	M.ScInformation Technology	A
	IT-401: Software Engineering	N S
1)	What are the characteristics of software?	D
	(A) Software is developed or engineered; it is not manufactured in the classical sense.	
	(B) Software doesn't "wear out".	
	(C) Software can be custom built or custom build.	
	(D) All mentioned above	
2)	FAST stands for	С
	(A). Functional Application Specification Technique	
	(B). Fast Application Specification Technique	
	(C). Facilitated Application Specification Technique	
	(D). None of the above	
3)	Which is not a step of Requirement Engineering?	С
	(A). Requirements elicitation	
	(B). Requirements analysis	
	(C). Requirements design	
	(D). Requirements documentation	
4)	Which of these software engineering activities are not a part of software processes?	A
	(A)Software dependence (B)Software development	
	(C)Software validation (D)Software specification	
5)	Which of the following is not a diagram studied in Requirement Analysis?	D
	(A)Use Cases (B) Entity Relationship Diagram	
	(C) State Transition Diagram (D) Activity Diagram	

6)	Why is Requirements Management Important? It is due to the changes	D
	(A) to the environment (B) in technology	
	(C) in customer's expectations (C) in all of the mentioned	
7)	Which model can be selected if user is involved in all the phases of SDLC?	С
	(A) Waterfall Model (B) Prototyping Model	
	(C) RAD Model (D) both Prototyping Model & RAD Model	
8)	If every requirement stated in the Software Requirement Specification (SRS) has	A
	only one interpretation, SRS is said to be correct	
	(A). Unambiguous	
	(B). Consistent	
	(C). Verifiable	
	(D). None of the above	
9)	What are attributes of good software?	В
	(A) Software maintainability (B) Software maintainability & functionality	
	(C) Software functionality (D) Software development	
10)	SDLC stands for	A
	(A) Software Development Life Cycle (B) System Development Life cycle	
	(C) Software Design Life Cycle (D) System Design Life Cycle	
11)	Risk analysis of a project is done in	В
	(A) System Analysis phase (B) Feasibility Study	
	(C) Implementation phase (D) Maintenance phase	
12)	Which is the most important feature of spiral model?	В
	(A). Quality management	
	(B). Risk management	
	(C). Performance management	
	(D). Efficiency management	

13)	Requirements analysis is critical to the success of a development project.	A
	(A) True (B) False	
	(C) Depends upon the size of project (D) None of the mentioned	
14)	Beta Testing is done by	С
	(A) Developers (B) Testers	
	(C) Users (D) All of the mentioned	
15)	Software Maintenance includes	D
	(A) Error corrections (B) Enhancements of capabilities	
	(C) Deletion of obsolete capabilities (D) All of the mentioned	
16)	Software consists of	В
	(A) Set of instructions I enqueting mass during	
	<ul><li>(A). Set of instructions + operating procedures</li><li>(B). Programs + documentation + operating procedures</li></ul>	
	(C). Programs + hardware manuals	
	(D). Set of programs	
17)	Choose the correct combination of good coded program:	С
	(A) Usability, Reliability, Robustness, Flexibility	
	(B) Availability, Reliability, Maintainability, Usability	
	(C) readability, robustness, Usability, Accuracy	
	(D) Accuracy, robustness, Testability, Usability	
18)	The tools that support different stages of software development life cycle are	A
	called	
	(A) CASE Tools	
	(B) CAME tools	
	(C) CAQE tools	
	(D) CARE tools	

19)	SRD stands for	В
	(A). Software Requirements Definition	
	(B). Structured Requirements Definition	
	(C). Software Requirements Diagram	
	(D). Structured Requirements Diagram	
20)	A COCOMO model is	В
	(A) Common Cost Estimation Model.	
	(B) Constructive Cost Estimation Model	
	(C) Complete Cost Estimation Model	
	(D) Comprehensive Cost Estimation Model	
21)	The model in which the requirements are implemented by its category is	A
	(A) Evolutionary Development Model	
	(B) Waterfall Model	
	(C) Prototyping	
	(D) Iterative Enhancement Model	
22)	31) Alpha and Beta Testing are forms of	A
	(A) Acceptance testing	
	(B) Integration testing	
	(C) System Testing	
	(D) Unit testing	
23)	If you were a lead developer of a software company and you are asked to submit a project / product within a stipulated time-frame but within cost barriers, which model would you select?	
	(A) Waterfall (B) Spiral	
	(C) RAD (D) Incremental	

