Name:

**Enrolment No:** 



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, July 2020

Course: B.Tech Program: CCVT/GG Course: Software Quality Management. Course Code: CSEG3014 Semester: VI Time 02 hrs.

Max. Marks: 100

Instructions: Attempt all questions

NO	QUESTION	MARKS	СО
1	Which of the following is not included in failure costs?	1.5	1
-	a) rework I	1.5	-
	b) Repair		
	c) failure mode analysis		
	d) none of the above		
2.	Which of the following is not included in External failure costs?	2	1
	a) testing		
	b) help line support		
	c) warranty work		
	d) complaint resolution		
3.	Software quality assurance consists of the auditing and reporting functions of	1.5	1
	management.		
	a) TRUE		
	b) FALSE		
4.	Inspections and testing are what kinds of Quality Costs?	1.5	1
	a) Prevention		
	b) Internal Failure		
	c) External Failure		
	d) Appraisal		
5.	Which of the following is responsible for the quality objective?	2	1
	a) Top level management		
	b) Middle level management		
	c) Frontline management		
	d) ALL OF THE ABOVE		
6.	Which of the following is not a core step of Six Sigma?	1.5	3
	a) Define		
	b) Control		
	c) Measure		
	d) Analyse		
7	Constantine suggests four "organizational paradigms" for software engineering	2	2
	teams. The best project team organizational model to use when handling		
	extremely complex problems is		
	a) Random paradigm		
	b) Open paradigm		

	c) Synchronous paradigm		
	d) Closed paradigm		
8.	The quality attributes can be calculated under which of the following measures?	1.5	1
	a) Observable		
	b) Non observable		
	c) both		
	d) none		
9.	Which of the following is considered incorrect with respect to the quality?	2	2
	a) Architecture is critical to the realization of many of the qualities of		
	interest in a system		
	b) All qualities are architecturally sensitive		
	c) both		
	d) none		
10.	What can be stated with regards to performance?	2	2
	a) Performance is an example of architectural and non architectural		
	dependencies		
	b) Performance depends partially on how much communication is necessary		
	between the components		
	c) all		
	d) none		
11.	What effect does achievement of quality attribute will have?	1.5	1
	a) The achievement of quality attribute will always have a positive effect		
	b) The achievement of quality attribute will always have a negative effect		
	c) The achievement of quality attribute will have a positive as well as		
	negative effect		
	d) None		
12.	By what methods quality attributes can be judged?	1.5	1
	a) Qualities that can be discerned by observing the system execute		
	b) Qualities directly attributable to the system		
	c) Qualities about the architecture itself that are important		
	d) All		
13.	All defects result in failure.	1.5	1
	a) FALSE		
	b) TRUE		
14.	Software quality is measured by functional as well as non functional attributes.	1.5	2
	a) TRUE		
	b) FALSE		
15.	The difference between producer's viewpoint and customer's needs is called as	1.5	2
	Quality gap.		
	a) TRUE		
	b) FALSE		
16.	Which of the following are objective of software testing?	1.5	3
	a) Determines that software product satisfy specified requirements		
	b) Demonstrate that software products are fit for use		
	c) Detect defects		
	d) all		

