Name: **Enrolment No:**	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, July 2020

Course: Software Quality Management **Semester: VI**
Program: B.Tech (CSE+BAO) **Time : 02 hrs.**

Course Code: CSEG3014 **Max. Marks: 100**

SN	Type	Question	Options							
1	MC	Which of the following is not one of the attributes of software quality?	Adds values for developers and users	**Incorrect**	Removes needs to consider performance issues	**Correct**	Effective software process creates infrastructure	**Incorrect**	Useful product satisfies stakeholder requirement	**Incorrect**
2	MC	Which requirements are the foundation from which quality is measured?	Hardware	**Incorrect**	Programmers	**Incorrect**	Software	**Correct**	None of the mentioned	**Incorrect**
3	MC	Which of the following management decision have the potential to impact software quality?	Estimation decisions	**Incorrect**	Risk oriented decisions	**Incorrect**	Scheduling decisions	**Incorrect**	**All of the mentioned**	**Correct**

4	MC	The quality attributes can be calculated under which of the following measures?	Observable	**Incorrect**	**all of the mentioned**	**Correct**	Non observable	**Incorrect**	None of the mentioned	**Incorrect**
5	MC	Quality costs may be divided into costs associated with	**Prevention, appraisal and failure**	**Correct**	People, Process and product	**Incorrect**	Customers, developers and maintenance	**Incorrect**	All of the mentioned	**Incorrect**
6	MC	Which of the following is likely to be the most expensive cost of quality?	Appraisal Cost	**Incorrect**	Internal Failure costs	**Incorrect**	Prevention Costs	**Incorrect**	**External failure costs**	**Correct**
7	MC	Which of the following is not included in failure costs?	Rework	**Incorrect**	Repair	**Incorrect**	**None of the mentioned**	**Correct**	Failure node analysis	**Incorrect**
8	MC	Which of the following is not included in External failure costs?	help line support	**Incorrect**	**testing**	**Correct**	warranty work	**Incorrect**	complaint resolution	**Incorrect**
9	MC	Inspections and testing are what kinds of Quality Costs?	**appraisal**	**Correct**	Internal Failure	**Incorrect**	External failure	**Incorrect**	prevetion	**Incorrect**
10	MC	Defect Removal Effectiveness is a part of	**Product Quality Metrics**	**Inorrect**	In Process Quality Process	**Correct**	Maintenance Quality Metrics	**Incorrect**	None of the mentioned	**Incorrect**
11	MC	Informal review may consist of which of the following	**casual meeting & desk checks**	**Correct**	inspection	**Incorrect**	pair programming	**Incorrect**	All of the mentioned	**Incorrect**

12	MC	Select the objective of formal technical reviews	allow senior members to correct errors	**Incorrect**	assess programmer capacity	**Incorrect**	**uncover errors in software work products**	**Correct**	determining who introduce an error into the program	**Incorrect**
13	MC	The primary objective of formal technical reviews is to find _____ during the process so that they do not become defects after release of the software.	failure cause	**Incorrect**	equivalent faults	**Incorrect**	None of the mentioned	**Incorrect**	**errors**	**Correct**
14	MC	Software metrics can be classified into	people, person and product	**Incorrect**	**product , process and project metrics**	**Correct**	program, people and production	**Incorrect**	None of the mentioned	**Incorrect**
15	MC	Many software metrics can only be measured indirectly	FALSE	**Incorrect**	**TRUE**	**Correct**	Can't say	**Incorrect**	None of the mentioned	**Incorrect**
16	MC	Mean Time to Failure is a part of	Product Quality Metrics	**Correct**	**In Process Quality Process**	**Incorrect**	Maintenance Quality Metrics	**Incorrect**	None of the mentioned	**Incorrect**
17	MC	Defect Removal Effectiveness is a part of	Product Quality Metrics	**Inorrect**	**In Process Quality Process**	**Correct**	Maintenance Quality Metrics	**Incorrect**	None of the mentioned	**Incorrect**

18	MC	Fix Response time and fix responsiveness is a part of	Product Quality Metrics	**Inorrect**	**In Process Quality Process**	**Incorrect**	Maintenance Quality Metrics	**Correct**	None of the mentioned	**Incorrect**
19	MC	Customer Satisfaction is a part of	Product Quality Metrics	**Correct**	**In Process Quality Process**	**Incorrect**	Maintenance Quality Metrics	**Incorrect**	None of the mentioned	**Incorrect**
20	MC	Mean time between Failure is	The expected time between two successive failures of a system	**Correct**	**Expected time to failure of a system**	**Incorrect**	Can't Say	**Incorrect**	Both A & B	**Incorrect**
21	MC	Cost of control failure is a part of	Internal Failure Cost	**Inorrect**	**External Failure Cost**	**Incorrect**	Both	**Correct**	None of the mentioned	**Incorrect**
22	MC	3 P's of Software Measurement is	Product, Process and People	**Correct**	**Public, Private and Protected**	**Incorrect**	Product, Process and Project	**Incorrect**	None of the mentioned	**Incorrect**

