

Answer Model of Petroleum Geology Exam

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	A	B
1. A reservoir rock is that contain disconnected pores	<input type="radio"/>	<input checked="" type="radio"/>
2. Anerobic degradation is thermodynamically more efficient than aerobic decomposition	<input type="radio"/>	<input checked="" type="radio"/>
3. Since the hydrocarbons are more dense than the saltwater, they will tend to migrate upward to the surface	<input type="radio"/>	<input checked="" type="radio"/>
4. Migration by molecular solution in water is the widely accepted theory in primary migration mechanism	<input type="radio"/>	<input checked="" type="radio"/>
5. Oil accumulated in the limbs of the anticlinal traps	<input type="radio"/>	<input checked="" type="radio"/>
6. In rock eval pyrolysis S1 normally decreases with burial depth > 1Km	<input type="radio"/>	<input checked="" type="radio"/>
7. Most petroleum found in rocks believed to have been deposited under terrestrial conditions	<input type="radio"/>	<input checked="" type="radio"/>
8. Shoestring sands are a secondary stratigraphic traps	<input type="radio"/>	<input checked="" type="radio"/>
9. Nature of the eroded material effect on the character of fragmental reservoir rocks	<input checked="" type="radio"/>	<input type="radio"/>
10. Sedimentary rocks classified according to their origin into clastic and chemical or biochemical rocks.	<input checked="" type="radio"/>	<input type="radio"/>
11. If the S1 of a sample is 0.16 mg/g and its S2 value is 4.6mg/g so its production index (PI) should be 0.03	<input checked="" type="radio"/>	<input type="radio"/>
12. Diagenetic changes in sand stone only increase its porosity.	<input type="radio"/>	<input checked="" type="radio"/>
13. Effective porosity is more important than total one in the petroleum geology	<input checked="" type="radio"/>	<input type="radio"/>
14. Type IV organic matter composed of oxidized and reworked organic matter	<input checked="" type="radio"/>	<input type="radio"/>
15. A structural trap formed by tectonic processes after deposition of reservoir beds	<input checked="" type="radio"/>	<input type="radio"/>
16. Compaction and cementation obviously reduce permeability based on primary porosity	<input checked="" type="radio"/>	<input type="radio"/>
17. In salt dome traps the formations at the sides of it are newer in age than it	<input type="radio"/>	<input checked="" type="radio"/>
18. Porosity types of carbonate reservoirs include vuggy (pores larger than grains), intergranular (between grains), intragranular or cellular (within grains)	<input checked="" type="radio"/>	<input type="radio"/>
19. As the source rock proceeds in maturation the organic matter decreases while the water content of porespace increases	<input type="radio"/>	<input checked="" type="radio"/>
20. The greater the area and thickness of the reservoir, the lower the potential for large accumulations of oil and gas	<input type="radio"/>	<input checked="" type="radio"/>

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22. In terms of API, crude oil quality classified into sweet to sour	<input type="radio"/>	<input checked="" type="radio"/>
23. In Shallow Reservoirs hydrocarbons would be less separated with more gas in solution and oil of reduced viscosity	<input type="radio"/>	<input checked="" type="radio"/>
24. Arkoses are of the fragmental reservoir rocks	<input checked="" type="radio"/>	<input type="radio"/>
25. If you have a two samples of organic matter with the same quantity one is alginite and the other is exinite . the first one will expel oil more than the other at the maturation stage	<input checked="" type="radio"/>	<input type="radio"/>
26. Secondary porosity is a syn-depositional porosity	<input type="radio"/>	<input checked="" type="radio"/>
27. Secondary porosity is a syn-depositional porosity	<input type="radio"/>	<input checked="" type="radio"/>
28. The sulphur content in source rocks is related to the environmental conditions	<input checked="" type="radio"/>	<input type="radio"/>
29. Clay enter in the calculation of (ϕ , K, water injection and secondary recovery)	<input checked="" type="radio"/>	<input type="radio"/>
30. Rock eval pyrolysis analysis carried out to samples which bearing more than 0.5% wt TOC	<input checked="" type="radio"/>	<input type="radio"/>
31. Shales are of high importance as a reservoir rocks according to its high porosity	<input type="radio"/>	<input checked="" type="radio"/>
32. Sealing faults can keep a trap from being charged	<input checked="" type="radio"/>	<input type="radio"/>
33. T_{max} is the temperature at which the minimum release of hydrocarbons from cracking of kerogen occurs during the pyrolysis (top of S2 peak)	<input type="radio"/>	<input checked="" type="radio"/>
34. Secondary porosity controlled by the degree of uniformity of particle size	<input type="radio"/>	<input checked="" type="radio"/>
35. Structural traps include anticline and fault traps	<input checked="" type="radio"/>	<input type="radio"/>
36. In crude oils , the higher the API gravity is, the heavier is the crude oils	<input type="radio"/>	<input checked="" type="radio"/>
37. Porosity that origin from redeposition and cementation is a primary porosity	<input type="radio"/>	<input checked="" type="radio"/>
38. CO_2 sequestration is a new technique used to make an artificial porosity	<input checked="" type="radio"/>	<input type="radio"/>
39. A combination trap is formed by a combination of processes present in the sediments during the time of deposition of the reservoir beds and by tectonic activity that occurred in the reservoir beds after their deposition	<input checked="" type="radio"/>	<input type="radio"/>
40. In salt dome traps oil accumulated at the top of salt	<input type="radio"/>	<input checked="" type="radio"/>
41. Lacustrine and marine organic matter have much higher petroleum potential than terrestrial organic matter	<input checked="" type="radio"/>	<input type="radio"/>
42. Diagenesis stage of organic matter including microbial degradation, organic diagenesis and thermal alteration	<input type="radio"/>	<input checked="" type="radio"/>
43. The measured organic carbon content (TOC) and S2 values obtained from the eval pyrolysis is the measuring of the reminder rather than the original	<input checked="" type="radio"/>	<input type="radio"/>
44. TOC values are 0.3% for carbonates and 0.5% for shales to indicated as source rocks	<input checked="" type="radio"/>	<input type="radio"/>
45. Pore patter of a clastic reservoir rocks is a function of grain size, shapes, sorting and recrystalization	<input type="radio"/>	<input checked="" type="radio"/>
46. Unconformity is one of the stratigraphic traps	<input type="radio"/>	<input checked="" type="radio"/>

