CS615 Final Term

All Past Papers Subjective

Solved by umair sid

Question#1
Define the SAFETY RISKS AND HAZARDS? 5 Marks
ANS PG 328,353

Software safety and hazard analysis [LEV95] are software quality assurance activities that focus on the identification and assessment of potential hazards that may affect software negatively and cause an entire system to fail. If hazards can be identified early in the software engineering process, software design features can be specified that will either eliminate or control potential hazards

Question#2
Define the importance Human resource management in the terms of the Software Mangemet?
ANS   PG 40

Project Human Resource Management includes the processes required to make the most effective use of the people involved with the project. It includes all the project stakeholders—sponsors, customers, partners, and individual contributors. Following are some major processes:
Organizational Planning—identifying, documenting, and assigning project roles, responsibilities, and reporting relationships.

- Staff Acquisition—getting the human resources needed assigned to and working on the project.
- Team Development—developing individual and group competencies to enhance project performance.

These processes interact with each other and with the processes in the other knowledge areas as well. Each process may involve effort from one or more individuals or groups of individuals, based on the needs of the project.

Question#3
Define the Risk & Change Management Concepts ?
ANS PG 334

Risk analysis and management are a series of steps that help a software team to understand and manage uncertainty. Many problems can plague a software project. A risk is a potential problem - it might happen, it might not But regardless of the outcome, it's a really good idea to identify it, assess its probability of occurrence, estimate its impact, and establish a contingency plan should the problem actually occur. Any project can encounter uncertainties in the form of increased costs, schedule delays, and diminished qualities. Unless tackled, these uncertainties can lead to major project disasters. The uncertainties encountered during project execution are the potential project risks. Every software project has to grapple with the new risks threatening information security along with the conventional risks, such as hardware failure, time and cost escalation, defects, or resource crunch.Risk can be defined as the possibility of loss. Risk arises due to the inability to achieve objectives within defined cost, schedule, and technical constraints. Risk management focuses the project manager's attention on those portions of the project most likely to cause trouble and compromise participants' win conditions. In other words, risk management is a set of actions that helps the project manager plan to deal with uncertain occurrences. It is through risk management that project managers assess risks and manage to reduce risks to an acceptable level.

Question#4
Explain the WBS?
ANS   PG 241
Work breakdown structure (WBS) is a technique to decompose the project for the purpose of management and control. It provides the framework for organizing and managing the work. The WBS is commonly used at the beginning of a project for defining project scope, organizing Gantt schedules and estimating costs It lives on, throughout the project, in the project schedule and often is the main path for reporting project costs.

WBS includes activities like management, procurement, installation, software development etc.Many of the WBS development tasks are derived from the development method that will be used, and from the design and architecture of the system. WBS is related to planning and scheduling a project .It is a functional decomposition of the tasks of the project.

Question#5
Define the disadvantages of the SLOC?
ANS PG 230
Despite being accurate in providing figures to calculate the effort required for a project, the SLOC technique has a drawback. *The SLOC technique is language-dependent. The effort required to calculate source lines of code may not be the same for all languages.* For example, to conceive and write 8 lines of code that accomplish a task in the assembly language may require 15 minutes. However, you may need only five
minutes to complete the same lines of code if it is written in Visual Basic
Question#6
Define the Project scheduling?
ANS PG 284
Software project scheduling is an activity that distributes estimated effort across the planned project duration by allocating the effort to specific software engineering tasks. It is important to note, however, that the schedule evolves over time. During early stages of project planning, a *macroscopic schedule* is developed. This type of schedule identifies all major software engineering activities and the product functions to which they are applied. As the project gets under way, each entry on the macroscopic schedule is refined into a *detailed schedule.* Here specific software tasks (required to accomplish an activity) are identified and scheduled.

Question#7
 Define the SQA Concept?
ANS PG 121
SQA is the process of evaluating the quality of a product and enforcing adherence to software product standards and procedures. It is an umbrella activity that ensures conformance to standards and procedures throughout the SDLC of a software product.

