SYBCA SEM-3 SOFTWARE ENGINEERING - I 302)

Sr.No.	Question	Option - 1	Option - 2	Option - 3	Option - 4	Correct Option
1	Many documentation tools are available to explain how a system works. Which tool provides a graphical description of the sources and destinations of data as well as data flow within the organization and the processes that transform and store that data?	Data flow diagram	Document flowchart	Program flowchart	System flowchart	1
2	A Data Flow Diagram DF is composed of which elements?	Data sources and destinations	Data flows	Transformation processes and datasource	all of these	4
3	Full form of DFD	Data Flow Design	Data Flow Diagram	Data Flow Development	None of these	2
4	What does the Circle represents in DFD?	Data flow	Datasotre	Process	Source	3
5	The data flow diagram symbol which represents data flows is the	square	*arrow*	circle	parallel lines.	2
6	Which is the firs type of DFD?	context level	first level	second level	all of these	1
7	Which type of DFD highlights the system as a whole?	first level	context level	second level	None of these	2
8	In DFD, which symbol is used to show an external entity?	arrow	circle	pentagon	rectangle	4
9	Main pupose of DFD is..	To show all entities	To highlights the system as a whole	To show boundaries of the process	To draw data flow	2

10	By levelling a DFD we mean	splitting it into different levels	make its structure uniform	expanding a process into one with more sub-processes giving more detail	summarizing a DFD to specify only the essentials	3
11	Data cannot flow from an external entity to an external entity because	it will get corrupted	it is not allowed in DFD	an external entity has no mechanism to read or write	both are outside the context of the system	4
12	A physical DFD specifies	what processes will be used	who generates data and who processes it	what each person in an organization does	which data will be generated	2
13	An external entity can be	source or sink	only source	only sink	None of these	1
14	What is software requirement?	It is nothing but custmoer need	It is specification that customer wants in the proposed software	It is minimum fuctinality of the software	It is used for testing	2
15	Which is not requirment collection technique?	Record review	Interview	Questionnaire	Telephone call	4
16	What is questionnaire?	It is list of requirements	It is list of wants	It is list of questions/queries	None of these	3
17	What is use of current application analysis?	To review records	To get idea of the current system of the client	To analyze result	To study requirements	2
18	What is full form of SRS?	Software Readiness System	Software Requirement Specification	Software Repaire and Simplification	Software Remedy and Specification	2
19	Which of the following property does not correspond to a good Software Requirements Specification SRS) ?	Verifiable	Ambiguous	Complete	Traceable	2

20	Which of the following property of SRS is depicted by the statement : “Conformity to a standard is maintained” ?	Correct	Complete	Consistent	Modifiable	2
21	The SRS document is also known as _____ specification.	black-box	grey-box	white-box	None of these	1
22	Consider the following Statement: “The product should have a good human interface.”What characteristic of SRS is being depicted here ?	Consistent	Non-Verifiable	Correct	Ambiguous	2
23	Which of the following is not defined in a good Software Requirement Specification SRS) document?	Functional Requirement	Nonfunctional Requirement	Goals of implementation	Algorithm for software implementation	4
24	Which of the following is the understanding of software product limitations, learning system related problems or changes to be done in existing systems beforehand, identifying and addressing the impact of project on organization and personnel etc?	Software Design	Feasibility Study	Requirement Gathering	System Analysis	4
25	Which project is undertaken as a consequence of a specific customer request?	Concept development projects	Application enhancement projects	New application development projects	Application maintenance projects	3

26	Requirement engineering process includes which of these steps?	Feasibility study	Requirement Gathering	Software Requirement specification & Validation	all of these	4
27	In which elicitation process the developers discuss with the client and end users and know their expectations from the software?	Requirement gathering	Organizing requirements	Negotiation & discussion	Documentation	1
28	If requirements are easily understandable and defined then which model is best suited?	Spiral model	Waterfall model	Prototyping model	None of these	2
29	Which document is created by system analyst after the requirements are collected from Various stakeholders?	Software requirement specification	Software requirement validation	Feasibility study	Requirement Gathering	1
30	Which is focused towards the goal of the organization?	Feasibility study	Requirement gathering	Software requirement specification	Software requirement validation	1
31	Which documentation works as a key tool for software designer, developer and their test team is to carry out their respective tasks?	Requirement documentation	User documentation	Software design documentation	Technical documentation	1
32	What is the meaning of requirement elicitation in software engineering?	Gathering of requirement	Understanding of requirement	Getting the requirements from client	all of these	4
33	What are the types of software development requirements ?	Availability	Reliability	Usability	all of these	4

