

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2020

Course: Upstream Petroleum: Exploration and Production

Course Code: CSOG 2002

Programme: B.Tech Computer Science in OGI

Semester: II

Time: 2 hrs

Max. Marks: 60

Instructions: Attempt all question and all question carries equal 1 Marks

M C	What is the old name of alkenes	Acetylene	Incorrect	Paraffin	Incorrect	Olefin	Correct	All of the above	Incorrect
M C	In which hydrocarbon all the four valencies of carbon are linked together with single bond	Alkynes	Incorrect	Alkenes	Incorrect	Alkanes	Correct	All of the above	Incorrect
M C	Which compound is used for making perfumes and dyes	Ethanoate	Incorrect	Ethyl alcohol	Incorrect	Ethyl acetate	Correct	Ethanone	Incorrect
M C	What is the general formula of alkenes?	C_nH_{2n}	Correct	C_nH_{2n-2}	Incorrect	C_nH_{2n+2}	Incorrect	$C_nH_{2n+O}H$	Incorrect
M C	Find the odd one out:	Alkynes	Incorrect	Alkanes	Incorrect	Aromatic	Correct	Alkenes	Incorrect
M C	Inhibitive mud is what kind of Mud	WBM	Incorrect	OBM	Incorrect	Polymer MUD	Correct	Both OBM and WBM	Incorrect
M C	Which of the following petrochemical product is responsible for	benzene	Incorrect	toluene	Incorrect	styrene	Correct	phenol	Incorrect

	formation of plastic								
M C	Which of the following are the stages of oil and gas field life cycle:	Gaining access	Incorrect	Appraisal phase	Incorrect	Decommissioning	Incorrect	All of the above	Correct
M C	Which of the following is identified first, while drilling inside the earth surface	Gas peak	Incorrect	Oil peak	Correct	both oil and gas peak	Incorrect	kerogen	Incorrect
T F	Porosity is inversely proportional to terran volume	TRUE	FALSE						
M C	Which of the following exploration method can't be used in offshore subsurface analysis	Sismic	Incorrect	Remote Sensing	Correct	Geochemical	Incorrect	None of the above	Incorrect
M C	Geochemical analysis is based on the assumption of	Migration	Incorrect	Permeability	Incorrect	Porosity	Incorrect	Chimney Effect	Correct
T F	Geophysical and Geology survey are the same	FALSE	TRUE						
M C	High value in gravity meter indicate	presence of sedimentary rocks,	Incorrect	presence of light rocks such as	Incorrect	presence of basement rock in a structure	Correct	None of the above	Incorrect

		over basement rocks		salt domes or porous reef.		like anticline or dome.			
M C	Arrange the following oil field in the chronological order a) Ankleswar b) Nahorkatiy a c) Nahorpung d) Digboi Oil field	a,b,c,d	Incorrect	b,a,c,d	Correct	a,b,d,c	Incorrect	d,c,b,a	Incorrect
M C	The quantity of generated petroleum that eventually forms commercial accumulations is	0.4	Incorrect	0.15	Incorrect	0.022	Correct	0.015	Incorrect
M C	Gulf Coast is famous from which of the following types of traps:	Pinch Out	Incorrect	Anticline	Incorrect	Salt dome	Correct	Trust Fault	Incorrect
M C	'subtle traps' mean	Combinational traps	Incorrect	Structural traps	Incorrect	stratigraphic traps	Correct	None of the above	Incorrect
M C	The oil & gas exploration is not carried out in the following state of India	Assam	Incorrect	Tamilnadu	Incorrect	Karnataka	Correct	Bombay	Incorrect

M C	Natural Forces which help in migration and accumulation of Petroleum are	Burial and Compaction of Sediments	Incorrect	action of gravity on the rock fluids	Incorrect	Hydraulic Pressure	Incorrect	All of them	Correct
M C	Which one of the below said element not found in the Petroleum (Crude oil)	Ammonia	Correct	Paraffin's	Incorrect	Hydrogen	Incorrect	Alkalens	Incorrect
M C	Which of the following is not in the process of structural trap formation.	Tectonic	Incorrect	Gravitational	Incorrect	Volcanic	Correct	Diapiric	Incorrect
M C	What are the secondary pores in a sedimentary rock	Pores that are formed after deposition	Correct	Pores that are formed during deposition	Incorrect	Pores that are formed either during or after deposition	Incorrect	None of the above	Incorrect
M C	GTO stand for	Geotechnical Order	Correct	Geothermal Order	Incorrect	Geochemical Technical order	Incorrect	Geophysical technical order	Incorrect
M C	Which of the following is not geological data collected during GTO	Age	Incorrect	Caving zone	Incorrect	Migration path	Correct	Formation pressure	Incorrect
T F	During GTO coring sample are taken from	TRUE	Flase						