Question#8

Write the Over view about RISK REFINEMENT?
ANS PG 326
During early stages of project planning, a risk may be stated quite generally. As time passes and more is learned about the project and the risk, it may be possible to refine the risk into a set of more detailed risks, each somewhat easier to mitigate, monitor, and manage One way to do this is to represent the risk in condition-transition-consequence (CTC) II format [GLU94). That is, the risk is stated in the following form:
Given that <condition> then there is concern that (possibly) <consequence>.
Using the CTC format for the reuse risk noted in Section 6.4.2, we can write: Given that all reusable software components must conform to specific design standards and that some do not conform, then there is concern that (possibly) only 70 percent of the planned reusable modules may actually be integrated into the as-built system, resulting in the need to custom engineer the remaining 30 percent of components

Question#9
Draw the Product Orientation table According to the WBS?
ANS PG 253
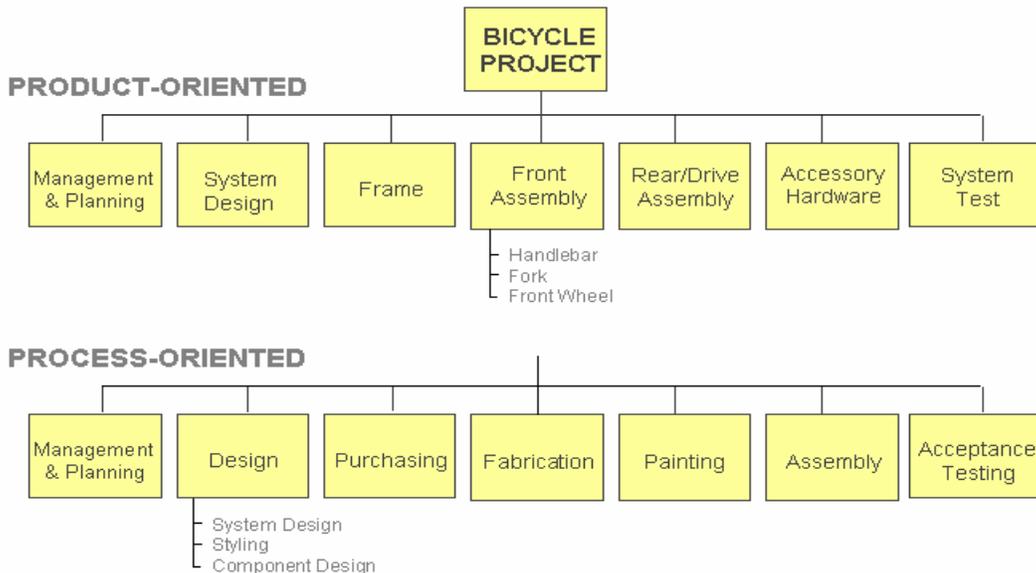
Question#10
 Define the Product risk ? 5 makrks
ANS PG 308

Product risks crop up in the form of changing requirements during product development. Incomplete and unclear requirements are a risk to the product during development.Similarly, problems in meeting design specifications can also be categorized as risk to product development. Risks could arise if the project deliverables or objectives are not clearly defined or if technical data is missing. The possibility of several alternatives at any given time during the project is also a cause of concern. If errors are not recognized during the design phase, they could turn into risks for the project. Similarly, risks could arise due to the size and complexity of the product or while achieving client acceptance of the product

Question#11
List the names of inputs to team development?Marks 2

ANS PG 207
Inputs to Team Development
i. Project staff. The staff assignments implicitly define the individual competencies and team competencies available upon which to build.
ii. Project plan. The project plan describes the technical context within which the team operates.
iii. Staffing management plan.
iv. Performance reports. Performance reports provide feedback to the project team about performance against the project plan.
v. External feedback. The project team must periodically measure itself against the expectations of those outside the project.

Question#12
What are the software risk components? Marks 2

ANS PG 317
Although there has been considerable debate about the proper definition for software risk, there is general agreement that risk always involves two characteristics [HIG 95]:
· Uncertainty - the risk may or may not happen; that is, there are no 100 % probable risks.