47. T _{max} -in rock eval pyrolysis use as quality indicator of the generated hydrocarbon	<input type="radio"/>	<input checked="" type="radio"/>
48. Hydrocarbons make many primary migrations but only one secondary migration	<input type="radio"/>	<input checked="" type="radio"/>
49. Carbonate reservoir rocks commonly have a more secondary porosity than sandstone	<input checked="" type="radio"/>	<input type="radio"/>
50. Oil produced from Ras Gharib Oil Field is a sweet oil	<input type="radio"/>	<input checked="" type="radio"/>
51. Horizontal permeability is usually measured perpendicular to the bedding planes of the reservoir rock	<input type="radio"/>	<input checked="" type="radio"/>
52. Connate water is the sea water in which marine sediments were deposited	<input checked="" type="radio"/>	<input type="radio"/>
53. S3 is the amount of CO ₂ (in milligrams CO ₂ per ton of rocks)	<input type="radio"/>	<input checked="" type="radio"/>
54. Primary migration take place when the source rock oversaturated with expelled oil and /or gas	<input checked="" type="radio"/>	<input type="radio"/>
55. Metagenesis is the main phase of hydrocarbon generation	<input type="radio"/>	<input checked="" type="radio"/>
56. The vitrinite reflectance is the ability of the vitrinite particles to refelect the light and its value increase with depth	<input checked="" type="radio"/>	<input type="radio"/>
57. Petroleum traps is not important factor in petroleum system analysis	<input type="radio"/>	<input checked="" type="radio"/>
58. Dolomitization explained by the following equation $2\text{CaCO}_3 + \text{MgCl}_2 \longrightarrow \text{CaMg}(\text{CO}_3)_2 + \text{CaCl}_2$	<input checked="" type="radio"/>	<input type="radio"/>
59. Contamination of samples by drilling fluids and mud can give an abnormally high value for S2	<input type="radio"/>	<input checked="" type="radio"/>
60. During the catagenesis phase the organic matter is degraded to carbon dioxide	<input type="radio"/>	<input checked="" type="radio"/>
61. The modified Van Krevelen Diagram is a plot between th Hydrogen index (HI) and T _{max} (deg.C) only	<input type="radio"/>	<input checked="" type="radio"/>
62. Structural closure is the vertical distance from the highest point down to the lowest closed contour	<input checked="" type="radio"/>	<input type="radio"/>
63. Seal or cap rock must be impermeable rocks	<input checked="" type="radio"/>	<input type="radio"/>
64. Porosity in well sorted rocks is larger than it in poorly sorted ones	<input checked="" type="radio"/>	<input type="radio"/>
65. Stratigraphic traps are a change in the lithology of the rock sequence	<input checked="" type="radio"/>	<input type="radio"/>
66. Lipids are biological substances insoluble in water but soluble in fat solvents such as ether, chloroform, and benzene	<input checked="" type="radio"/>	<input type="radio"/>
67. Environments that preserve unusually large amounts of organic matter in the sediments are stagnant lakes and opened basins	<input type="radio"/>	<input checked="" type="radio"/>
68. marine and lacustrine environments as oxic if the waters contain more than 1 ml/l of dissolved oxygen	<input checked="" type="radio"/>	<input type="radio"/>
69. Organic matter is subjected to increasingly higher temperatures with greater depth of burial in Diagenesis stage .	<input type="radio"/>	<input checked="" type="radio"/>
70. Metagenesis is the last stage in the significant thermal alteration of organic matter. Here methane generation Increases and graphitic structures begin to form.	<input type="radio"/>	<input checked="" type="radio"/>
71. Lipids can be converted to oil by loss of small amount of oxygen.	<input checked="" type="radio"/>	<input type="radio"/>
72. Digensis stage characterized by a temperature from 0° C to 50°C.	<input checked="" type="radio"/>	<input type="radio"/>

73. Source rock are commonly shales and lime-mudstone contain significant amounts of organic matter (more than, 0.5 or 0.3 wt % of the whole rock).	<input checked="" type="radio"/>	<input type="radio"/>
74. Lenticular traps is a secondary stratigraphic traps	<input type="radio"/>	<input checked="" type="radio"/>
75. Sweet crude oil is commonly defined as crude oil with sulphur content of more than 0.5%.	<input type="radio"/>	<input checked="" type="radio"/>
76. Biomarkers are a group of compounds, primarily hydrocarbons, found in oils, rock extracts, recent sediment extracts, and soil extracts.	<input checked="" type="radio"/>	<input type="radio"/>
77. There is a generally observed increase in the salinity of formation waters with depth.	<input checked="" type="radio"/>	<input type="radio"/>
78. Mature hydrocarbons first have to migrate out of the source rock is the definition of primary migration.	<input checked="" type="radio"/>	<input type="radio"/>
79. Gamma ray readings increase with hydrocarbon maturation	<input checked="" type="radio"/>	<input type="radio"/>
80. Both temperature and Porosity increase with increasing depth	<input type="radio"/>	<input checked="" type="radio"/>

With my best wishes