


Name:	 UPES UNIVERSITY WITH A PURPOSE
Enrolment No:	
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, July 2020	
Course: Software Engineering and Project Management	Semester: IV
Program: AI&ML	Time:02 hrs.
Course Code: CSEG2008	Max. Marks: 100
Instructions: Use of calculators and other electronic devices is prohibited	

S N	Type	Options								
		1	MC	Software consists of _____	Set of instructions + operating procedures	Incorrect	Programs + documentation + operating procedures	Correct	Programs + hardware manuals	Incorrect

2	MC	What are the characteristics of software?	Software can be custom built or custom build	Incorrect	Software doesn't "wear out".	Incorrect	All of the mentioned	Correct	Software is developed or engineered; it is not manufactured in the classical sense.	Incorrect
3	MC	Type of program which is designed for users to customize the program is _____	shareware	Incorrect	macros	Incorrect	open source software	Incorrect	freeware	Correct
4	MC	What often-false assumption does the waterfall model made about requirements specifications?	specifications are predictable	Incorrect	all of the mentioned	Correct	specifications are stable	Incorrect	specifications have low change rates	Incorrect
5	MC	The waterfall model for software development is _____	A reasonable approach when requirements are well defined	Correct	A good approach when a working program is required quickly	Incorrect	The best approach to use for projects with large development teams	Incorrect	An old fashioned model that is rarely used any more.	Incorrect

6	MC	The incremental model of software development is _____	An old fashioned model that is rarely used any more.	Incorrect	The best approach to use for projects with large development teams	Incorrect	A reasonable approach when requirements are well defined	Incorrect	a good approach when a working core product is required quickly	Correct
7	MC	The prototyping model of software development is _____	A reasonable approach when requirements are well defined	Incorrect	The best approach to use for projects with large development teams	Incorrect	A useful approach when a customer cannot define requirements clearly	Correct	A risky model that rarely produces a meaningful products	Incorrect
8	MC	The spiral model of software development	Ends with the delivery of the software product	Incorrect	include project risk evaluation during each iteration	Correct	Is more chaotic than the incremental model	Incorrect	All of the mentioned	Incorrect

9	MC	The rapid application development model is _____	a high speed adaption of the linear sequential model	Correct	another name for component-based development	Incorrect	A useful approach when a customer cannot define requirements clearly	Incorrect	All of the mentioned	Incorrect
10	MC	Which of the following are advantages of iterative model?	Early revenue generation	Incorrect	Simpler to manage	Incorrect	All of the mentioned	Correct	Early feedback	Incorrect
11	MC	Which of these factors complicate decision making by global software teams	All of the mentioned	Correct	complexity of the problem	Incorrect	different views of the problem	Incorrect	risk associated with the decision	Incorrect
12	MC	The system specification describes the	time required for system simulation	Incorrect	element software architecture	Incorrect	Function, performance and constraints of a computer based system	Correct	implementation of each allocated system	Incorrect
13	MC	Which of the following is not a UML diagram used creating a system analysis model?	state diagram	Incorrect	class diagram	Incorrect	activity diagram	Incorrect	dataflow diagram	Correct

14	MC	The result of the requirements engineering task is an analysis model that defines which of the following problem domain?	information	Incorrect	all of the mentioned	Correct	functional	Incorrect	behavioral	Incorrect
15	MC	The entity relationship diagram	depicts function that transform the data flow	Incorrect	depicts relationship between data objects	Correct	indicates how data are transformed by the system	Incorrect	indicates system reactions to external events	Incorrect
16	MC	Which is not a characteristic of a good SRS?	Correct	Incorrect	Brief	Correct	Complete	Incorrect	Consistent	Incorrect
17	MC	After SRS, we may like to estimate	Size	Incorrect	Cost	Incorrect	All of the mentioned	Correct	Development	Incorrect
18	MC	The weak entities are represented in UML diagrams by using aggregations called	qualified aggregation	Correct	qualified segregation	Incorrect	non qualified segregation	Incorrect	non qualified aggregation	Incorrect
19	MC	In UML diagrams, the relationship between object and component parts is represented	ordination	Incorrect	aggregation	Correct	segregation	Incorrect	increment	Incorrect
20	MC	SRS document is also known as _____ specification.	white box	Incorrect	grey box	Incorrect	black box	Correct	blue box	Incorrect
21	MC	Which of the following is a part of SRS?	Cost	Incorrect	Delivery Schedule	Incorrect	Staffing	Incorrect	Design constraints	Correct