· Loss - if the risk becomes a reality, unwanted consequences or losses will occur. When risks are analyzed, it is important to quantify the level of uncertainty and the degree of loss associated with each risk. To accomplish this, different categories of risks are considered. Project risks threaten the project plan. That is, if project risks become real, it is likely that project schedule will slip and that costs will increase. Project risks identify potential budgetary, schedule, personnel (staffing and organization), resource, customer, and requirements problems and their impact on a software project.

Question#13
What is meant by constraints and what types of constraints are added to the tasks of MS Project? Marks: 2

ANS PG 376
Adding Constraints to Tasks
Constraints are defined as1illitations that negatively affect the schedule and quality of a project. Some of the typical project constraints are mentioned below:

☐ Duration of a project
☐ Resources of a Project
☐ Performance goals of a project

A constraint also affects other constraints. For example, you may need more resources if you reduce the project duration. You may also have to forgo some of the goals and features of the project if you decide to reduce the project duration. Therefore, it is important that you decide the tradeoff judiciously. In Microsoft Project, you can specify constraints as limitations that are enforced on a task. For example, you can specify that a task must start on a particular date or not finish later than a particular date. Therefore, schedule-related constraints are available in Microsoft Project.

· As soon as possible (ASAP)

· As late as possible (ALAP)

· Start no later than (SNLT)

- Finish on later than (FNLT)
- Start no earlier than (SNET)
- Finish no earlier than (FNET)
- Must start on (MSO)
- Must finish on (MFO)

Question#14
What acts as bridges between software engineering and software design? Marks 2

ANS

It acts as the bridge between the real world needs of users, customers, and other constituencies affected by a software system, and the capabilities and opportunities afforded by software-intensive technologies.

http://www.computing.open.ac.uk/Themes/READ

Question#15
Write names of six methods of requirements elicitation for software? Marks3

ANS PG 97

Requirements Elicitation for Software

1. Initiating the Process
2. Facilitated Application Specification Techniques
3. Quality Function Deployment
4. Use Cases
5. Analysis Principles
6. Software Prototyping

Question#16
As a project manager, how will you deal with risks in projects? Marks3

ANS PG 304

Risk is defined as the possibility of loss. It is the inability to achieve program objectives within defined cost, schedule, and technical constraints. Risk management is a set of actions that helps the project manager plan an approach to deal with uncertain occurrences.

Question#17
What are outputs that come from staff acquisition? Marks: 3

ANS PG 206

Outputs from Staff Acquisition
i. Project staff assigned. The project is staffed when appropriate people have been reliably assigned to work on it. Staff may be assigned full time, part time, or variably, based on the needs of the project.
ii. Project team directory. A project team directory lists all the project team members and other stakeholders. The directory may be formal or informal, highly detailed or broadly framed, based on the needs of the project

Question#18
How will you explain the concept of tracking the project plan? Marks: 5

ANS PG 390
Tracking a Project Plan
Project management is a multiple-phase undertaking. The first phase is the project initiation or the project planning phase. This phase is followed by the project tracking phase. Finally, you wrap up a project with the-project-end phase. Project tracking is an extremely in important activity in an organization. Unless a project is tracked effectively, it might never come close to termination. Project tracking also ensures strict adherence to project plans, requirements, and schedules.

Question#19
What is functional decomposition? Elaborate it with the perspective of WBS. Marks: 5
ANS PG 267
The functional decomposition of a software project is a division of the system into its operational components as they are seen by the user. Functional decomposition is part of the requirements phase of a project. The objective of this phase is to define air the characteristics of the system from the user's perspective.
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 or the system.

Question#20
Discuss the concept of quality. Elaborate it with respect to what, who, why, and what are the steps for quality. Marks: 5

Quality Concept

What is it? It's not enough to talk the talk by saying that *soft* ware quality is important, you have to (1) explicitly define what is meant when you say 'software quality, (2) *create* a set *of* activities that will help ensure that every software engineering Work product exhibits high quality, (3) perform quality assurance activities on every software project, (4) use metrics to develop strategies to improving your software process and as a consequence the quality *of.* the end product.

Who does it? Everyone involved in the software engineering process is responsible for quality.