34	Select the developer specific requirement ?	Portability	Maintainability	Availability	Both Portability and Maintainability	4
35	FAST stands for	Functional Application Specification Technique	Fast Application Specification Technique	Facilitated Application Specification Technique	None of these	3
36	The user system requirements are the parts of which document ?	SDD	SRS	DDD	DFD	2
37	Which is one of the most important stakeholder from the following ?	Entry level personnel	Middle level stakeholder	Managers	Users of the software	4
38	Which one of the following is a functional requirement ?	Maintainability	Portability	Robustness	None of these	4
39	The primary tool used in structured design is a:	structure chart	DFD	structure chart	module	1
40	Which of the property of software modularity is incorrect with respect to benefits software modularity?	Modules are robust	Module can use other modules	Modules Can be separately compiled and stored in a library	Modules are mostly dependent	4
41	_____ is a measure of the degree of interdependence between modules.	Cohesion	Coupling	All of these	None of these	2
42	Which of the following is the best type of module coupling?	Control Coupling	Stamp Coupling	Data Coupling	Content Coupling	3

43	Which of the following is the worst type of module coupling?	Control Coupling	External Coupling	Data Coupling	Content Coupling	2
44	Which of the following is the worst type of module cohesion?	Logical Cohesion	Temporal Cohesion	Functional Cohesion	Coincidental Cohesion	4
45	Which of the following is the best type of module cohesion?	Logical Cohesion	Temporal Cohesion	Functional Cohesion	Coincidental Cohesion	3
46	In what type of coupling, the complete data structure is passed from one module to another?	Control Coupling	Stamp Coupling	Data Coupling	Content Coupling	2
47	If all tasks must be executed in the same time-span, what type of cohesion is being exhibited?	Logical Cohesion	Temporal Cohesion	Functional Cohesion	Coincidental Cohesion	2
48	When elements of module are grouped because the output of one element serves as input to another element and so on, it is called _____ .	Logical Cohesion	Temporal Cohesion	Functional Cohesion	Sequential Cohesion	4
49	Which type of document is prepared for maintaining system design?	System Design	Design Document	Documentation	Documentation DFD	2
50	Step by step occurance and execution of modules called as….	Queue	Lining	Sequencing	None of these	3
51	What is Cohesion?	Modules in different software	Measurement of degree of which module belongst to the same module	Mergining of different modules	degree to which the elements inside a module belong together	4

52	What is Coupling?	Degree of Independance between software modules	Measurement of degree of which module belongst to the same module	Degree of interdependence between software modules	None of these	3
53	What is the characteristics of software?	Software is developed or engineered; it is not manufactured in the classical sense.	Software doesn't "wear out.	Software can be custom built or custom build	All of above	4
54	Compilers, Editors software come under which type of software?	System software	Application software	Scientific software	None of these	1
55	What is legacy system?	A legacy system refers to newer version of software.	A legacy system refers to outdated application software that is used instead of available upgraded versions.	A legacy system always devolved by advance technology.	None of the above.	2
56	Which of the following cannot be applied with software according to software engineering layers?	Process	Methods	Manufacturing	None of the above.	3
57	A generic process framework for software engineering encompasses five activities. What are those activities?	Communication, risk management, measurement, production, deployment.	Communication, Planning, Modeling, construction, deployment.	Analysis, designing, programming, debugging, maintenance	None of the above.	2