22	MC	Which one is not the part of SRS?	Performance	Incorrect	Design solutions	Correct	Functionality	Incorrect	External Interfaces	Incorrect
23	MC	The Data Flow Diagram(DFD) shows	flow of data	Incorrect	the process	Incorrect	All of the mentioned	Correct	the area where they are stored	Incorrect
24	MC	In DFD, an originator or receiver of that data is usually designated by	a circle	Incorrect	an arrow	Incorrect	square box	Incorrect	rectangle	Correct
25	MC	Which of the following is not desired in a good SRS document	non functional requirements	Incorrect	algorithms for software implementation	Correct	functional requirement	Incorrect	goals of implementation	Incorrect
26	MC	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	Correct	System Flowchart	Incorrect	Document Flowchart	Incorrect	Program Flowchart	Incorrect
27	MC	Which of the following is not a guideline for drawing a Data Flow Diagram (DFD)?	Develop a context diagram	Incorrect	Subdivide the DFD	Incorrect	Determine system boundaries	Incorrect	Display the physical location of data files	Correct

28	MC	In RAD model, information gathered in business modeling phase is reviewed and analyzed to form sets of data objects vital for business in	Buisness Modeling	Incorrect	Process Modeling	Incorrect	Data modeling	Correct	Deployemnt Modeling	Incorrect
29	MC	The principle of Albrecht's function point analysis (FPA) is that a system is decomposed into functional units. How many functional units are there in it?	1	Incorrect	5	Correct	3	Incorrect	4	Incorrect
30	MC	Internal logical files and external interface files are	Data Function type	Correct	Transactional Function type	Incorrect	Non Functiona type	Incorrect	None of the mentione d	Incorrect
31	MC	Consider a with the following functional units: Number of user inputs=60, Number of user outputs = 40, Number of user enquiries=35, Number of user files =6, Number of external interfaces= 04; What will be the value of UFP by considering that all CAF and weighting factors are average?	628	Incorrect	1028	Incorrect	668	Correct	776	Incorrect

32	MC	Consider a with the following functional units: Number of user inputs=60, Number of user outputs = 40, Number of user enquiries=35, Number of user files =6, Number of external interfaces= 04; What will be the value of FP by considering that CAF is 1.07 and weighting factors are average?	715	Correct	672	Incorrect	772	Incorrect	615	Incorrect
33	MC	An application has the following : 20 low external inputs, 12 high external inputs , 10 low internal logical files, 15 high external interface files and 12 average external inquiries and the value of CAF is 1.10. What will be the value of unadjusted function point?	452	Incorrect	462	Incorrect	412	Correct	512	Incorrect
34	MC	An application has the following : 20 low external inputs, 12 high external inputs , 10 low internal logical files, 15 high external interface files and 12 average external inquiries and the value of CAF is 1.10. What will be the value of function point?	497	Incorrect	597	Incorrect	557	Incorrect	453	Correct

35	MC	The number of people required for a software project is determined	by the size of project budget	Incorrect	after an estimate of the development effort is made	Correct	from an assessment of the technical complexity of the system	Incorrect	All of the mentioned	Incorrect
36	MC	Suppose that a project was estimated to be 300 KLOC. Calculate the effort for organic mode.	1295.31	Incorrect	957.6	Correct	1395.31	Incorrect	857.6	Incorrect
37	MC	Suppose that a project was estimated to be 300 KLOC. Calculate the development time for organic mode.	38.07	Incorrect	33.94	Correct	48.07	Incorrect	43.94	Incorrect
38	MC	A project size of 200 KLOC is to be developed. Software development team has average experience on similar type of projects. The project schedule is not very tight. Calculate the average staff size of the project.	32.67	Incorrect	34.44	Incorrect	38.67	Correct	43.26	Incorrect
39	MC	A project size of 200 KLOC is to be developed. Software development team has average experience on similar type of projects. The project schedule is not very tight. Calculate the productivity of the project.	176	Correct	136	Incorrect	156	Incorrect	186	Incorrect