Why is it important? You can do it right, *or* you can do it over again. If a software team stresses quality in all software engineering activities, it reduces the amount of rework that it must do that results in lower costs, and more importantly,improved time-to-market.

What are the steps? Before software quality assurance activities can be initiated,it is important to define 'software quality' at a number of different levels of abstraction, Once you understand what quality is, a software team must identify a set of SQA activities that will filter errors out of work products before they are passed on.

Question#21
 How does intermediate COCOMO differ from Basic COCOMO? Give at least two differences. (6)

The **basic COCOMO** technique estimates the effort and cost of a software project by using only the lines of code. You, use basic COCOMO when you need a rough estimate of effort, such as during maintenance projects. This is because in such projects, a majority of the work is already completed. Estimating the effort in the basic COCOMO technique involves three steps.
1. Estimating the total delivered lines of code
2. Determining the effort constants based on the type of the project
3. Substituting values for lines of code and effort constant in a formula

Intermediate COCOMO
Calculation of effort by using the intermediate COCOMO technique involves an additional step of calculating the effort adjustment factor (EAF). The effort adjustment factor is calculated by assigning ratings to 15 cost driver attributes. These cost driver attributes relate to the various aspects of a

software project, such as project, product, personnel, and computer attributes. Using the intermediate COCOMO technique, you can accurately estimate effort and cost required for a project. Accurate estimates are very helpful to start new development projects.

Question#22
Explain why software quality assurance organization should be independent of the development organization? (9)
ANS PG 361
Software Quality Assurance
Even the most jaded software developers will agree that high-quality software is an important goal. But how do we define quality? A wag once said, 'Every program does something right, it just may not be the thing that we want it to do.'Many definitions of software quality have been proposed in the literature. For our purposes, *software quality* is defined as:
Conformance to explicitly stated functional and performance requirements, explicitly documented development standards, and implicit characteristics that are expected of all professionally developed software.
There is little question that this definition could be modified or extended. In fact, a definitive definition of software quality could be debated endlessly. For the purposes of this book, the definition serves to emphasize three important points:
1. Software requirements are the foundation from which quality is measured. Lack of conformance to requirements is lack of quality.
2. Specified standards define a set of development criteria that guide the manner in which software is engineered. If the criteria are not followed, lack of quality will almost surely result.
3. A set of implicit requirements often goes unmentioned (e.g., the desire for ease of use and good maintainability). If software conforms to its explicit requirements but fails to meet implicit requirements, software quality is suspect.

Question#23
Using yours knowledge of 'Work Breakdown Structures?? (5)
ANS PG 242
WBS is a definition of a project in terms of its work or a deliverable-
oriented grouping of project elements that organizes and defines the total
scope of the project. Each descending level represents an increasingly
detailed definition of the project's work. It's an outline of the work of the
project, not the work itself, created by those doing the work – that may
include all functional stakeholders.

Question#24
What tools are available for creating WBS?
ANS PG 243
WBS as a Project Management Tool
A WBS is a valuable management tool that is used throughout all life-cycle
phases to:
a. Manage Risk
It helps in managing risk by providing insight into technical aspects of
program management.
b. Manage Costs
A WBS can be used to help make program management decisions.
For example, if the costs of an element in the WBS are too high, the WBS
can be used to identify possible tradeoffs. Identifying and analyzing
tradeoffs can help the manager decide how best to stay within budget.
c. Assign Work
The WBS is also useful for determining an acquisition strategy and/or
assigning work. The information contained in the WBS can help a Program
Manager
d. Schedule and Track activities
A schedule of key events can be developed for each element in the WBS.
Completion of these key events is then tracked.
– Schedule and Track activities
– The work breakdown structure defines all tasks to be performed during the
development of the project.