23	MC	Metrics for software maintenance include	Fix Backlog and Backlog Management Index	**Incorrect**	Fix Response Time and Fix Responsiveness	**Incorrect**	**All of the mentioned**	**Correct**	Percent Delinquent Fixes and fix quality	**Incorrect**
24	MC	In which term usability can be measured ?	Intellectual skill to learn the system	**Incorrect**	The time required to become moderately efficient in system usage	**Incorrect**	Net increase in productivity	**Incorrect**	**All of the mentioned**	**Correct**
25	MC	What is the crucial characteristic of software metric	reliable	**Incorrect**	**all of the mentioned**	**Correct**	relevant	**Incorrect**	valid	**Incorrect**
26	MC	Which metric is related to the software development process	**process**	**Correct**	development	**Incorrect**	software	**Incorrect**	product	**Incorrect**
27	MC	Quality indicators used in the software testing & development life cycle are	15 in numbers	**Incorrect**	None of the mentioned	**Incorrect**	5 in numbers	**Incorrect**	**10 in numbers**	**Correct**

28	MC	Mean time between Failure is	The expected time between two successive failures of a system	**Correct**	Expected time to failure of a system	**Incorrect**	Can't Say	**Incorrect**	**None of the mentioned**	**Incorrect**
29	MC	Mean Time to Failure is a part of	Product Quality Metrics	**Correct**	In Process Quality Process	**Incorrect**	Maintenance Quality Metrics	**Incorrect**	**None of the mentioned**	**Incorrect**
30	MC	Which is not a part of quality plan	**Debugging**	**Correct**	work verification	**Incorrect**	Testing parameters	**Incorrect**	Audit	**Incorrect**
31	MC	Software Quality Control is limited to	Error correction & detection	**Incorrect**	planning and production	**Incorrect**	**Reviews & Testing**	**Correct**	None of the mentioned	**Incorrect**
32	MC	The process/rules for developing a zero defect software are	The defects must be fixed on everyday basis , regularly review the code	**Incorrect**	Quality modules must be re written, debugging of code effectively	**Incorrect**	**All of the mentioned**	**Correct**	Learning from previous bugs.	**Incorrect**

33	MC	Which of the following is not a SQA plan for a project?	audits and reviews to be performed	**Incorrect**	evaluations to be performed	**Incorrect**	documents to be produced by the SQA group	**Incorrect**	**amount of technical work**	**Correct**
34	MC	Which of the following is not an appraisal cost in SQA?	testing	**Incorrect**	**quality planning**	**Correct**	designing	**Incorrect**	maintenance	**Incorrect**
35	MC	Software safety is a quality assurance activity that focus on hazards that	may result from user input errors	**Incorrect**	**may cause an entire system to fail**	**Correct**	affect the reliability of softwatre component	**Incorrect**	prevent profitable marketing to the final product	**Incorrect**
36	MC	Identifies, documents, and verifies is done by _____that corrections have been made to the software?	Project manager	**Incorrect**	**SQA group**	**Correct**	project team	**Incorrect**	All of the mentioned	**Incorrect**
37	MC	The objective of ISO-9000 family of Quality management is	skill enhancement	**Incorrect**	environmental issues	**Incorrect**	**customer satisfaction**	**Correct**	employee satisfaction	**Incorrect**
38	MC	Total quality management focus on	**employee and customer**	**Correct**	employee only	**Incorrect**	customer only	**Incorrect**	None of the mentioned	**Incorrect**
39	MC	When a manager monitors the work performance of workers in his department to determine if the quality of	planning	**Incorrect**	**controlling**	**Correct**	Testing	**Incorrect**	All of the mentioned	**Incorrect**

		their work is 'up to standard', this manager is engaging in which function?								
40	MC	Which of the following are key components of a Total Quality Management system?	individual responsibility, incremental improvement, use of raw data	**Incorrect**	involves everyone, individual responsibility, incremental improvement	**Incorrect**	involves everyone, continual improvement, use of data & knowledge	**Correct**	incremental improvement, individual responsibility	**Incorrect**
41	MC	Quality in manufacturing means that at a _____, all production must be within specification limits and the _____ variation from the nominal, the better the quality.	minimum, more	**Incorrect**	maximum, less	**Incorrect**	maximum, more	**Incorrect**	**minimum, less**	**Correct**
42	MC	TQM & ISO both focuses on	Employee	**Incorrect**	supplier	**Incorrect**	**Customer**	**Correct**	All of the mentioned	**Incorrect**
43	MC	Verification and Validation uses _____.	External and internal resource respectively	**Incorrect**	internal resource only	**Incorrect**	external resource only	**Incorrect**	**Internal and External resources respectively**	**Correct**

