


Name:										
Enrolment No:										
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, May 2020										
Course: IT application in Exploration and Production						Semester: IV				
Course Code: CSOG 3002						Time: 2 hrs				
Programme: B.Tech Computer Science in OGI						Max. Marks: 120				
Instructions: Attempt all question and all question carries equal 2 Marks										
1	M C	Which of the following are the objectives of SIG	Drive issue	Incor rect	Drive issue	Incor rect	Both 1 and 2	Corr ect	None of the above	Incor rect
2	M C	Which of the following is not a committee SIG	Steerin g Commi ttee	Incor rect	Technical Team	Incor rect	Accounts Team	Corr ect	Work Group	Incor rect
3	M C	Which of the following is Standard on Logging Operations.	OISD-STD-181	Incor rect	OISD-STD-176	Incor rect	OISD-STD-183	Corr ect	OISD-STD-185	Incor rect
4	M C	Number of unmanned platforms for which ESA's are being planned by OISD are	332	Incor rect	456	Incor rect	238	Corr ect	167	Incor rect
5	T F	POSC is the old name of Energetics	TRUE	FALS E						
6	M C	Which of the following is not a founding member of Energetics	BP	Incor rect	Total	Incor rect	FERC	Incor rect	API	Corr ect
7	T F	API headquater was always in Washington DC	FALSE	TRU E						
8	M C	Which of the following is not an objective of API	to afford a means of cooper ation with	Incor rect	to promote in general the interests of the petroleu	Incor rect	To permote the sale of Electricit y and natural gas	Corr ect	to promote the mutual improve ment of its member	Incor rect

			the government in all matters of national concern		in industry in all its branches				s and the study of the arts and sciences connected with the natural gas and oil industry	
9	M C	Which of the following assets are regulated by FERC	Natural Gas pipeline	Incorrect	Hydropower licensing	Incorrect	Electric reliability	Incorrect	All of the Above	Correct
10	M C	Which of the following responsibilities is not stated by Energy Policy Act of 2005.	Regulation of retail electricity and natural gas sales to consumers	Correct	Regulates the transmission and wholesale sales of electricity in interstate commerce	Incorrect	Ensures the safe operation and reliability of proposed and operating LNG terminals	Incorrect	Monitors and investigates energy markets	Incorrect
11	M C	Which Indian company is part of PDIX	ONGC	Incorrect	MENAT	Correct	HP	Incorrect	Reliance OIL	Incorrect
12	M C	Which of the following SQL standard is deployed in PPDM	SQL-60	Incorrect	SQL-78	Incorrect	SQL-89	Incorrect	SQL-92	Correct
13	M C	Which of the following is not a feature of SCADA system	Trends	Incorrect	Script	Incorrect	Middleware	Correct	Security	Incorrect
14	T F	EOLCS stand for Engine Oil Licensing and Certification System.	TRUE	FALSE						
15	M C	Distributed SCADA system is which generation of SCADA system	2nd	Correct	1st	Incorrect	3rd	Incorrect	4th	Incorrect

16	M C	Which of following communication protocol used in SCADA system :	MODBUS	Incorrect	FIELDBUS	Incorrect	PROFIBUS	Incorrect	All of the Above	Correct
17	M C	Electromagnetic spectrum contains:	Infrared rays (wavelength < 10 ¹⁴ m)	Incorrect	Ultraviolet rays (wavelength < 10 ⁸ m)	Incorrect	Gamma rays (wavelength < 10 ¹¹ m)	Incorrect	All of the Above	Correct
18	M C	Which of the following are disadvantage of GIS system	Accuracy improvement	Incorrect	Data can be managed efficiently	Incorrect	Low cost/benefit ratio	Correct	Time minimization	Incorrect
19	M C	Which of the following is the disadvantage of Vector data	The location of each vertex needs to be stored explicitly	Correct	Accurate geographic location of data is maintained.	Incorrect	Since most data, e.g. hard copy maps, is in vector form no data conversion is required.	Incorrect	Data can be represented at its original resolution and form without generalization.	Incorrect
20	M C	Which of the following is the advantage of Raster data	The cell size determines the resolution at which the data is represented.	Incorrect	Raster maps normally reflect only one attribute or characteristic for an area.	Incorrect	Most output maps from grid-cell systems do not conform to high-quality cartographic needs.	Incorrect	Discrete data, e.g. forestry stands, is accommodated equally well as continuous data, e.g. elevation data, and facilitates the integrating of the two	Correct

