_ with indents to show structure.

**Vertical list 246**

Horizontal list

Both Vertical list and Horizontal list

Neither Vertical list nor Horizontal list

20. \_\_\_\_\_ decomposition of a software system is a division of the system into lower level components that coincide with the actual software components of the system.

**The design 269**

The Project

The Functional

Both Project and Functional

21. Fred Brooks, the well-known author of The Mythical-Man-Month [BR095], was once asked how software projects fall behind schedule. His response was as simple as it was profound \_\_\_\_\_

**One day at a time 284**

One day at evening

One day afternoon

Two day at a time

22. Contingency planning involves maintaining an alternative plan if the original plan fails, Contingency plans are put to use when \_\_\_\_\_

Risks are not clear

**Risks become a reality 305**

Project risks

Risk Mitigated



23. Everyone involved in the software process managers, software engineers and customers in \_\_\_\_\_ activities.

**Risk analysis and management 305**

Risk identification and analysis

Risk identification only

Risk identification and management

24. The amount of training time needed for a new user is called \_\_\_\_\_

Reliability

Recoverability

Availability

**User-friendliness 368**

25. In Microsoft Project, every unit of work, which consumes effort, time, and money, is called as \_\_\_\_\_

Work unit

Activity

Work unit and Activity

**Task 370**

26. \_\_\_\_\_ in a task is defined as an abrupt and sudden interruption in the planned schedule

**A split 385**

A schedule

Split and Schedule

Neither Split nor Schedule

27. \_\_\_\_\_ committee is set up to monitor implementation committee

Implementation department

Implementation

**Implementation coordination 404**

Configuration

28. Which of the following is not a project Player?

Senior Manager

Project Manager

Customer

**End-User 9**

29. The widespread use of silicon-based microprocessor occurs in which phase of the software evolution?

**Third phase 59**

Fourth phase

Second phase

Fifth phase

30. The project management process groups are ... activities.

**Discrete 132**

One time

Iterative

Overlapping

31. There are ... main types of Work Break down Structure (WBS).

4

3 251

2

5

32. The activity that distributes estimated effort across the planned project duration by allocating the effort to specific software engineering tasks is called...

Cost management

**Project schedule 284**

Effort management

Activity management

33. The ISO quality assurance standard that applies to software engineering is

**ISO 9000 359**

ISO 9001

ISO 9002

ISO 9003

34. If P is risk probability, L is loss, and then Risk Exposure (RE) is computed as...

$RE = P/L$

$RE = P + L$

$RE = P * L$

$RE = 2 * P * L$

35. Degree of uncertainty that the product will meet its requirements and be fit for its intended use is called...

**Performance risk 348**

Cost risk

Schedule risk

Support risk

36. Which of the following is not a size metric?

LOC

Function count

Program length

Cyclomatic complexity

37. A key concept of quality control is that all work products ...

Are delivered on time and under budget

Have complete documentation

**Have measurable specification for process outputs 359**

Are thoroughly tested before delivery to the customer

38. Number of clauses used in ISO 9001 to specify quality system requirements are ...

15

**20**

25

28

39. How many risk stages are there in risk management plan?

2

**3**

4

5

40. Project Risk Management includes all of the following processes except ...

Risk Monitoring and Control

Risk Identification

**Risk avoidance 42**

Risk analysis

## Subjective

**42. Write down the formula to calculate initial development effort using Intermediate COCOMO technique 02.**

**Ans:** The last step in calculating effort by using the COCOMO technique is to substitute the values of lines of code and effort constants in the following formula:  $E_i = a_1 * (KLOC)^{a_2}$

In the formula,  $E_i$  is the effort for a project. The effort constants,  $a_1$  and  $a_2$  depend on the type of project being developed.

**43. How can material resources rate is calculated?02**

**44. How is validation criteria helpful in optimal use of resources?02**

**Ans: Validation Criteria:** you also determine the validation criteria for time and effort allocation in a software project. Determining the validation criteria allows you to ensure that the optimal level of resources is available for a particular activity. Suppose 5 people are assigned to an activity that requires an effort of 3.5 person days. This means resources allocated are more than the actual requirement.