40	MC	In Intermediate COCOMO Model, complexity of the product is a part of	hardware attributes	Incorrect	product attributes	Correct	personal attributes	Incorrect	project attributes	Incorrect
41	MC	In Intermediate COCOMO Model, programming language experience of the product is a part of	hardware attributes	Incorrect	product attributes	Incorrect	personal attributes	Correct	project attributes	Incorrect
42	MC	A new project with estimated 400 KLOC embedded system has to be developed. Developers of low quality but a lot of experience with the programming language. What is the value of effort estimation?	3528 PM	Incorrect	5528 PM	Incorrect	3458 PM	Incorrect	4528 PM	Correct
43	MC	A company projecting revenue of 64 lacs in first year and the revenue is going to increase by 25% every year for the next 3 years in succession, after which revenue decreases by 20 lacs in the fifth year and thus will be closed after 5 years. The fixed initial investment for the project is 120 lacs and working capital requirement is 60 lacs. Compute payback for the project .	3.553 years	Incorrect	3.853 years	Incorrect	2.853 years	Correct	2.553 years	Incorrect

44	MC	A company projecting revenue of 64 lacs in first year and the revenue is going to increase by 25% every year for the next 3 years in succession, after which revenue decreases by 20 lacs in the fifth year and thus will be closed after 5 years. The fixed initial investment for the project is 120 lacs and working capital requirement is 60 lacs. Compute ROI for the project .	43.67%	Incorrect	22.67%	Incorrect	33.67%	Incorrect	32.67%	Correct
45	MC	A company projecting revenue of 64 lacs in first year and the revenue is going to increase by 25% every year for the next 3 years in succession, after which revenue decreases by 20 lacs in the fifth year and thus will be closed after 5 years. The fixed initial investment for the project is 120 lacs and working capital requirement is 60 lacs. Compute NPV assuming 12.5% discount rate for the project .	Rs. 14463300 0	Incorrect	Rs. 14663000	Correct	Rs. 13463300 0	Incorrect	Rs. 14466600 0	Incorrect

46	MC	One of the most important attributes for software product metric is that it should be	easy to compute	Correct	qualitative in nature	Incorrect	reliable over time	Incorrect	widely applicable	Incorrect
47	MC	Which of the following is comes under indirect measure of product?	Complexity	Incorrect	Reliability	Incorrect	Quality	Incorrect	All of the mentioned	Correct
48	MC	Usability can be measured in terms of	Time required to become moderately efficient in system usage	Incorrect	Intellectual skill to learn the system	Incorrect	All of the mentioned	Correct	Net increase in productivity	Incorrect
49	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
50	MC	During unit testing, which of the following need to be assessed?	error handling & execution path	Correct	code stability	Incorrect	error handling only	Incorrect	execution path only	Incorrect
51	TF	Boundary value analysis can only be used to do white-box testing	TRUE	FALSE						

52	MC	Which testing phase tests individual software modules combined together as a group?	Integration testing	Correct	Module Testing	Incorrect	White-Box Testing	Incorrect	Software Testing	Incorrect
53	MC	Statement Coverage will not check for the following	Unused branches	Incorrect	Dead Code	Incorrect	Missing Statement	Correct	Unused statement	Incorrect
54	MC	Equivalence Partitioning is	A black box testing technique used only by developers	Incorrect	A white box testing technique appropriate for component testing	Incorrect	None of the mentioned	Incorrect	A black box testing technique appropriate to all levels of testing	Correct
55	MC	Before launching a software which testing is to be done in-house?	Beta	Incorrect	Alpha	Correct	Gamma	Incorrect	None of the mentioned	Incorrect
56	MC	Which of the following is not one of three software product aspects address by McCall's software quality factors	ability to undergo change	Incorrect	production cost & scheduling	Correct	operational characteristics	Incorrect	adaptability to new environments	Incorrect
57	MC	Which of the following are ISO 9126 software quality factors?	Functionality only	Incorrect	Functionality, Portability & Reliability	Correct	Portability only	Incorrect	Reliability Only	Incorrect

58	MC	Three Categories of risk are	buisness risks, personnel risks & budget risks	Incorrec t	planning risks, technical risks & personnel risks	Incorrect	project risks , technical risks & buisness risk	Correct	managem ent risks, technical risks & design risks	Incorrec t
59	MC	Project manager will also be involved in making choice that require balancing in	Goal of the project & Goals of the firm	Correct	Goals of the resources	Incorrect	Goals of the project only	Incorrect	Goals of the firm only	Incorrec t
60	MC	Of the following management skills, which will a project manager use most?	leading	Incorrec t	communicatin g	Correct	influencin g the organizati on	Incorrect	Negotiati ng	Incorrec t