58	Software process and improvement are assessed by.	ISO 9000	ISO 9001	SPICE ISO/IEC15504)	Both B and C options are correct.	4
59	Which phase refers to the support phase of software development?	Acceptance Phase.	Testing.	Maintenance.	None of the above.	3
60	Which model is also called as the classic life cycle or the Waterfall model?	Iterative Development	Linear Sequential Development	RAD Model.	Incremental Development	2
61	What is the main aim of Software engineering?	Reliable software	Cost effective software	Reliable and cost effective software	None of the above	3
62	Which of the following is not defined in a good software requirement specification SRS) document?	Functional Requirement.	Nonfunctional Requirement.	Goals of implementation.	Algorithm for software implementation.	4
63	IEEE provides a standard as IEEE 830-1993. For which activity this standard is recommended standard?	Software requirement specification.	Software design.	Testing.	Both and	1
64	Software Requirement Specification SRS) is also known as specification of?	White box testing	Acceptance testing	Integrated testing	Black box testing	4
65	CASE Tool stands for.	Computer Aided Software Engineering	Component Aided Software Engineering	Constructive Aided Software Engineering	Computer Analysis Software Engineering	1

66	The tools that support different stages of software development life cycle are called as:	CASE Tools	CAME tools	CAQE tools	CARE tools	1
67	Which of the items listed below is not one of the software engineering layers?	Process	Manufacturing	Methods	Tools	2
68	Which is not a step of requirement engineering?	Requirements elicitation	Requirements analysis	Requirements design	Requirements documentation	3
69	There are different phase available in SDLC. Find out which phase is not available in software life cycle?	Coding	Testing	Maintenance	Abstraction	4
70	Measurements can be categorized in two ways. What are those two ways?	Direct and Indirect	Front and Rear	Metric	Quality and Reliability.	1
71	Line of codeLO of the product comes under which type of measures?	Indirect measures	Direct measures	Coding	None of the above.	2
72	Quality of the product comes under which type of measures?	Indirect measures	Direct measures	Coding	None of the above.	1
73	Measure of reliability is given by.	Mean Time between success.	Mean reliable	Mean Time between failure MTBF).	MTTR	3
75	RAD Software process model stands for.	Rapid Application Development.	Relative Application Development.	Rapid Application Design.	Recent Application Development.	1

76	If requirements are easily understandable and defined then which model is best suited?	Spiral model.	Waterfall model.	Prototyping model	None of the above.	2
77	Project risk factor is considered in which model.	Spiral model.	Waterfall model.	Prototyping model	None of the above.	1
78	What is the meaning of requirement elicitation in software engineering?	Gathering of requirement.	Understanding of requirement.	Getting the requirements from client.	All of the above.	4
79	The prototyping model of software development is well suited?	When requirements are well defined.	For projects with large development teams.	When a customer cannot define requirements clearly.	None of the above.	3
80	Which of the following is/are project estimation technique?	Empirical Estimation Technique.	Heuristic Estimation Technique.	Analytical Estimation Technique.	All of the above.	4
81	In Software engineering, CMM model is a technique to	Develop the software.	Improve the software process.	Improve the testing process.	All of the above.	2
82	FAST stands for	Facilitated Application Software Technique.	Functional Application Software Technique.	Facilitated Application Specification Technique.	None of the above.	3
83	How many numbers of maturity levels in CMM are available?	3	4	5	6	3
84	Design phase is followed by.	Coding	Testing	Maintenance	None of the above.	1

85	Which software is used to control products and systems for the consumer and industrial markets?	System software	Artificial intelligence software	Embedded software	Engineering and scientific software	3
86	From the following, which software has been characterized by "number crunching" algorithms?	System software	Artificial intelligence software	Embedded software	Engineering and scientific software	4
87	Software is defined as	Instructions	Data Structures	Documents	All of the above	4
88	Which software enables the program to adequately manipulate information?	Instructions	Data Structures	Documents	All of the above	2
89	Abbreviate the term CMMI.	Capability Maturity Model Integration	Capability Model Maturity Integration	Capability Maturity Model Instructions	Capability Model Maturity Instructions	1
90	First level prototype is evaluated by?	Developer	Tester	User	System Analyst	3
91	The Bedrock that supports software Engineering in layered technology.	Methods	Tools	Process	Quality Focus	4
92	Which one of the below provides semi-automatic and automatic support to methods in layered technology.	Methods	Tools	Process	Quality Focus	2
93	The physical connections between elements of the OO design represent?	Cohesion	Coupling	Both A & B	None of the above	2

