



# UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

## End Semester Examination, July 2020

**Course: Software Quality Management**

**Program: B.Tech-CS-CSF**

**Course Code: CSEG3014**

**Semester: VI**

**Time**

**Max. Marks:**

### Test Canvas: End Semester Examination- Software Quality Management

The Test Canvas lets you add, edit and reorder questions, as well as review a test. [More Help](#)

Question Settings

You can edit, delete or change the point values of test questions on this page. If necessary, test attempts will be regraded after you submit your changes.

Description Dear students,

The end-semester examination of Software Quality Management has been scheduled on July 15, 2020, from 10 AM to 12 PM. The end semester quiz contains 60 questions, which involve 40 questions of 2 marks each and 20 questions of 1 marks each. While attempting, the marks of each question will be visible in the quiz. The duration of the quiz is 2 hours and there is no negative marking for incorrect answer.

Instructions

Total Questions 60

Total Points 100

Number of Attempts 38

Select: All None Select by Type: - Question Type - v

Delete and Regrade

Points

Update and Regrade

Hide Question Details



1. **Multiple Choice: The task involved in software quality...**

Points: 2

**Question**

The task involved in software quality engineering is:

**Answer**

Quality planning

Software verification and validation

Measurement of software quality

All of the mentioned

2. Multiple Choice: "From the user's perspective, the mea...

Points: 2

Question	"From the user's perspective, the meaning of software quality is "
Answer	<p>Conformance to process standards.</p> <p><input checked="" type="checkbox"/> Meeting with the expectations of the user.</p> <p>Customer's willingness to pay for software.</p> <p>None of the mentioned.</p>

 3. Multiple Choice: "According to ISO-9126(ISO, 2001), th...

Points: 2

Question	"According to ISO-9126(ISO, 2001), the_____subcharacteristic has been defined under reliability characteristic."
Answer	<p><input checked="" type="checkbox"/> Recoverability</p> <p>Security</p> <p>Operability</p> <p>Adaptability</p>

 4. Multiple Choice: "According to the Pareto principle, M...

Points: 2

Question	"According to the Pareto principle, M% of failures are caused by N% of faults. Here M and N are defined as:"
Answer	<p>"30,70"</p> <p>"70,30"</p> <p><input checked="" type="checkbox"/> "80,20"</p> <p>"20,80"</p>

 5. Multiple Choice: The cost of good quality is the sum o...

Points: 2

Question	The cost of good quality is the sum of
Answer	<input checked="" type="checkbox"/> Prevention cost and appraisal cost

Appraisal cost and Internal failure cost

Internal failure cost and external failure cost

Shipping damage cost and employee training cost

6. Multiple Choice: "If a customer raises a service reque..."

Points: 2

Question	"If a customer raises a service request during usage of a software due to failure of certain component, then cost associated with the repair of these components, comes under:"
Answer	<p>Internal failure cost</p> <p><input checked="" type="checkbox"/> External failure cost</p> <p>Appraisal cost</p> <p>Prevention cost</p>

7. Multiple Choice: Software testing is a \_\_\_\_\_...

Points: 2

Question	Software testing is a _____ technique.
Answer	<p>Defect prevention</p> <p><input checked="" type="checkbox"/> Defect reduction</p> <p>Defect containment</p> <p>None of the mentioned.</p>

8. Multiple Choice: Which of the following technique is u...

Points: 2

Question	Which of the following technique is used in damage control activity during defect containment?
Answer	<p>Hazard reduction</p> <p>Defect prevention</p> <p><input checked="" type="checkbox"/> Safe abandonment of products .</p> <p>None of the mentioned.</p>

9. Multiple Choice: Which of the following is a peer revi...

Points: 2

Question	Which of the following is a peer review technique?
Answer	<input checked="" type="checkbox"/> Inspection
	<input type="checkbox"/> Execution of software
	<input type="checkbox"/> Maintenance
	<input type="checkbox"/> All of the mentioned