									data types.	
21	MC	GIS is not used in which of the following applications in exploration	Basin analysis	Incorrect	Calculation of hydrocarbon yield	Correct	Integrating with other data	Incorrect	Visualization	Incorrect
22	TF	Aperiodic jobs have soft or no deadlines	TRUE	FALSE						
23	MC	Who is the father of AI	John McCarthy	Incorrect	Alan Turing	Correct	Allen Newell	Incorrect	Fisher Ada	Incorrect
24	MC	Which is not a property of representation of knowledge	Inferential Adequacy	Incorrect	Representational Adequacy	Incorrect	Representational Verification	Correct	Inferential Efficiency	Incorrect
25	MC	The first AI programming language was called	BASIC	Incorrect	FORTRAN	Incorrect	IPL	Correct	LISP	Incorrect
26	MC	What is the term used for describing the judgmental or commonsense part of problem solving?	Critical	Incorrect	Value Based	Incorrect	Analytical	Incorrect	Heuristic	Correct
27	MC	What was originally called the "imitation game" by its creator?	The Turing Test	Correct	LISP	Incorrect	The Logic Theorist	Incorrect	Cybernetics	Incorrect
28	MC	AI technique that allows computers to understand associations and relationships between objects and events is called:	Heuristic Processing	Incorrect	Cognitive science	Incorrect	Pattern Matching	Correct	relative symbolism	Incorrect
29	MC	the field that investigates the mechanics of human intelligence is	history	Incorrect	psychology	Incorrect	cognitive Science	Correct	sociology	Incorrect

30	M C	Which of the following is considered to be a pivotal event in the history of AI.	1956, Dartmouth University Conference Organized by John McCarthy	Correct	1961, Computer and Computer Sense.	Incorrect	1950, Computing Machinery and Intelligence.	Incorrect	1949, Donald O. The organization of Behavior.	Incorrect
31	M C	Process undertaken to find the union of features are	Proximity	Incorrect	Overlay	Correct	Buffer	Incorrect	All of the above	Incorrect
32	M C	Application where GIS is not used in Oil and Gas	Seismic Mapping	Incorrect	Land/Lease Management	Incorrect	Computer Analysis	Incorrect	Rock Taxonomy	Correct
33	M C	Which of the following is related to GIS	Ramanujan space	Incorrect	Pythagorean space	Incorrect	Euclidean space	Correct	Manhattan Space	Incorrect
34	T F	GeoReferencing and Geo Rectification are the same concepts	FALSE	TRUE						
35	M C	Spectral Resolution of Hyperspectral Remote Sensing	5-10 nm	Correct	2-3 nm	Incorrect	10-15 nm	Incorrect	15-20 nm	Incorrect
36	M C	Effect responsible of leaking of Oil on earth surface is called	Migration	Incorrect	Drift	Incorrect	Chimney Effect	Correct	transfer effect	Incorrect
37	M C	Which of the following is not surface geochemical expression due to hydrocarbon	paraffin dirt	Incorrect	formation of calcite	Incorrect	Formation of Ferric Oxide	Correct	Concentration of Methan	Incorrect
38	M C	Hydrocarbon Index is focused around which wavelength	1865 nm	Incorrect	1750 nm	Incorrect	1730 nm	Correct	1710 nm	Incorrect

39	MC	Kaolinite present strong absorption feature centered at	2.16 micrometer	Correct	2.10 micrometer	Incorrect	2.05 micrometer	Incorrect	2.3 micrometer	Incorrect
40	MC	What is the term used for describing the judgmental or commonsense part of problem solving	Critical	Incorrect	Value Based	Incorrect	Analytical	Incorrect	Heuristic	Correct
41	MC	Which of the following is not a Hydrocarbon indicator Plants	Anabasis Salsa	Incorrect	Allium cepa	Correct	Allium	Incorrect	All of the Above	Incorrect
42	MC	Which of the following mineral formation are associated with hydrocarbon	Calcite	Incorrect	pyrite	Incorrect	uranium	Incorrect	All of the Above	Correct
43	MC	Upper range of SWIR band is	1730 nm	Incorrect	1690 nm	Incorrect	2310 nm	Correct	2467 nm	Incorrect
44	TF	If hydrocarbon bearing material is present at the surface, the value of HI >0	TRUE	FALSE						
45	TF	Remote sensing has the potential to detect hydrocarbon-induced alteration in rocks, soils and vegetation.	TRUE	FALSE						
46	MC	There are 10 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5,	1	Incorrect	0	Incorrect	2	Correct	3	Incorrect