94	In which way CMMI process meta model can be represented?	A continuous model	A staged model	Both A & B	None of the above	3
95	In which level metrics and indicators are available to measure the process and quality.	Optimized	Defined	Quantitatively Managed	Managed	3
96	In which level goal, objective, work tasks, work products and other activities of software process are carried out.	Performed	INCOMPLETE	Optimized	Quantitatively Managed	1
97	Which model is used if you have no clue of how to improve the process for quality software?	A Continuous model	A Staged model	Both A & B	None of the above	2
98	The process of developing a software product using software engineering principles and methods is referred to as.	Software myths	Scientific Product	Software Evolution	None of the above	3
99	MTTC stands for _____	Mean time to change	Modular time to change	Mean time to control	Modular time to control	1
100	Software design paradigm is a part of software development and it includes which of these.	Coding	Testing	Integration	None of the above	4

101	Which paradigm is related to programming aspect of software development that includes : Coding, Testing and Integration	Programming paradigm	Requirement gathering paradigm	Software development paradigm	None of the above	1
102	_____ is a piece of programming code which performs a well defined task	Computer Program	Computer Software	Both A & B	None of the above	1
103	If the software process were not based on scientific and engineering concepts it would be easier to re-create new software than to scale an existing one is known as.	Cost	Dynamic Management	Large Software	Scalability	3
104	Which of the following is the understanding of software product limitations, learning system related problems or changes to be done in existing systems beforehand, identifying and addressing the impact of project on organization and personnel etc?	Software Design	Feasibility Study	Requirement Gathering	System Analysis	3

105	What is the simplest model of software development paradigm?	Spiral model	Big Bang model	V-model	Waterfall model	4
106	Which model is not suitable for large software projects but good one for learning and experimenting?	Big Bang model	Spiral model	Iterative model	Waterfall model	1
107	Which model is also known as Verification and validation model?	Waterfall model	Big Bang model	V-model	Spiral model	3
108	In which SDLC activity the user initiates the request for a desired software product.	Requirement gathering	Implementation	Disposition	Communication	4
109	In which step the developers decide a roadmap of their plan and try to bring up the best Software model suitable for the project.	Software Design	System Analysis	Coding	Testing	2
110	We can select the best SDLC model if following are satisfied.	If SDLC suitable for selected technology to implement the software.	If SDLC appropriate for client's requirements and priorities.	If SDLC model suitable for size and complexity of the software.	All mentioned above	4
111	Classes communicate with one another via?	Read sensors	Dial phones	Messages	None of the above	3
112	Which aspect is important when the software is moved from one platform to another?	Maintenance	Operational	Transitional	All of the above	3

113	The always growing and adapting nature of software hugely depends upon the environment in which user works in _____	Cost	Dynamic Nature	Quality Management	Scalability	2
114	Which software, works strictly according to defined specifications and solutions?	Static-type	Practical-type	Embedded-type	None of the above	1
115	The software design paradigm is a part of software development and it includes.	Design, Maintenance, Programming	Coding, Testing, Integration	Requirement gathering, Software design, Programming	None of the above	1
116	The average effective global activity rate in an evolving E-type system is invariant over the lifetime of the product.	Self-regulation	Reducing quality	Feedback systems	Organizational stability	4
117	Object inherits a class is known as.	Maintenance	Operations	Transitional	Development	2
118	A Project can be characterized as.	Every project may not have a unique and distinct goal.	Project is routine activity or day-to-day operations.	Project does not comes with a start time and end time.	None of the above	4
119	Software project management comprises of a number of activities, which contains.	Project planning	Scope management	Project estimation	All mentioned above	4
120	COCOMO stands for	COnsumed COst MOdel	COnstructive COst MOdel	COmmon COntrol MOdel	COmposition COst MOdel	2
121	In which estimation software size should be known.	Time estimation	Effort estimation	Cost estimation	Software size estimation	2