24)	What is legacy system?	В
	(A) A legacy system refers to newer version of software.	
	(B) A legacy system refers to out-dated application software that is used instead of available upgraded versions.	
	(C) A legacy system always devolved by advance technology.	
	(D) None of the above.	
25)	What is the main aim of Software engineering?	С
	(A) Reliable software (B) Cost effective software	
	(C) Reliable and cost effective software (D) None of the above	
26)	In software maintenance removing errors spotted by users is known as	В
	(A) Adaptive (B) Corrective	
	(C) Perfective (D) Preventive	
27)	Which plan describes how the skills and experience of the project team members will be developed?	D
	(A). HR Plan	
	(B). Manager Plan	
	(C).Team Plan	
	(D).Staff Development Plan	
28)	What can static analysis NOT find?	С
	(A). The use of a variable before it has been defined.	
	(B). Unreachable ("dead") code.	
	(C). Memory leaks.	
	(D). Array bound violations.	

29)	The Test Cases Derived from use cases	A
	(A) Are most useful in uncovering defects in the process flows during real world use of the system.	
	(B). Are most useful in uncovering defects in the process flows during the testing use of the system.	
	(C) Are most useful in covering the defects in the process flows during real world use of the system.	
	(D) Are most useful in covering the defects at the Integration Level.	
30)	Which of the following is not a part of the Test Implementation and Execution Phase?	D
	(A).Creating test suites from the test cases	
	(B). Executing test cases either manually or by using test execution tools	
	(C).Comparing actual results	
	(D). Designing the Tests	
31)	Which chart is a tool that depicts project as network diagram that is capable of	A
	graphically representing main events of project in both parallel and consecutive	
	way?	
	(A) PERT chart	
	(B) Gantt chart	
	(C) Both A & B	
	(D) None of the above	
32)	The first step in the systems development life cycle(SDLC) is	С
	(A) analysis (B) design	
		1

33)	After implementation of the system, system maintenance could be done for	D
	A. Minor changes in the processing logic	
	B. Errors detected during the processing	
	C. Revision of the formats of the reports	
	D. All of the above	
34)	Design Phase consists of	D
	1. Identity the functions to be performed	
	2. Design the input/output and file design	
	3. Defining basic parameters for system design	
	(A) 1 & 2 (B) 2 & 3	
	(C) 1 & 3 (D) 1, 2 & 3	
35)	Compilers, Editors software come under which type of software?	A
	(A) System software	
	(B) Application software	
	(C) Scientific software	
	(D) None of the above	
36)	Select which option is not true about SQA?  A) Audits and reviews to be performed by the team	С
	B) Amount of technical work to be performed	
	<ul><li>C) Evaluations to be performed</li><li>D) Documents that are produced by the SQA team.</li></ul>	
25)		
37)	Software quality assurance consists of which function of management.  A) reporting functions B) auditing functions C)both A and B D)all of the above	С
38)	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 defect A) failure B) errors C) faults D) none of these	В
	/	1

39)	1 1		
	software		
	A) Project manager		
	B) SQA team		
	C) Project team		
	D) All of the mentioned		
40)	Which requirement is the foundation from which quality is measured?	В	
	A) Hardware		
	B) Software		
	C) Programmers		
	D) None of the mentioned		
41)	From the following methods which size of the software product can be calculated?	С	
	(A).Counting the lines of delivered code		
	(B). Counting delivered function points		
	(C). Both A and B		
	(D). None of the above		
42)		A	
72)	A software project manager is a person who undertakes the responsibility of	11	
	carrying out the software project.		
	(A)True		
	(B) False		
43)	Which aspect is important when the software is moved from one platform to another?	С	
	(A) Maintenance		
	(B) Operational		
	(C) Transitional		
	(D) All of the above		

44)	Which class gives a content or function change that corrects an error or enhances	A
	local content or functionality in change management?	
	(A) Class 1	
	(B) Class 2	
	(C) Class 3	
	(D) Class 4	
45)	Which model gives the overall reliability of the system that is projected and	С
	certified?	
	(A) Sampling model	
	(B) Component model	
	(C) Certification model	
	(D) Both A & B	
46)	SCM stands for	D
	A) Software Cognizance Maintenance B) Software Clearance Measurement	
	C)Software Configuration Measurement D) Software Configuration Management	
47)	ISO stands for	A
	A)International Organization for Standardization B) International Standard Organization C) International Standard in Organisation D) International Specification in Organization	
48)	The Objective of ISO 9000 family of Quality management is	A
	A)Customer Satisfaction B) Employee Satisfaction C) Skill Enhancement	
	D) Environmental Issues	
49)	Total Quality Management (TQM) focuses on a) Employee b)Customer c) Both (a) and (b) d) None of the above	С
50)	Which of the following are areas of concern in design model?	D
	a) Architecture b) Data c) Interface d) All	
	I .	لصب