 10. Multiple Choice: The software inspection process invol...

Points: 2

Question	The software inspection process involves _____ phase.
Answer	<input type="checkbox"/> Planning and preparation
	<input type="checkbox"/> Follow-up
	<input type="checkbox"/> Correction
	<input checked="" type="checkbox"/> All of the mentioned

 11. Multiple Choice: Which of the following is indirect so...

Points: 2

Question	Which of the following is indirect software quality measurement?
Answer	<input type="checkbox"/> The number of defects discovered.
	<input type="checkbox"/> Duration of the testing process.
	<input checked="" type="checkbox"/> Defect density
	<input type="checkbox"/> Time spent by programmers in a project.

 12. Multiple Choice: Which of the following does not affec...

Points: 2

Question	Which of the following does not affect the quality of the software?
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Answer

Employee

Quality objectives

Technology

 Market 13. Multiple Choice: Which of the following is a software ...

Points: 2

Question

Which of the following is a software quality metric?

Answer

Product metric

Project metric

 All of the mentioned

Process metric

 14. Multiple Choice: The cost associated with software dev...

Points: 2

Question

The cost associated with software development is a part of:

Answer

Product metric

None of the mentioned

 Project metric

Process metric

 15. Multiple Choice: The process metrics describe /\*\*/ d...

Points: 2

Question

The process metrics describe

Answer

Complexity of software.

 Effectiveness of software testing.

Size of software.

schedule of software development.

16. Multiple Choice: The total number of license months of...

Points: 2

Question	The total number of license months of software is computed as:
Answer	<input checked="" type="checkbox"/> Number of install licenses * Number of months in calculations
	<input type="checkbox"/> Number of install licenses
	<input type="checkbox"/> Number of install licenses + Number of months in calculations
	<input type="checkbox"/> Number of install licenses/Number of months in calculations

17. Multiple Choice: To achieve a low value of problem per...

Points: 2

Question	To achieve a low value of problem per user month in customer problem metrics
Answer	<input type="checkbox"/> Increase defect rate
	<input type="checkbox"/> Remove documentation of software
	<input checked="" type="checkbox"/> Increase the sale
	<input type="checkbox"/> Decrease testing effectiveness

18. Multiple Choice: Which of the following metric is meas...

Points: 2

Question	Which of the following metric is measured using customer's survey data:
Answer	<input type="checkbox"/> Defect density metric
	<input type="checkbox"/> Customer problem metric
	<input type="checkbox"/> Defect removal effectiveness
	<input checked="" type="checkbox"/> Customer satisfaction metric

Points: 2

## 19. Multiple Choice: Defect removal effectiveness is a typ...

Question	Defect removal effectiveness is a type of
Answer	<input checked="" type="checkbox"/> In-process quality metric. <input type="checkbox"/> Product metric <input type="checkbox"/> Process metric <input type="checkbox"/> All of the mentioned

 20. Multiple Choice: Which of the following indicator is u...

Points: 2

Question	Which of the following indicator is used to measures the number of defects that have remained unresolved for a long period of time?
Answer	<input type="checkbox"/> Defect removal rate <input checked="" type="checkbox"/> Defect age profile <input type="checkbox"/> Defect density <input type="checkbox"/> Defect detection efficiency.

 21. Multiple Choice: "Suppose, the number of defects in tw...

Points: 2

Question	"Suppose, the number of defects in two modules are 80 and 20. The line of code (LOC) in both modules are 10000 and 40000 respectively. Then, the cumulative defect rate of both modules per KLOC will be:"
Answer	<input type="checkbox"/> 0.0002 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 0.0008 <input type="checkbox"/> 4.25

 22. Multiple Choice: "In a certain duration, a software de...

Points: 2

Question	"In a certain duration, a software development team receives 1000 defects. The team delivered 200 fixes within the specified time and the remaining 800 defects are fixed after the specified maximum allowed time. The percentage of delinquent fixes will be:"
Answer	25