17.	Building the software does not require a different mindset from testing the software.	1.5	2
	a) FALSE		
	b) TRUE		
18.	Bug is same name of	1.5	2
-0.	a) Error	1.0	-
	b) Incident		
	c) Mistake		
	d) defects		
19.	Which are methodologies of Walk Through?	2	3
	a) Scenario, Dry Run, Peer Group	-	•
	b) Kick off meetings		
	c) Formal Follow Up Process		
	d) Includes Metrics		
20	A software reliability matrix, is a measure of the likelihood that	2	3
_	the system will fail when a service request is made.		_
	a) Probability of Failure on Demand (POFOD)		
	b) Rate of Failure Occurrence (ROCOF)		
	c) Mean Time to Failure (MTTF)		
	d) Rate of Failure Occurrence (ROCOF)		
21	Which are the different types of review techniques used?	1.5	3
	a) Scenario based		-
	b) Checklist based		
	c) Metrics		
	d) All		
22.	Which of the following does not affect the software quality and organizational	1.5	3
	performance?		
	a) Market		
	b) Product		
	c) Technology		
	d) People		
23.	Which of the following is an indirect measure of product?	1.5	2
	a) Quality		
	b) Complexity		
	c) Reliability		
	d) All		
24.	Defects removal efficiency (DRE)depends on:	2	2
	a) E – errors found before software delivery		
	b) D – defects found after delivery to user		
	c) Both A&B		
	d) Varies with project		
25.	Define the task of project indicators from the following:	2	3
	a) Of ongoing project help in the assessment of the status		
	b) Potential risk tracker		
	c) track potential risk & help in the assessment of the status of an ongoing		
	project		
	d) None		
26.	In FPA which one is not an information domain required for analyzing function	2	2
			1
	point ?		

	b) Number of user Inquiries		
	c) Number of external Interfaces		
	d) Number of errors		
27.	Which metrics are derived by normalizing quality and/or productivity measures	2	3
	by considering the size of the software that has been produced?		
	a) Size oriented		
	b) Function-Oriented		
	c) Object-Oriented		
	d) Use-case-Oriented		
28	Capability level in which all level 2 criteria have been achieved, process is	2	4
	tailored from organization's set of standard processes according to organization's		
	tailoring guidelines and contributed work products ,measures and other process		
	improvement information to organizational process assets in		
	A) Level0:incomplete		
	B) Level1:Performed		
	C) Level2:Managed		
	D) Level3:Defined		
29	Which of the following distribution is used for describing statistical time varying	2	4
	nature of received envelope of multipath component?		
	a) Log normal distribution		
	b) Levy distribution		
	c) Rayleigh distribution		
	d) Gaussian distribution		
30	Software reliability is defined with respect to	1.5	4
	a) Time		
	b) Bugs		
	c) Failure		
	d) Quality		
31.	Degree to which design specifications are followed in manufacturing the product	1.5	3
	is called		
	a) Quality Control		
	b) Quality of conformance		
	c) Quality Assurance		
	d) None	4 -	
32.	Software quality assurance consists of the auditing and reporting functions of	1.5	3
	management.		
	a) TRUE		
22	b) FALSE Verification is	1 Г	
33.		1.5	5
	<ul><li>a) Making sure that it is what the user really wants</li><li>b) Checking that we are building the right system</li></ul>		
	c) Checking that we are building the system right		
	<ul><li>d) Performed by an independent test team</li></ul>		
34.	Quality assurance is related to	1.5	3
54.	a) strategic activities to ensure the financial plans	1.5	5
	b) set of activities that ensures that the services and product meet the		
	requirements		
	c) set of activities that ensures that the supplier-customer quality issues are		
	properly resolved		
	d) set of activities that include inspection and planning		
	2, 25 of activities and methods inspection and planning	1	1

		1	
35.	Select what is the primary objective of formal technical reviews to find during the process so that after the release of the software they do not become the	2	3
	defect		
	a) failure		
	b) Faults		
	c) Errors		
	d) None		
36.	CMM model in Software Engineering is a technique of	1.5	4
	a) Develop the software		
	b) Improve the software process		
	c) Improve the testing process		
	d) All		
37.	What is the project and process level that provides the Quality Metric benefit?	2	4
	a) Defect amplification		
	b) Defect removal efficiency		
	c) Measuring quality		
	d) All		
38.	Software project manager is engaged with software management activities. He is	2	4
	responsible for		
	a) Project planning.		
	b) Monitoring the progress		
	c) Communication among stakeholders		
	d) All		
39.	ISO 9001 is not concerned with of quality records.	2	4
	a) Collection		
	b) Maintenance		
	c) Verification		
	d) dis-positioning		
40.		2	4
	identified and used to verify the acceptability of process capability and product		
	characteristics.		
	a) ISO 9001		
	b) ISO 9000-4		
	c) CMM		
	d) All		
41.	Quality also can be looked at in terms of user satisfaction which includes	2	4
	a) A compliant product		
	b) Good quality output		
	c) Delivery within budget and schedule		
	d) All		
42.	Checking quality of software in both simulated and live environments is known	1.5	5
	a) Validity		
	b) Usability		
	c) Checking		
	d) Validation		_
43.	What does QA and QC stand for?	1.5	4
	a) Quality Adjustment and Queuing control		