122	Which may be estimated either in terms of KLOC (Kilo Line of Code) or by calculating number of function points in the software.	Time estimation	Effort estimation	Cost estimation	Software size estimation	4
123	In Risk management process what make note of all possible risks, that may occur in the project.	Manage	Monitor	Categorize	Identification	4
124	Software project management is the process of managing all activities that are involved in software development, they are.	Time	Cost	Quality management	All mentioned above	4
125	Software project manager is engaged with software management activities. He is responsible for.	Project planning.	Monitoring the progress	Communication among stakeholders	All mentioned above	4
126	Size of software product can be calculated using which of these methods.	Counting the lines of delivered code	Counting delivered function points	Both A and B	None of the above	3
127	In project execution and monitoring, every project is divided into multiple phases in which all major tasks are performed based on which phase of SDLC.	Milestones checklist	Status reports	Activity monitoring	None of the above	1

128	Requirement engineering process includes which of these steps.	Feasibility study	Requirement Gathering	Software Requirement specification & Validation	All mentioned above	4
129	Which document is created by system analyst after the requirements are collected from Various stakeholders.	Software requirement specification	Software requirement validation	Feasibility study	Requirement Gathering	1
130	In which elicitation process the developers discuss with the client and end users and know their expectations from the software.	Requirement gathering	Organizing requirements	Negotiation & discussion	Documentation	1
131	The process to gather the software requirements from client, analize and document them is known as.	Requirement engineering process	Requirement elicitation process	User interface requirements	Software system analyst	1
132	What computer-based system can have a profound effect on the design that is chosen and also the implementation approach will be applied.	Scenario-based elements	Class-based elements	Behavioural elements	Flow-oriented elements	3
133	In the requirement analysis which model depicts the information domain for the problem.	Data models	Class-Oriented models	Scenario-based models	Flow-oriented models	1

134	In the requirement analysis which model depicts how the software behaves as a consequence of external events.	Class-Oriented models	Scenario-based models	Flow-oriented models	Behavioural models	4
135	The requirements model must achieve which of these primary objectives.	To describe what the customer requires	To establish a basis for the creation of a software design	To define a set of requirements that can be validated once the software	All mentioned above	4
136	Users can be divided into groups and groups can be given separate rights.	Functional Requirements	Non-functional Requirements	Both A & B	None of the above	1
137	Which is focused towards goal of the organization?	Feasibility study	Requirement gathering	Software requirement specification	Software requirement validation	1
138	System Analysts have which of these responsibilities.	Analyzing and understanding requirements of intended software	Understanding how the project will contribute in the organization objectives	Identify sources of requirement	All mentioned above	4
139	The process to gather the software requirements from client, analize and document them is known as.	Requirement engineering	Requirement elicitation	User interface requirements	Software system analyst	1
140	Abbreviate the term SRS.	Software Requirement Specification	Software Refining Solution	Software Resource Source	None of the above	1
141	Mention any two indirect measures of product.	Quality	Efficiency	Accuracy	Both A and B	4

142	Which design identifies the software as a system with many components interacting with each other?	Architectural design	High-level design	Detailed design	Both B & C	1
143	Which design deals with the implementation part in which it shows a system and its sub-systems in the previous two designs?	Architectural design	High-level design	Detailed design	Both A & B	3
144	Activities and action taken on the data are represented by circle or round-edged rectangles.	Entities	Process	Data storage	Data flow	2
145	When elements of module are grouped together that are executed sequentially in order to perform a task, is called.	Procedural cohesion	Logical cohesion	Emporal cohesion	Co-incidental cohesion	1
146	When elements of module are grouped because the output of one element serves as input to another and so on.	Functional cohesion	Sequential cohesion	Communicational cohesion	Procedural cohesion	2
147	When multiple modules have read and write access to some global data, it is called.	Content coupling	Stamp coupling	Data coupling	Common coupling	4

148	Which depicts flow of control in program modules?	Flowchart	DFD	Both A & B	None of the above	1
149	Which type of DFD concentrates on the system process and flow of data in the system.	Logical DFD	Physical DFD	Both A & B	None of the above	1
150	Activities and action taken on the data are represented by Circle or Round-edged rectangles.	Process	Data storage	Data flow	Entities	1