**45. List the names of Tasks of Controlling Process03**

**Ans: Controlling Process Tasks** 1. Integrated Change Control 2. Scope Verification 3. Scope Change Control 4. Schedule Control 5. Cost Control 6. Quality Control 7. Performance Reporting 8. Risk Response Control

**46. What type of information WBS document contains? 03**

**Ans:** The information contained in the WBS can help a Program Manager develop a statement of work that describes what products or services are to be delivered.

**47. What activities are involved in Risk Management? 03**

**Ans:** The steps of risk management involve risk identification, risk analysis, and risk mitigation. Risk identification involves identifying risks. Risks are identified after discussion with team members about the requirements documents, available technology, resources, and other project-related factors.

**49. In Delphi technique an estimation activity meeting, how many distinct groups of people need to be present discuss in details.05**

**Ans:** The Delphi technique has eight basic steps: 1. Identify the terms that need to perform the estimation activity. In an estimation activity meeting, three distinct groups of people need to be present. *Estimation experts: Estimation coordinator: · Author:*

## 50. List the usefulness of WBS.05

**Ans:** Usefulness:– Should define the context of the project and clarifies the work – Should communicate project scope to all stakeholders in terms of the work to be completed – Is “in sync” with the scope statement and project schedule – Implies and allows for continual improvement/update o

## 51. What is Quality Control Myths? Discuss two myths identified by Cobb and Mills.05

Cobb and Mills (1990) list several of these myths, and suggest methods of combating them. Two of the more prevalent myths identified by Cobb and Mills are described below.

**Myth: Quality costs money.** This is one of the most common myths (not only in software development). In fact, quality in software usually saves money. Poor quality breeds failure. There is a positive correlation between failures and cost in that it is more expensive to remove execution failures designed into software than to design software to exclude execution failures.

**Myth: Software failures are unavoidable.** This is one of the worst myths because the statement is partly true, and is therefore often used as an excuse to justify poor quality software. The claim that ‘there is always another bug’ should never be a parameter in the design or implementation of software.

## 52. Suppose you are working on a large scale construction project. What will be the major cost management factors and show how will you map them with above mentioned project? The example project that you can consider is the construction of flyovers at city level.05

**Ans: Costs and Cost Management**

Project Cost Management includes the processes required to ensure that the project is completed within the approved budget. ⇒ **Resource Planning**—determining what resources (people, equipment, materials and what quantities of each should be used to perform project activities. ⇒ **Cost Estimating**—developing an approximation (estimate) of the costs of the resources needed to complete project activities. ⇒ **Cost Budgeting**—allocating the overall cost estimate to individual work activities. ⇒ **Cost Control**—controlling changes to the project budget.

## 41. What type of SQA activities are described in SQA Plan?02

**Ans:** There are a large number of tasks involved in SQA activities.

These include:

- i. Formulating a quality management plan ii. Applying software engineering techniques
- iii. Conducting formal technical reviews iv. Applying a multi-tiered testing strategy
- v. Enforcing process adherence vi. Controlling change vii. Measuring impact of change
- viii. Performing SQA audits ix. Keeping records and reporting

## 42. A project has five phases, some of them are sequential and some are non sequential, list which phases are sequential and which are non sequential? 02

**Ans:** A project has five phases. Here's a brief summary of each:

**Sequential:** Initiation, Closing

**Non sequential:** ⇒ Planning ⇒ Executing ⇒ Controlling

## 44. Software project scheduling is an activity that distributes estimated effort across the planned project duration by allocating the effort to specific software engineering tasks. What are the two different perspectives of scheduling software engineering projects02?

**Ans:** Scheduling for software engineering projects can be viewed from two rather different perspectives. In the first, an end-date for release of a computer-based system has already (and irrevocably) been established the software organization is constrained to distribute effort within the prescribed time frame. The second view of software scheduling assumes that rough chronological bounds have been discussed but the end-date is set by the software engineering organization. Effort is distributed to make best use of resources and an end-date is defined after careful analysis of the work. Unfortunately, the first situation is encountered far more frequently than the second.