51)	Hazard analysis focuses on the identification and assessment of potential hazards	A
	that can cause the	
	(A) External problems	
	(B) Internal problems	
	(C) Both A & B	
	(D) None of the above	
	(B) None of the doore	
52)	The total number of distinct operator and operand occurrences measures are used	В
	in	
	(A) Lawrence theory	
	(B) Halstead's theory	
	(C) Kyburg, H. E.	
	(D) Jech, T.	
53)	Abbreviate the term HIPO.	A
	(A) Hierarchical Input Process Output	
	(B) High-level Input Process Output	
	(C) Huge Input Process Output	
	(D) None of the above	
54)	Which depicts flow of control in program modules?	A
	(A) Flowchart	
	(B) DFD	
	(C) Both A & B	
	(D) None of the above	

55)	Which tool consist of programming environments like IDE, in-built modules	C
	library and simulation tools?	
	(A) Web development tools	
	(B) Prototyping tools	
	(C) Programming tools	
	(D) Design tools	
5()	Which of the control of the desired	C
36)	Which of these characteristics of good design?	C
	A)Strong coupling between modules B)implements all requirements in analysis model C) B and D D) provides a complete picture of software	
57)	What types of abstraction are used in software design?	D
	A) Control B) data C) procedural D) all	
58)	Which design is equivalent to floor plan of the house?	A
	A)Architectural design B) component level design C) data design D)	
	interface design	
59)	Cohesion is qualitative indication of degree to which module	В
	A)Can be written more compactly B) focuses on just one thing C)is able	
	to complete its function in timely manner D)is connected to other modules	
	and outside world	
60)	Coupling is qualitative indication of degree to which module	D
	A)Can be written more compactly B) focuses on just one thing C)is able	
	to complete its function in timely manner D)is connected to other modules	
	and outside world	
61)	CASE tools cannot be grouped together if they have similar functionality, process	В
	activities and capability of getting integrated with other tools.	
	(A) True	
	(B) False	
	ı	

62)	The spell check feature in word processor is a module of software.	A
	(A)True	
	(B) False	
63)	When elements of module are grouped because the output of one element serves as	С
	input to another element and so on, it is called	
	(A) Functional Cohesion	
	(B) Communicational cohesion	
	(C) Sequential cohesion	
	(D) Procedural cohesion	
64)	Which of these primary objectives have to be achieved for the requirement model?	D
	moder:	
	(A) To describe what the customer requires	
	<ul><li>(B) To establish a basis for the creation of a software design</li><li>(C) To define a set of requirements that can be validated once the software</li></ul>	
	(D) All mentioned above	
65)	The interviews, which are held between two persons across the table is	D
	(A) Written	
	(B) Non-structured	
	(C) Group	
	(D) One-to-one	
66)	Which of the following can be used to represent the architectural design of piece of software?	D
	A)Dynamic models B) Functional Models C)Structural Models D) All	
67)	Which of the following is / are the type of Cohesion?	D
	A) Functional B)Layer	
	C)Communicational	
	D)All of the above.	

Which is the worst type of coupling? A)Control coupling B)Data coupling C)Content coupling D)Stamp coupling	С
Three statements are given below regarding the User Interface Design,  1. Place the user in control.  2. Reduce the user's memory load.  3. Make the interface consistent.	A
These rules are called as  A)Golden Rule B)Silver Rule C)User Rule D)Interface rule	
is an indication of the relative interdependence among modules.  A)Cohesion  B)Coupling  C)Modularity  D)Cohesion and coupling.	В
What is Cyclomatic complexity?  A) Black box testing  B) White box testing  C) Yellow box testing  D) Green box testing	В
White Box techniques are also classified as A) Design based testing B) Structural testing C) Error guessing technique D) None of the mentioned	В
What are the various Testing Levels? A) Unit Testing B) System Testing C) Integration Testing D) All of the mentioned	D

	Which of the following is non-functional testing?  A) Black box testing	В
	B) Performance testing	
	C) Unit testing	
	D) None of the mentioned	
7.5		
15)	Test cases should uncover errors like	A
	A) Non-existent loop termination     B) Comparison of different data types	
	C) Incorrect logical operators or precedence	
	D) All of the mentioned	
76)	8) Which quality deals with the maintaining the quality of the software product?	В
	(A).Quality assurance	
	(B). Quality control	
	(C). Quality Efficiency	
	(D). None of the above	
77)	Burst force, backtracking, cause elimination are strategies used in art of	A
	debugging.	
	(A).Yes	
	(B). No	
78)	Software is not considered to be collection of executable programming code,	В
	associated libraries and documentations.	
	(A) True	
	(B) False	