Question#25
What three knowledge areas comprise the triple constraint of project management? Explain your answer (5)
ANS PG 29
In managing competing project requirements Project managers often talk of a triple constraint:
– Project scope
– Time and
– Cost
The relationship among these factors is such that if any one of the three factors changes, at least one other factor must change.
Simply put: project success means completing all project deliverables on *time,*
within *budget,* and to a level of *quality* that is acceptable to sponsors and stakeholders. The project manager must keep the team's attention focused on achieving these broad goals. Most people still want their projects to be on time, meet quality objectives, and not cost more than the budget. These form the classic time, quality, cost triangle. In fact if you have an unlimited budget and unlimited time, project management becomes rather easy. For most people, however, time and money are critical and that is what makes project management so important today. Project management is often summarized in a triangle. The three most important factors are time, cost and scope. These form the vertices with quality as a central theme

Question#26
What are the tasks that you perform in project closedown? (2)
ANS   PG 80
Prepare closedown report:
The project closedown report contains the results of the causal analysis that you do for the project. This contains an analysis of what went wrong, what went right, and what you could have done better in the software project.

Question#27
State any three benefits of weekly status report (2)
ANS PG 64
    1. Activities during the report period
    2.   Activities planned for next week

3. Problems

Question#26
List the features of WBS? (2)
ANS PG 248
Features
– The WBS should contains 100% of the work defined by the scope or contract
– Development of WBS should involve the entire project team
– Should be deliverable-oriented
– Should captures all deliverables (Internal, External, Interim) in terms of work to be completed

Question#27
What are the advantages of function point (2)

ANS PG 231
Advantages of Using Function Points
Function points are language-and technology-independent. Therefore, you can use them to estimate any kind of project. They can also be used to estimate the effort, cost, and schedules of projects that use the Prototyping and Spiral models because such projects have uncertain user and project requirements. In addition, you can use function points as a project estimation technique when you anticipate changes in the middle of a project. These changes may disturb the estimates if, you had used SLOC to estimate the effort, cost, or size of a project. The FP estimation uses a subjective and holistic approach for project estimation. Consequently, the estimates calculated by using the FP are unlikely to be
incorrect

Question#28
what are the types of risk (2)
ANS PG 304
 A software project encounters two types of risks, development process risks and product- related risks. Some of the development process risks are developer errors, natural disasters, disgruntled employees, and poor

management objectives.Some project related risks are incomplete requirements, unclear project deliverables and objectives, and complexity of the product.

Question#29
How can material resource rate is calculated? (2)

ANS PG 389

when you assign a material resource to a task, Microsoft Project automatically calculates the total cost of the resource by using the material resource rate specified by you and the quantity of material required for completing the task.

Question#30
Define software process & explain it (3)

ANS PG 147

When you build a product or system, it's important to go through a series of predictable steps – a road map that helps you create a timely, high-quality result,The road map that you follow is called a 'software *process'* .
Software engineers and their managers adapt the process to their needs and then follow it. In addition, the people who have ties defined by the process requested the software play a role in the software process.

Question#31
Write down concept of "time and effort allocation" for project scheduling? (3)

ANS PG 288

Time and Effort Allocation
Each activity in a software project needs a certain amount of time and effort for completion. To manage the project, you assign start and end dates to each activity. You also need to allocate appropriate effort to each activity. Most software projects operate with time and effort constraints. Therefore, managing within the available resources is very important for a software project manager.

Question#32
When risk is considered in the context of software engineering what conceptual underpinning are always in evidence ?(3)

ANS PG 334
The future is our concern – what risks might cause the software project to go awry?
– Change is our concern -how will changes in customer requirements, development technologies, target computers, and all other entities connected to the project affect timeliness and overall success?
– Last, we must grapple with choices - what methods and tools should we use,
how many people should be involved, how much emphasis on quality is "enough"?
Question#33
What is process line? How many ways a progress line can be displayed?(3)

ANS PG 390
Progress Lines
To track a project plan, you first view the progress of a project. You can view the progress of a project by applying progress lines to the tasks in the project. You can display progress lines in three ways; you can choose to display progress lines always at the current status of a project.
To do this, you need to select the Always display current progress lines check box in the Progress Lines dialog box.
The second way to display project lines is to display them on selected dates of a project plan.Finally, you can display progress lines at regular intervals such as daily, weekly, or monthly.1f you choose daily, you can further define its preciseness by choosing everyday, every second, or every third day, and so on

Question#34
List the project planning key tasks used in planning physics? (3)