20

 400

80

 23. Multiple Choice: "Suppose, the total number of defects..."

Points: 2

Question	"Suppose, the total number of defects exists in a software are 100. Out of them, 75 defects are removed during the development phase. Then, defect removal effectiveness will be: "
Answer	<input checked="" type="checkbox"/> 300
	25
	75
	33.33

 24. Multiple Choice: "During the release-to-release compar..."

Points: 2

Question	"During the release-to-release comparison, if the defect rate in the current release is higher than the previous release without changing the testing effectiveness, then it means that"
Answer	<input checked="" type="checkbox"/> Quality perspective is negative.
	There is no need to perform more testing.
	Publish the next release
	None of the mentioned.

 25. Multiple Choice: Which of the following reliability mo...

Points: 2

Question	Which of the following reliability models use defect patterns of current software development to estimate the end product reliability.
Answer	Waterfall model
	None of the mentioned
	Static models



Dynamic models

26. Multiple Choice: "In Rayleigh model, the Probability d..."

Points: 2

Question "In Rayleigh model, the Probability density Function defines "

Answer Total number of defects in the software lifecycle.

Cumulative defect arrival pattern.

Defect rate over time.

None of the mentioned.

27. Multiple Choice: "In Rayleigh reliability modeling, it..."

Points: 2

Question "In Rayleigh reliability modeling, it has been assumed that the correlation between defect rate during the development phase and defect rate after software delivery to the client, is"

Answer Cannot be determined.

No correlation

Negative

Positive

28. Multiple Choice: Software reliability has been compute...

Points: 2

Question Software reliability has been computed with respect to

Answer Quality

Error

Time

None of the mentioned.

29. Multiple Choice: The Jelinski-Moranda model assumes th...

Points: 2

Question	The Jelinski-Moranda model assumes that
Answer	<p>The size of different faults are different.</p> <hr/> <p><input checked="" type="checkbox"/> The proposed fix does not introduce any new fault.</p> <hr/> <p>Fix time is very large.</p> <hr/> <p>None of the mentioned</p>

30. Multiple Choice: "Which of the following model assume ...

Points: 2

Question	"Which of the following model assume that different faults contribute unequally to failures,"
Answer	<p><input checked="" type="checkbox"/> Littlewood model</p> <hr/> <p>Goel-Okumoto imperfect debugging model</p> <hr/> <p>Rayleigh model</p> <hr/> <p>Musa-Okumoto logarithmic Poisson execution time model</p>

31. Multiple Choice: Which of the following is not an elem...

Points: 1

Question	Which of the following is not an element of the strategic quality plan?
Answer	<p>Include quality in the vision statement of the organization.</p> <hr/> <p>Understand the organization's view on quality.</p> <hr/> <p>Understand the strategic needs of customers.</p> <hr/> <p><input checked="" type="checkbox"/> None of the mentioned.</p>

32. Multiple Choice: A manager is monitoring the performan...

Points: 2

Question	A manager is monitoring the performance of its team members during software development to determine if the quality of their efforts is up to standards. The manager is engaged in _____ function.
Answer	<p>Organizing</p> <hr/> <p><input checked="" type="checkbox"/> Controlling</p>

Leading

Planning

33. Multiple Choice: Which of the following are primary el...

Points: 2

Question	Which of the following are primary elements of Total Quality Management?
Answer	<p>"Individual responsibility, incremental improvement, use of raw data"</p> <p><input checked="" type="checkbox"/> "Total employee involvement, continual improvement, use of data and knowledge"</p> <p>"Collective responsibility, continual improvement, random decision making"</p> <p>None of the mentioned</p>

34. Multiple Choice: The Quality plan document specifies ...

Points: 1

Question	The Quality plan document specifies
Answer	<p>quality standards</p> <p>quality specifications</p> <p>sequence of activities related to specific product</p> <p><input checked="" type="checkbox"/> All of the mentioned</p>