79)	Classes communicate with one another via	С
	(A) Read sensors (B) Dial phones	
	(C) Messages	
	(D) None of the above	
80)	Software project manager is engaged with software management activities. He is responsible for	D
	<ul><li>(A) Project planning.</li><li>(B) Monitoring the progress</li><li>(C) Communication among stakeholders</li><li>(D) All mentioned above</li></ul>	
81)	In which testing level the focus is on customer usage? A) Alpha Testing B) Beta Testing C) Validation Testing D) Both Alpha and Beta	D
82)	What are the Types of Integration Testing?  A) Big Bang Testing  B)Bottom Up Testing  C) Top Down Testing  D) All the above	D
83)	Which is non-functional software testing?  A)Unit Testing  B) Block box testing  C) Performance Testing  D) Regression testing	С

84)	The main focus of acceptance testing is:	D
	A) finding faults in the system	
	B) ensuring that the system is acceptable to all users	
	C) testing the system with other systems	
	D) testing for a business perspective	
85)	Which of the following is a form of functional testing?	A
	A)Boundary value analysis	
	B)Usability testing	
	C) Performance testing	
	D)Security testing	
86)	Which requirements is the foundation from which quality is measured?  A) Hardware  B) Software	В
	C) Programmers D) None of the mentioned	
	Who identifies, documents, and verifies that corrections have been made to the software?  A) Project manager  B) Project team  C) SQA group  D) All of the mentioned	С
, i	What is not included in prevention costs?  A) quality planning B) formal technical reviews C) test equipment D) equipment calibration and maintenance	D
89)	Quality Management in software engineering is also known as A) SQA B) SQM C) SQI D) SQA and SQM	A

90)	Quality also can be looked at in terms of user satisfaction which includes A) A compliant product B) Good quality output	D
	C) Delivery within budget and schedule	
	D) All of the mentioned	
	b) An of the mentioned	
91)	State if the followings are true or false.	A
	For scheduling a project, it is necessary to:	
	1) Break down the project tasks into smaller, manageable form.	
	2) Find out various tasks and correlate them.	
	3) Estimate time frame required for each task.	
	4) Divide time into work-units.	
	(A) True	
	(B) False	
92)	Function-oriented design is comprised of many smaller sub-systems is known as,	A
	Functions.	
	(A) Yes	
	(B) No	
93)		В
	From the following which quality deals with maintaining the quality of the	
	software product?	
	(A) Quality assurance	
	(B) Quality control	
	(C) Quality efficiency	
	(D) None of the above	

94)	Choose the correct option according to given below statement.	В
	Statement 1: Umbrella activities are independent of any one framework activity and occur throughout the process.	
	Statement 2: software quality assurance, software configuration management are umbrella activity.	
	Statement 3: software quality assurance, software configuration management are not umbrella activity.	
	(A). Only statement 1 is correct.	
	(B). Statement 1 and statement 2 are correct.	
	(C). Only statement 3 is correct.	
	(D). Statement 1 and statement 3 are correct.	
95)	Which of the following is not a core step of Six Sigma?  A) Define B) Control C) Measure D) Analyse	В
96)	Which of the following is an example of QA?	С
	A) Validation	
	B )Software testing	
	C )Verification	
	D )Documentation	
97)	Select the people who identify the document and verify the correctness of the software	A
	A) SQA team	
	B )Project team	
	C )Project manager	
	D )All of the mentioned	
1		1

98)	Select which option is not true about SQA?	C
	A) Audits and reviews to be performed by the team	
	B) Amount of technical work to be performed	
	C) Evaluations to be performed	
	D) Documents that are produced by the SQA team.	
99)	The objective of ISO-9000 family of Quality management is	A
	A)Customer satisfaction	
	B)Employee satisfaction	
	C)Skill enhancement	
	D)Environmental issues	
100	In a risk-based approach the risks identified may be used to:	В
	i. Determine the test technique to be employed	
	ii. Determine the extent of testing to be carried out	
	iii. Prioritize testing in an attempt to find critical defects as early as possible.	
	iv. Determine the cost of the project	
	(A). ii is True; i, iii, iv and v are False	
	(B). i,ii,iii are true and iv is false	
	(C). ii and iii are True; i, iv are False	
	(D). ii, iii and iv are True; i is false	

\*\*\*\*\*