ANS PG 143
Project Planning: Key Tasks
1. Set goal and scope
2. Select lifecycle

3. Set organization team form
4. Start team selection
5. Determine risks
6. Create WBS
7. Identify tasks
8. Estimate size
9. Estimate effort
10. Identify task dependencies
11. Assign resources
12. Schedule work

Question#35
What are the output that comes from staff acquisition (3)

ANS PG 206
Outputs from Staff Acquisition
i. Project staff assigned. The project is staffed when appropriate people have been reliably assigned to work on it. Staff may be assigned full time, part time, or variably, based on the needs of the project.
ii. Project team directory. A project team directory lists all the project team members and other stakeholders. The directory may be formal or informal, highly detailed or broadly framed, based on the needs of the project.

Question#36
Why we use WBS?(5)

ANS PG 243
Uses of WBS
– Defines 100% of the scope and can communicate the scope of the project without the presence of the scope statement or document.
– Communicates effectively to all stakeholders
– Defines and clarifies
– Boundaries (Life cycle of the project – not the product)
– Deliverables
– Refines Scope

Defines scope in project management language (perhaps down to work package level which may lead to development of project schedule)
It's not a single document that can be mistaken for the project plan, schedule or scope statement

Question#37
Difference between reactive & proactive risk management (5)

ANS PG 316,350
REACTIVE VS. PROACTIVE RISK STRATEGIES
Reactive strategies have been laughingly called the "Indiana Jones School of risk management" [THO92]. In the movies that carried his name, Indiana Jones, when faced with overwhelming difficulty, would invariably say, "Don't worry, I'll think of something!" Never worrying about problems until they happened, Indy would react in some heroic way.
Sadly, the average software project manager is not Indiana Jones and the members of the software project team are not his trusty sidekicks. Yet, the majority of software teams rely solely on reactive risk strategies. At best, a reactive strategy monitors the project for likely risks. Resources are set aside to deal with them, should they become actual problems. More commonly, the software team does nothing about risks until something goes wrong. Then, the team flies into action in an attempt to correct the problem rapidly. This is often called a fire fighting mode. When this fails, "Crisis Management" [CHA92] takes over, and the project is in real jeopardy.
A considerably more intelligent strategy for risk management is to be proactive. A proactive strategy begins long before technical work is initiated. Potential risks are identified, their probability and impact are assessed and they are ranked by importance. Then, the software team establishes a plan for managing risk. The primary objective is to avoid risk, but because not all risks can be avoided, the team works to develop a contingency plan that will enable it to respond in a controlled and effective manner.

Question#38
Prepare simple risk analysis table? (5)
ANS PG 342

Risk analysis table

Risk Description	Probability of Occurrence (0 – 1)	Impact on Project (1 – 10)	Risk Factor (Probability x Impact)

Question#39

Give the name of configuration control tools?

ANS PG 115

Configuration control tools, including:

☐ Automatic version control and

☐ Change control tools

☐ Monitoring, auditing and registration support utilities

☐ Storage facilities; a safe repository for all approved configuration items, including:

– On-site storage for the day to day development process

– Off-site storage for catastrophe recovery.

Question#40

Explain ESTIMATION? 2 Marks

ANS PG 222

Estimation of factors such as cost, effort, risks, and resources is crucial. It gives you a fair idea of the size of the project. You can use the information about size to estimate the cost, effort, and duration of the project. This further helps plan for resources and schedule the project.

Question#41

Explain WBS? 2 Marks

ANS PG 242

WBS is a definition of a project in terms of its work or a deliverable-oriented grouping of project elements that organizes and defines the total scope of the project.

Each descending level represents an increasingly detailed definition of the project's work. It's an outline of the work of the project, not the work itself, created by those doing the work – that may include all functional

stakeholders.

Question#42
Explain Quality Control? 2 Marks
ANS PG 258

Variation control may be equated to quality control. But how do we achieve quality control? Quality control involves the series of inspections, reviews, and tests used throughout the software process to ensure each work product meets the requirements placed upon it.Quality control includes a feedback loop to the process that created the work product. The combination of measurement and feedback allows us to tune the process when the work products created fail to meet their specifications. This approach views quality control as part of the manufacturing process.