	b) Quality Assurance and Quality control		
	c) Quality Adjustment and Quality completion		
	d) Quality Assurance and Queuing Control		
44.	Software safety is equivalent to software reliability.	1.5	4
	a) FALSE	1.5	-
	b) TRUE		
45.	Misinterpretation of customer communication is a sample of possible cause	1.5	4
13.	defects.	1.5	•
	a) TRUE		
	b) FALSE		
46.	Total Quality Management (TQM) focuses on	1.5	4
_	a) Employee	-	
	b) CUSTOMER		
	c) BOTH		
	d) NONE		
47.	The objective of ISO-9000 family of Quality management is	1.5	4
	a) Customer satisfaction		
	b) Employee satisfaction		
	c) Skill enhancement		
	d) Environmental issues		
48	Which of the following is correct for TQM?	1.5	4
	a) Quality strategy in TQM emanates from top		
	b) TQM is a static process		
	c) It is a management approach to short-term success through customer		
	d) It is used to improve processes not products		
49.	How many stages are needed for inspection and testing in TQM as per ISO 9001?	1.5	4
	a) 1		
	b) 2		
	c) 3		
	d) 4	_	
50.	Which of the following is correct option for given statements about TQM?	2	4
	Statement 1: Design of the formal system is a one time effort. Statement 2: TQM		
	is a management philosophy.		
	a) FF		
	b) FT		
	c) TT		
	d) TF	4 5	-
51.	A set of activities that ensure that software correctly implements a specific function	1.5	5
	function. a) verification		
	<ul><li>b) testing</li><li>c) implementation</li></ul>		
	d) VALIDATION		
52.	Which of the following term describes testing?	1.5	5
52.	a) Finding broken code	1.5	5
	<ul><li>b) Evaluating deliverable to find errors</li></ul>		
	c) A stage of all projects		
	d) None		
53.	Which are benefits of static testing?	1.5	1
		T.J	1

	a) Early feedback of a quality		
	b) Less rework cost		
	c) Increased developmental productivity		
	d) ALL		
54.	To check whether coding standards are followed, which type of testing will be	1.5	5
•	beneficial?		•
	a) Dynamic testing		
	b) Static testing		
	c) Parameter testing		
	d) Computation testing		
55.	Standard Enforcer is a	1.5	5
	a) Static Testing Tool		
	b) Dynamic Testing		
	c) Static & Dynamic Testing		
	d) None		
56.	Which testing tool does a simple job of enforcing standards in a uniform way of	1.5	5
	many programs?		
	a) Static Analyzer		
	b) Code Inspector		
	c) Standard Enforcer		
	d) Both Code Inspector & Standard Enforcer		
57.	Which of the following testing tools examine program systematically &	1.5	5
	automatically ?		
	a) Code Inspector		
	b) Static Analyzer		
	c) Standard Enforcer		
	d) Coverage Analyzer		_
58.	Standard enforcer tool looks at the whole program.	1.5	5
	<ul><li>a) FALSE</li><li>b) TRUE</li></ul>		
59	b) TRUE CASE stands for	1.5	5
59	a) Cost Aided Software Engineering	1.5	2
	<ul><li>b) Computer Aided Software Engineering</li></ul>		
	c) Control Aided Software Engineering		
	d) NONE		
60.	CASE tools are used only during the software testing phase.	1.5	5
00.	a) FALSE	1.5	5
	b) TRUE		
	o, mol		