35. Multiple Choice: Zero defect management tool is used t...

Points: 1

Question	Zero defect management tool is used to
Answer	<p>plant new defects in the software</p> <p><input checked="" type="checkbox"/> Motivate employee to prevent mistakes</p> <p>ensure 100% bug-free software</p> <p>None of the mentioned</p>

36. Multiple Choice: Which of the following activity is no...

Points: 1

Question	Which of the following activity is not performed in the Software Quality Assurance process.
Answer	<p>Management plan</p> <p>Keeping reports and records</p> <p><input checked="" type="checkbox"/> Prediction of after release defects</p> <p>Conducting formal technical review</p>

 37. Multiple Choice: "In Statistical Quality Assurance, th...

Points: 1

Question	"In Statistical Quality Assurance, the information about defects is"
Answer	<p>hidden from management.</p> <p><input checked="" type="checkbox"/> categorized</p> <p>predicted</p> <p>None of the mentioned</p>

 38. Multiple Choice: Which of the following step is used i...

Points: 1

Question	Which of the following step is used in the quality improvement process?
Answer	<p>Reduce testing efforts</p> <p><input checked="" type="checkbox"/> Repeated review</p> <p>Test lately</p> <p>Increase sales of software products</p>

 39. Multiple Choice: Which of the following is an advantag...

Points: 1

Question	Which of the following is an advantage of using quality standards during software development?
Answer	

Ensure the quality of the product.

Achieve environmental goals.

Complying with government regulations.

All of the mentioned

40. Multiple Choice: Total Quality Management focus on /\*...

Points: 1

Question	Total Quality Management focus on
Answer	<input type="checkbox"/> supplier <input type="checkbox"/> All of the mentioned <input type="checkbox"/> Employee <input checked="" type="checkbox"/> Customer

41. Multiple Choice: A quality objective should be /\*\*/ ...

Points: 1

Question	A quality objective should be
Answer	<input checked="" type="checkbox"/> Time-based <input type="checkbox"/> Vague <input type="checkbox"/> Unrealistic <input type="checkbox"/> Immeasurable

42. Multiple Choice: Which of the following is not a princ...

Points: 1

Question	Which of the following is not a principle of ISO 9000 standard?
Answer	<input type="checkbox"/> Relationship management <input checked="" type="checkbox"/> Employee focused <input type="checkbox"/> Process approach

Engagement of people

43. Multiple Choice: Quality standards describes \_\_\_\_\_...

Points: 1

Question	Quality standards describes _____ to achieve while the project process standards defines _____ to achieve.
Answer	<p>"when, what"</p> <p><input checked="" type="checkbox"/> "what, how"</p> <p>"how, when"</p> <p>"how, where"</p>

44. Multiple Choice: Which of the following Quality Standa...

Points: 1

Question	Which of the following Quality Standard is used for Auditing?
Answer	<p><input checked="" type="checkbox"/> ISO 19011</p> <p>ISO 9001</p> <p>ISO 9004</p> <p>ISO 19140</p>

45. Multiple Choice: Software validation has been performe...

Points: 1

Question	Software validation has been performed using
Answer	<p><input checked="" type="checkbox"/> Testing</p> <p>Walkthrough</p> <p>Inspection</p> <p>All of the mentioned</p>

Points: 2

## 46. Multiple Choice: The major limitation of verification ...

Question	The major limitation of verification and validation is:
Answer	<p>Impracticality of testing all data.</p> <p>No absolute proof of correctness.</p> <p>Impracticality of testing all paths.</p> <p><input checked="" type="checkbox"/> All of the mentioned</p>

 47. Multiple Choice: Which of the following testing level ...

Points: 1

Question	Which of the following testing level focus on ensuring correct interfacing among software components?
Answer	<p>Blackbox testing</p> <p>Unit testing</p> <p><input checked="" type="checkbox"/> Integration testing</p> <p>None of the mentioned</p>

 48. Multiple Choice: The objectives of verification and va...

Points: 1

Question	The objectives of verification and validation are
Answer	<p>Correctness</p> <p>Consistency</p> <p>Sufficiency</p> <p><input checked="" type="checkbox"/> All of the mentioned</p>

 49. Multiple Choice: Software verification defines /\*\*/ ...

Points: 1

Question	Software verification defines
Answer	Are we building the right System/Product?