Question#43
Risk and management? 2 Marks

ANS PG 316

Risk analysis and management are a series of steps that help a software team to understand and manage uncertainty. Many problems can plague a software project A risk is a potential problem - it might happen, it might not But regardless of the outcome, it's a really good idea to identify it, assess its probability of occurrence, estimate its impact, and establish a contingency plan should the problem actually occur.

Question#44
What is COCOMO? 3 Marks
ANS PG 233

The COCOMO technique is another popular estimation technique. Dr: Barry Boehm propounded this technique in 1981. COCOMO uses cost driver attributes to calculate the effort and duration of a project. The COCOMO technique has three levels of implementation. With each level, the complexity of the model increases. The levels of the COCOMO technique are:
i. Basic
ii. Intermediate

iii. Advanced

Question#45
Explain SLOC? 3 Marks
ANS PG 229

The SLOC technique is an objective method of estimating the size because there are no multiple ways of calculating the lines of code. Therefore, the effort estimate is close to being accurate. This technique includes the calculation of lines of code, documentation of pages, inputs, outputs, and components of a software program. Components are again of multiple types, such as reports, screens, and files. The SLOC technique is also used to directly calculate the effort to be spent on a project.

Question#46
Explain Project Scheduling? 3 Marks

ANS PG 284,285

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

Question#47
RISK REFINEMENTS? Marks 3

ANS PG 325
RISK REFINEMENT
During early stages of project planning, a risk may be stated quite generally. As time passes and more is learned about the project and the risk, it may be possible to refine the risk into a set of more detailed risks, each somewhat easier to mitigate, monitor, and manage. One way to do this is to represent the risk in condition-transition-consequence (CTC) II
format [GLU94). That is, the risk is stated in the following form:
Given that <condition> then there is concern that (possibly) <consequence>.
Using the CTC format for the reuse risk noted in Section 6.4.2, we can write:

Given that all reusable software components must conform to specific design standards and that some do not conform, then there is concern that (possibly) only 70 percent of the planned reusable modules may actually be integrated into the as-built system, resulting in the need to custom engineer the remaining 30 percent of components.

Question#48
What is Quality Assurance explain Marks 5

ANS PG 361
Quality Assurance
Quality assurance consists of the auditing and reporting functions of management. The goal of quality assurance is to provide management with the data necessary to I be informed about product quality, thereby gaining insight and confidence that product quality is meeting its goals. Of course, if the data provided through quality assurance identify problems, it is management's responsibility to address the problems, and apply the necessary resources to resolve quality issues.

Question#49
What is RISK PROJECTION Marks 5

ANS PG 321
RISK PROJECTION
Risk projection, also called risk estimation, attempts to rate each risk in two ways-the likelihood or probability that the risk is real and the consequences of the problems associated with the risk, should it occur. The project planner, along with other managers and technical staff, performs four risk projection activities:
(1) Establish a scale that reflects the perceived likelihood of a risk,
(2) Delineate the consequences of the risk,
(3) Estimate the impact of the risk on the project and the product, and
(4) Note the overall accuracy of the risk projection so that there will be no misunderstandings.

Question#50
List the names of inputs to team development. Marks: 2

Inputs to Team Development
i. Project staff. The staff assignments implicitly define the individual competencies and team competencies available upon which to build.
ii. Project plan. The project plan describes the technical context within which the team operates.
iii. Staffing management plan.
iv. Performance reports. Performance reports provide feedback to the project team about performance against the project plan.
v. External feedback. The project team must periodically measure itself against the expectations of those outside the project.

Question#51
Write down concept of "time and effort allocation" for project scheduling ? (3)

Time and Effort Allocation
Each activity in a software project needs a certain amount of time and effort for completion. To manage the project, you assign start and end dates to each activity. You also need to allocate appropriate effort to each activity. Most software projects operate with time and effort constraints. Therefore, managing within the available resources is very important for software project manager.