#### **45. Describe the types of maintenance activities? 03**

**Ans:** There are four types of maintenance activities:

- Corrective • Adaptive • Perfective • Preventive

#### **46. Let us consider an automatic bank teller system.**

**a) The system has ability to communicate on-line between the remote automatic tellers and the bank's central computer in order to provide updated account information.**

**b) The method of transmission between the automatic teller and the central computer.**

**You are given two statements. You have to identify which statement is functional characteristic and which is not a functional characteristic? 03**

**Ans:** Let us consider an automatic bank teller system. The ability to communicate online between the remote automatic tellers and the bank's central computer in order to provide updated account information is a functional characteristic of the system. This will usually be defined during the requirements phase of the development cycle. However, the method of transmission between the automatic teller and the central computer is not a functional characteristic of the system, as this is internal to the design and implementation of the system and is not apparent to the user. The method of transmission, including the communications protocol, will usually be defined during the design phase of the development of the system.

#### **47 List at least five terms used by the planning process.3**

**Ans:** 1. Scope Planning 2. Scope Definition 3. Activity Definition 4. Activity Sequencing 5. Activity Duration Estimating 6. Resource Planning 7. Cost Estimating 8. Cost Budgeting Risk Planning 9. Schedule Development 10. Quality Planning 11. Communications Planning 12. Organization Planning 13. Staff Acquisition 14. Procurement Planning 15. Project Plan Development.

**48. Program Evaluation and Review Techniques (PERT) is a probabilistic technique to estimate the time, which criteria used by PERT to estimate the time.03**

**49. Elaborate the concept of Product Operation Factors and explain all Product Operation Factors.05**

**Ans: Time Estimates in PERT**

PERT is a probabilistic technique that uses three time estimates: It assumes that activity times are represented by a probability distribution. To finish an activity, it bases the probability distribution of activity time on three time estimates:

- Optimistic time • Pessimistic time • Most likely time

The optimistic time is the shortest time period within which an activity can end if everything goes well.



**50. In a customized insurance project, there are four modules. The total effort estimate of the modules is 3.0 KLOC. The management has identified four cost driver attributes with the respective multiplying factors that might affect the project most. In this situation, the values of  $a_1$  and  $a_2$  are 3.2 and 1.05, respectively, the project is organic. Calculate the initial effort estimate.**

$$E_i = a_1 (KLOC)^{a_2}$$

$$E_i = 3.2 * 31.05$$

$$E_i = 3.2 * 3.16$$

$$E_i = 10.11$$

The values assigned to the cost driver attributes that are applicable to a particular software application are displayed in Table 2. According to the table, the time to execute a software program is of high importance. Therefore, the attribute TIME is assigned a value of 1.35. In contrast, the software application does not require a very high analyst involvement. Therefore, the value assigned to ACAP is very low or 0.95. Using the same logic, the values for other cost driver attributes are assigned.

**51. To reschedule an incomplete task in Microsoft project, what steps you should perform?**

**Ans:** Microsoft Project 2000 is a popular project management tool that also enables you to schedule and track your project plan. In Microsoft Project, every unit of work, which consumes effort, time, and money, is called a *task*. You use Microsoft Project to specify tasks and the expected duration of each task. Using the task-related information, Microsoft Project prepares a project schedule. The schedule displays a plan consisting of the start and end dates of each task. In addition, it plots a pictorial Gantt chart. The Gantt chart view depicts the extension of tasks across days along with the corresponding resources.

**52. Suppose you are working as a project manager in a software company. As we know project can be compared to a large system and a large system consists of multiple, independent subsystems that achieve a common goal. Similarly, a project consists of small, independent tasks.**

**As a project manager, which steps you will follow to create a Work Breakdown Structure?**

**Ans: Creating a Work Breakdown Structure**

A project can be compared to a large system. A large system consists of multiple, independent subsystems that achieve a common goal. Similarly, a project consists of small, independent tasks. Each task can be subdivided into sub tasks. For example, in a general software project, a task is to perform project analysis. You may also consider studying the organizational objectives and preparing a project proposal to present to the client. Therefore, in a project analysis task, there are three subtasks. A subtask is also known as a work package. A work package is a unit-level entity in a project system.

You can create a WBS by following the three steps listed below. These are general steps, and they can vary in relation to an individual or an organization.

**a) Brainstorm to arrive at board tasks for a project**

**b) Refine the board tasks**

**c) Categorize tasks into logical task headers**