		<p>J6,J7,J8,J9,J10 Each job has the release time and absolute deadline respectively (2,0,3,3,2,4,4,9,7,9) and deadline (7,3,10,6,10,6,10,13,10,16) respectively. The precedence and successor relation of the job as follows: 1) J6 is a successor of J3 and J4, 2) J7 is a successor of J4, 3) J10 is a successor of J8, 4) J3 is a successor of J2, 5) J5 and J2 are the predecessor of J4, 6) J4 and J9 are the predecessor of J8, and 7) J1 is the predecessor of J2. Now If the execution time of each job is 1 cycle then what will be the release time of J2</p>								
47	MC	<p>There are 10 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5, J6,J7,J8,J9,J10</p>	J2	Incorrect	J1	Incorrect	J4	Correct	J3	Incorrect

		<p>Each job has the release time and absolute deadline respectively (2,0,3,3,2,4,4,9,7,9) and deadline (7,3,10,6,10,6,10,13,10,16) respectively. The precedence and successor relation of the job as follows: 1) J6 is a successor of J3 and J4, 2) J7 is a successor of J4, 3) J10 is a successor of J8, 4) J3 is a successor of J2, 5) J5 and J2 are the predecessor of J4, 6) J4 and J9 are the predecessor of J8, and 7) J1 is the predecessor of J2. Now If the execution time of each job is 1 cycle then name of Job who's release time and deadline doesn't change</p>								
48	MC	There are 10 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5,	0	Incorrect	2	Incorrect	1	Correct	3	Incorrect

		<p>J6,J7,J8,J9,J10 Each job has the release time and absolute deadline respectively (2,0,3,3,2,4,4,9,7,9) and deadline (7,3,10,6,10,6,10,13,10,16) respectively. The precedence and successor relation of the job as follows: 1) J6 is a successor of J3 and J4, 2) J7 is a successor of J4, 3) J10 is a successor of J8, 4) J3 is a successor of J2, 5) J5 and J2 are the predecessor of J4, 6) J4 and J9 are the predecessor of J8, and 7) J1 is the predecessor of J2. Now if the execution time of each job is 1 cycle then how many remaining clock cycle is left for J5</p>								
49	MC	There are 10 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5,	J6	Correct	J1	Incorrect	J3	Incorrect	J9	Incorrect

		<p>J6,J7,J8,J9,J10 Each job has the release time and absolute deadline respectively (2,0,3,3,2,4,4,9,7,9) and deadline (7,3,10,6,10,6,10,13,10,16) respectively. The precedence and successor relation of the job as follows: 1) J6 is a successor of J3 and J4, 2) J7 is a successor of J4, 3) J10 is a successor of J8, 4) J3 is a successor of J2, 5) J5 and J2 are the predecessor of J4, 6) J4 and J9 are the predecessor of J8, and 7) J1 is the predecessor of J2. Now If the execution time of each job is 1 cycle then name of Jobs who will miss their deadline based on EDF order</p>								
50	MC	There are 10 jobs to be executed under the given hard real-time system i.e. J1,	0	Incorrect	3	Incorrect	1	Incorrect	2	Correct

		<p>J2, J3, J4, J5, J6, J7, J8, J9, J10</p> <p>Each job has the release time and absolute deadline respectively (2,0,3,3,2,4,4,9,7,9) and deadline (7,3,10,6,10,6,10,13,10,16) respectively.</p> <p>The precedence and successor relation of the job as follows:</p> <p>1) J6 is a successor of J3 and J4, 2) J7 is a successor of J4, 3) J10 is a successor of J8, 4) J3 is a successor of J2, 5) J5 and J2 are the predecessor of J4, 6) J4 and J9 are the predecessor of J8, and 7) J1 is the predecessor of J2. Now what will be the Level of J9</p>								
51	MC	<p>There are 10 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5, J6, J7, J8, J9, J10</p> <p>Each job has the release time and</p>	J3	Incorrect	J4	Correct	J6	Incorrect	J8	Incorrect

		<p>absolute deadline respectively (2,0,3,3,2,4,4,9,7,9) and deadline (7,3,10,6,10,6,10,13,10,16) respectively. The precedence and successor relation of the job as follows: 1) J6 is a successor of J3 and J4, 2) J7 is a successor of J4, 3) J10 is a successor of J8, 4) J3 is a successor of J2, 5) J5 and J2 are the predecessor of J4, 6) J4 and J9 are the predecessor of J8, and 7) J1 is the predecessor of J2. Now If the execution time of each job is 1 cycle then as per EDF order, job after J5</p>								
52	MC	<p>There are 10 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5, J6, J7, J8, J9, J10 Each job has the release time and absolute deadline</p>	J7	Correct	J6	Incorrect	J3	Incorrect	J8	Incorrect