Question#52
When risk is considered in the context of software engineering what conceptual underpinning are always in evidence? (3)

When risk is considered in the context of software engineering, Charette's three conceptual underpinnings are always in evidence. The future is our concern – what risks might cause the software project to go awry? Change is

our concern -how will changes in customer requirements, development technologies, target computers, and all other entities connected to the project affect timeliness and overall success? Last, we must grapple with choices - what methods and tools should we use, how many people should be involved,how much emphasis on quality is "enough"?

Question#53
What are the software risk components? Marks2

ANS PG 319
The Air Force approach requires that the project manager identify the risk drivers that affect software risk components. Performance, cost, support, and schedule. In the context of this discussion, the risk components are defined in the following manner:
Performance risk - the degree of uncertainty that the product will meet its requirements and be fit for its intended use.
· Cost risk - the degree of uncertainty that the project budget will be maintained.
· Support risk - the degree of uncertainty that the resultant software will be easy to correct, adapt, and enhance.
· Schedule risk - the degree of uncertainty that the project schedule will be maintained and that the product will be delivered on time.

Question#54
Write names of six methods of requirements elicitation for software?
Marks: 3

ANS PG 98
Requirements Elicitation for Software
1. Initiating the Process
2. Facilitated Application Specification Techniques
3. Quality Function Deployment
4. Use Cases
5. Analysis Principles
6. Software Prototyping

Question#55
How will you explain the concept of tracking the project plan? Marks5

Tracking a Project Plan
Project management is a multiple-phase undertaking. The first phase is the project initiation or the project planning phase. This phase is followed by the project tracking phase. Finally, you wrap up a project with the-project-end phase. Project tracking is an extremely in important activity in an organization. Unless a project is tracked effectively, it might never come close to termination. Project tracking also ensures strict adherence to project plans, requirements, and schedules.

Question#56
What is functional decomposition? Elaborate it with the perspective of WBS?Marks5

The functional decomposition of a software project is a division of the system into its operational components as they are seen by the user. Functional decomposition is part of the requirements phase of a project. The objective of this phase is to define air the characteristics of the system from the user's perspective.
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 or the system.

Question#57
State any three benefits of weekly status report (2)
1) Activities during the period
2) Activities plaaned for next week
3) Problems.

Question#58
List the features of WBS? (2)
ANS PG 227
First, it gives the management an idea about the size and complexity of the project.
Second, it helps in planning, scheduling, and monitoring a project realistically.This is possible because all the tasks in the project can be preformed measurable targets for each task.

Question#59
What are the advantages of function point (2)

ANS PG 231
Advantages of Using Function Points
Function points are language-and technology-independent. Therefore, you can use them to estimate any kind of project. They can also be used to estimate the effort, cost, and schedules of projects that use the Prototyping and Spiral models because such projects have uncertain user and project requirements. In addition, you can use function points as a project estimation technique when you anticipate changes in the middle of a project. These changes may disturb the estimates if, you had used SLOC to estimate the effort, cost, or size of a project. The FP estimation uses a subjective and holistic approach for project estimation.Consequently; the estimates calculated by using the FP are unlikely to be incorrect.

Question#60
What are the types of risk? (2)

ANS PG 304
 A software project encounters two types of risks, development process risks and product- related risks. Some of the development process risks are

developer errors, natural disasters, disgruntled employees, and poor management objectives.Some project related risks are incomplete requirements, unclear project deliverables and objectives, and complexity of the product.

Question#61
Why we use WBS?(5)

ANS PG 227
Using a WBS provides a number of benefits to the management and to the development teams.
First, it gives the management an idea about the size and complexity of the project.
Second, it helps in planning, scheduling, and monitoring a project realistically.This is possible because all the tasks in the project can be preformed measurable targets for each task.
To aid planning, scheduling, and monitoring a project, you can use tools such as:
– Program Evaluation and Review Techniques (PERT)
– Critical Path Method (CPM)
– Timeline charts
– Gantt charts
These tools use WBS as the fundamental basis for assessing resources to tasks, computing the number of days needed, and the cost required to complete the tasks.

Question#62
Prepare simple risk analysis table?(5)
ANS

Risk Description	Probability of Occurrence (0 – 1)	Impact on Project (1 – 10)	Risk Factor (Probability x Impact)

Remember me in your prayers.