Are we building the System/Product rightly?

Both the mentioned

None of the mentioned

50. Multiple Choice: Who performs software validation? /\*...

Points: 1

Question	Who performs software validation?
Answer	<input checked="" type="checkbox"/> Testers
	<input type="checkbox"/> Business developer
	<input type="checkbox"/> Management of company
	<input type="checkbox"/> Designer

51. Multiple Choice: Which of the following is a type of f...

Points: 1

Question	Which of the following is a type of functional testing?
Answer	<input type="checkbox"/> Performance testing
	<input type="checkbox"/> Compliance Testing
	<input type="checkbox"/> Security Testing
	<input checked="" type="checkbox"/> Smoke Testing

52. Multiple Choice: \_\_\_\_\_ is carried out...

Points: 1

Question	_____ is carried out by the customer.
Answer	<input checked="" type="checkbox"/> Beta testing
	<input type="checkbox"/> Sanity testing
	<input type="checkbox"/> Smoke testing
	<input type="checkbox"/> All of the mentioned



53. Multiple Choice: Which of the following testing type m...

Points: 2

Question	Which of the following testing type makes small modifications in a program to evaluate the quality of already existing software test cases.
Answer	<p>Slice based testing</p> <hr/> <p><input checked="" type="checkbox"/> Mutation testing</p> <hr/> <p>Data flow testing</p> <hr/> <p>None of the mentioned</p>

 54. Multiple Choice: A modern testing tool should be /\*\*/...

Points: 1

Question	A modern testing tool should be
Answer	<p>flexible</p> <hr/> <p>traceable</p> <hr/> <p><input checked="" type="checkbox"/> All of the mentioned</p> <hr/> <p>easy to use</p>

 55. Multiple Choice: Which of the following is a dynamic t...

Points: 2

Question	Which of the following is a dynamic testing tool?
Answer	<p>Raxis</p> <hr/> <p>PVS-Studio</p> <hr/> <p>Kiuwan</p> <hr/> <p><input checked="" type="checkbox"/> Intel Inspector</p>

 56. Multiple Choice: \_\_\_\_\_ testing analyze the behavi...

Points: 2

Question	_____ testing analyze the behavior of the system when its resources are saturated
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Answer



Stress

Error-oriented

Concurrency

Integration

 57. Multiple Choice: Which of the following functionality ...

Points: 2

Question

Which of the following functionality is not supported by structural testing?

Answer

Data flow anomaly detection



Detection of missing functions.

Data flow coverage assessment

All of the mentioned

 58. Multiple Choice: Which of the following strategies are...

Points: 2

Question

Which of the following strategies are used to achieve software reliability:

i) Fault Avoidance

ii) Fault Tolerance

iii) Fault Detection

iv) Fault Deletion

Answer

ii and iii only

ii, iii and iv only

I, ii, iii and iv



I, ii, and iii only

 59. Multiple Choice: To achieve high predictive validity, ...

Points: 2

Question

To achieve high predictive validity, \_\_\_\_\_.

Answer



Input data should be reliable and accurate.

Wider confidence interval

Input data should be complex.

None of the mentioned

60. Multiple Choice: \_\_\_\_\_ is used...

Points: 2

Question

\_\_\_\_\_ is used for identification of potential bottlenecks that may prevent the product from satisfying its specifications under extreme loads.

Answer

Error seeding

Stress analysis

Concurrency analysis

None of the mentioned

Select: All None Select by Type: - Question Type -

Delete and Regrade

Points

Update and Regrade

Hide Question Details

← OK