44	MC	What is "V" model?	Test design technique	**Incorrect**	**SDLC**	**Correct**	test level	**Incorrect**	test type	**Incorrect**
45	MC	Software Verification process involves	**All of the mentioned**	**Correct**	Reviews	**Incorrect**	Meetings	**Incorrect**	Inspections	**Incorrect**
46	MC	Software Validation involves	Black Bos Testing	**Incorrect**	White Box Testing	**Incorrect**	Grey Box Testing	**Incorrect**	**All of the mentioned**	**Correct**
47	MC	A testing oracle is a mechanism that can be used for determining whether a test has	pass	**Incorrect**	failed	**Incorrect**	**pass or failed**	**Correct**	None of the mentioned	**Incorrect**
48	MC	What is the normal order of activities in which traditional software testing is organized?	integration testing, system testing, unit testing , validation testing	**Incorrect**	**unit testing, integration testing, validation testing, system testing**	**Correct**	unit testing, validation testing, system testing, integration testing	**Incorrect**	validation testing, system testing, unit testing, integration testing	**Incorrect**
49	MC	_____is performed on the 'new' build given by developers to QA team to verify if the basic functionalities are working or not.	**Smoke Testing**	**Correct**	Component Testing	**Incorrect**	Sanity Testing	**Incorrect**	Mutation	**Incorrect**
50	MC	When a new build is received with minor	Smoke Testing	**Incorrect**	Component Testing	**Incorrect**	**Sanity Testing**	**Correct**	Mutation	**Incorrect**

		modifications, instead of running a thorough regression test suite we perform a _____								
51	MC	_____Testing is a type of Software Testing that is performed to design new software tests and also evaluate the quality of already existing software tests.	**Mutation**	**Correct**	Smoke	**Incorrect**	Component	**Incorrect**	Sanity	**Incorrect**
52	MC	_____is conducted to push the application beyond its capabilities to observe how it reacts.	Smoke Testing	**Incorrect**	Mutation Testing	**Incorrect**	**Stress Testing**	**Correct**	Sanity Testing	**Incorrect**
53	MC	To check whether coding standards are followed, which type of testing will be beneficial?	Dynamic Testing	**Incorrect**	Computation Testing	**Incorrect**	Parameter Testing	**Incorrect**	**Static Testing**	**Correct**
54	MC	Which are the benefits of Static Testing?	Early feedback of a quality.	**Incorrect**	**all of the mentioned**	**Correct**	Less rework costs	**Incorrect**	Increased developmental productivity.	**Incorrect**
55	MC	What is true about Static Analysis Tools?	It can detect memory leakes	**Incorrect**	It gives quality information about code without executing it.	**Correct**	It tells about percentage of code coverage.	**Incorrect**	It compares actual and expected result.	**Incorrect**

56	MC	_____are statistical models which can be used to make predictions about a software system's failure rate, given the failure history of the system.	Incremental Models	**Incorrect**	**Software Reliability Models**	**Correct**	Software quality assessment model	**Incorrect**	waterfall models	**Incorrect**
57	MC	What are the steps to be included to model software reliability.	Examine the data, Select a model	**Incorrect**	Estimate the parameters of the model, Obtain the fitted model	**Incorrect**	**All of the mentioned**	**Correct**	perform a goodness-of-fit test, Make reliability predictions based on th fitted model.	**Incorrect**
58	MC	_____is regarded as a well-accepted approach for assessing, managing and improving software product quality	**Quality Model**	**Correct**	Software Reliability Model	**Incorrect**	Incremental model	**Incorrect**	waterfall model	**Incorrect**
59	MC	_____is a metric-based approach to assess the software quality.	Software reliability model	**Incorrect**	**Quality Assessment Model**	**Correct**	Incremental model	**Incorrect**	waterfall model	**Incorrect**
60	MC	The Rayleigh Model comes under which model?	Incremental Models	**Incorrect**	**Software Reliability Models**	**Correct**	All of the mentioned	**Incorrect**	waterfall model	**Incorrect**