	1640 - 1740 m								
M C	Which type of drilling rig is used to drill offshore to the depth of 300 fts.	Inland Drill	Incorrect	Drill ship	Incorrect	Jack Up	Correct	Semi submersible rig	Incorrect
M C	How many type of casing are there	2	Incorrect	4	Incorrect	3	Correct	5	Incorrect
M C	Rotatory drilling was made popular after the Spindletop discovery by "Dad" Joiner in:	1920	Incorrect	1940	Incorrect	1930	Correct	1910	Incorrect
M C	Which of the following is not a component of rotary drilling	Conveyor belts	Correct	Kelly	Incorrect	BOP	Incorrect	Mud pit	Incorrect
T F	Swivel is the connection between slush pump and the drill string	TRUE	FALSE						
T F	Derick is the most essential component of rotary drill	TRUE	FALSE						
M C	Which of the following is not a type of	Iron bits	Correct	tungsten carbide inserts bits	Incorrect	Polycrystalline Diamond Compact Bits	Incorrect	Diamond Bits	Incorrect

	rotatory drill bit								
M C	Which of the following drilling does not require the drill-pipe to be rotated to form drilling hole	Horizontal drilling	Incorrect	Dyna Drilling	Correct	Vertical drilling	Incorrect	Fault drilling	Incorrect
M C	Which of the following is called as "killing" the well.	Sidetrack well	Incorrect	Multilateral well	Incorrect	Closed well	Incorrect	Relief well	Correct
M C	Survey used to detect hydrocarbon plumes is called:	3-D survey	Incorrect	Plumes survey	Incorrect	Sniffer survey	Correct	None of the above	Incorrect
M C	Which type of offshore rig reduce the effect of tidal waves	Drill ship	Incorrect	Jack Up	Incorrect	Semi submersible rig	Correct	Inland Drill	Incorrect
M C	Which of the following are the functionality of drilling fluid	To act as a medium for electrical well logging.	Incorrect	Cooling of the bit and as a lubricant.	Incorrect	To build a wall around the inside of the hole, which prevents the hole from caving in	Incorrect	All of the above	Correct
M C	Encroachment of the formation fluids, can be detected by which	Salinity	Correct	Gel strength	Incorrect	pH value	Incorrect	Density	Incorrect

	property of drilling mud								
M C	for suppressing the hydration and swelling of clay minerals in clay bearing productive sands	OBM	Incorrect	Potassium base Muds:	Correct	WBM	Incorrect	Inhibited	Incorrect
T F	High resistivity is always indicator of hydrocarbons	FALSE	TRUE						
T F	Induction resistivity tool is preferred over latero type tool in non conducting muds	TRUE	FALSE						
T F	Gamma Ray log is used as lithology indicator	TRUE	FALSE						
T F	Positive SP is developed against reservoir section when salinity of formation water is more than that of mud filtrate	FALSE	TRUE						

T F	Dipmeter is based upon resistivity measurements	TRUE	FALSE						
T F	Neutron porosity (PHIN) increases with presence of gas	FALSE	TRUE						
M C	Which log help in distinguish particular clay minerals.	Density	Incorrect	Natural Gamma log	Incorrect	Spectral Gamma Log	Correct	SP log	Incorrect
M C	70 to 95 % of oil is flushed the rest is called.	Residual oil	Correct	Annulus	Incorrect	Salt fresh water	Incorrect	None of the above	Incorrect
M C	detection of gas zones and determination of lithology are found by	the neutron density combination	Correct	dual lateral	Incorrect	annulus	Incorrect	None of the above	Incorrect
M C	To estimate invasion in a formation we use what two logs	Dual lateral	Correct	Gas effect	Incorrect	Photoelectric effect	Incorrect	None of the above	Incorrect
M C	SRB stand for	Subsurface rotatory bit	Incorrect	Salt ratio band	Incorrect	Sulphur reducing Bacteria	Correct	None of the above	Incorrect
M C	SO2 can be absorbed using	SILICA GEL	Incorrect	BAUXITE	Incorrect	PULVERISED LIMESTONE	Correct	ACTIVATED CARBON	Incorrect
M C	Which of the following is	Ferric oxide	Correct	SILICA GEL	Incorrect	BAUXITE	Incorrect	ACTIVATED CARBON	Incorrect

	not a absorbent for hydrocarbon pollutants								
M C	Number of Sedimentary Basins of India are	25	Incorrect	25	Incorrect	26	Correct	27	Incorrect
M C	Temperature range for oil window is	0 to 100 degree celsius	Incorrect	60 to 175 degree celsius	Correct	100 to 325 degree celsius	Incorrect	None of the above	Incorrect
M C	A log that helps in finding the fractured porosity is	NHM	Incorrect	Neutron	Incorrect	Sonic	Correct	Density	Incorrect
M C	Which of the following log is used for depth matching and well to well correlation while running with other logs	Natural Gamma Log	Correct	Gamma Gamma log	Incorrect	Neutron log	Incorrect	None of the above	Incorrect
M C	In a shale formation , which clay mineral are most radioactive	Kaolinite	Incorrect	Chlorite	Incorrect	Illite	Correct	Montmorillonite	Incorrect
M C	Inhibitive mud is what kind of Mud	WBM	Incorrect	OBM	Incorrect	Polymer MUD	Correct	Both OBM and WBM	Incorrect
M C	Salt Section hole enlargement is a complication of:	Drilling Mud	Correct	Drilling Bit	Incorrect	Casing	Incorrect	Salt domes	Incorrect