		<p>respectively (2,0,3,3,2,4,4,9,7,9) and deadline (7,3,10,6,10,6,10,13,10,16) respectively. The precedence and successor relation of the job as follows: 1) J6 is a successor of J3 and J4, 2) J7 is a successor of J4, 3) J10 is a successor of J8, 4) J3 is a successor of J2, 5) J5 and J2 are the predecessor of J4, 6) J4 and J9 are the predecessor of J8, and 7) J1 is the predecessor of J2. Now If the execution time of each job is 1 cycle then as per EDF order, job after J4 if job with missed deadline is not considered.</p>								
53	MC	<p>There are 10 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5, J6, J7, J8, J9, J10 Each job has the release time and</p>	J10	Incorrect	J7	Incorrect	J9	Correct	J5	Incorrect

		<p>absolute deadline respectively (2,0,3,3,2,4,4,9,7,9) and deadline (7,3,10,6,10,6,10,13,10,16) respectively. The precedence and successor relation of the job as follows: 1) J6 is a successor of J3 and J4, 2) J7 is a successor of J4, 3) J10 is a successor of J8, 4) J3 is a successor of J2, 5) J5 and J2 are the predecessor of J4, 6) J4 and J9 are the predecessor of J8, and 7) J1 is the predecessor of J2. Now If the execution time of each job is 1 cycle then on the basis of priority; job that will be follow job J6</p>								
54	MC	<p>There are 10 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5, J6, J7, J8, J9, J10 Each job has the release time and</p>	J7	Incorrect	J8	Incorrect	J9	Correct	J10	Incorrect

		<p>absolute deadline respectively (2,0,3,3,2,4,4,9,7,9) and deadline (7,3,10,6,10,6,10,13,10,16) respectively. The precedence and successor relation of the job as follows: 1) J6 is a successor of J3 and J4, 2) J7 is a successor of J4, 3) J10 is a successor of J8, 4) J3 is a successor of J2, 5) J5 and J2 are the predecessor of J4, 6) J4 and J9 are the predecessor of J8, and 7) J1 is the predecessor of J2. Now If the execution time of each job is 2 cycle then which of the following job will miss their deadline</p>								
55	MC	<p>There are 10 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5, J6, J7, J8, J9, J10 Each job has the release time and</p>	10	Correct	6	Incorrect	4	Incorrect	8	Incorrect

		absolute deadline respectively (2,0,3,3,2,4,4,9,7,9) and deadline (7,3,10,6,10,6,10,13,10,16) respectively. The precedence and successor relation of the job as follows: 1) J6 is a successor of J3 and J4, 2) J7 is a successor of J4, 3) J10 is a successor of J8, 4) J3 is a successor of J2, 5) J5 and J2 are the predecessor of J4, 6) J4 and J9 are the predecessor of J8, and 7) J1 is the predecessor of J2. Now If the execution time of each job is 2 cycle then the deadline of J5 if the J5 is executed.								
56	MC	How many type of attribute data are there	1	Incorrect	2	Incorrect	4	Correct	3	Incorrect
57	MC	There are 6 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5, J6. Each job	8	Incorrect	4	Incorrect	6	Correct	2	Incorrect

		has the release time and absolute deadline respectively (0,1,4,2,1,5) and deadline (8,6,8,10,12,12). The precedence and successor relation of the job as follow J2 is successor of J1, J3 is predecessor of J2 and J4, J5 is successor of J2 and J4, and J5 is predecessor of J6. What will be deadline of J1								
58	MC	There are 6 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5, J6. Each job has the release time and absolute deadline respectively (0,1,4,2,1,5) and deadline (8,6,8,10,12,12). The precedence and successor relation of the job as follow J2 is successor of J1, J3 is predecessor of J2 and J4, J5 is successor of J2 and J4, and J5	1	Incorrect	2	Incorrect	4	Correct	6	Incorrect

		is predecessor of J6. What will be the release time of J2								
59	MC	There are 6 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5, J6. Each job has the release time and absolute deadline respectively (0,1,4,2,1,5) and deadline (8,6,8,10,12,12). The precedence and successor relation of the job as follow J2 is successor of J1, J3 is predecessor of J2 and J4, J5 is successor of J2 and J4, and J5 is predecessor of J6. Which job will follow J2	J4	Correct	J1	Incorrect	J2	Incorrect	J3	Incorrect
60	MC	There are 6 jobs to be executed under the given hard real-time system i.e. J1, J2, J3, J4, J5, J6. Each job has the release time and absolute deadline respectively (0,1,4,2,1,5)	J4	Incorrect	J3	Incorrect	J1	Incorrect	J2	Correct

		and deadline (8,6,8,10,12,12). The precedence and successor relation of the job as follow J2 is successor of J1, J3 is predecessor of J2 and J4, J5 is successor of J2 and J4, and J5 is predecessor of J6. Which job will miss the deadline in EDF order								
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