

University of Baghdad
College of Science
Dept. of Geology

Admission Exam for MSc. 2015-2016

Answer all the questions

Q1- Placing geologic events in sequential order as determined by their position in geologic record is called?

- a- uniformitarianism . b-correlation. C- Correlative dating . d-absolute dating.

Q2- In which type of unconformity are the beds parallel to each other ?

- a-angular unconformity . b-hitaus. C- disconformity. d-none conformity.

Q3- Which of the following methods can be used to demonstrate age equivalency of rock units?

- a-lateral tracing. b-radiometric dating. C-guide fossils. d-position in sequence. f-all of these.

Q4- How can classify the foraminifera according to chemical composition ?

Q5- The unit of electrical resistivity is :

- a- ohm b- ohm-m c- ohm-m² d- ohm - m⁻¹

Q6- The Gutenberg discontinuity is located at a depth of around ?

- a- 35 km b- 150 km c- 2900 km d- 5000 km

Q7- List types of tectonics boundaries and their relation to epicentral locations ?

Q8- What are the main principals of gravity and magnetic methods?

Q9- - The mineral quartz belongs to:

- a- Oxides b- Silicates c- Hydroxides

Q10- - Bedding planes are defined according to the change:

- a- In composition b- In grain size c- In both above

Q11- Relate the crystallization of minerals from magma to Bowen's reaction series

Q12- Differentiate between the followings:

- a - Sand and sandstone b- Magma and lava c- Limestone and marble d- Shale and claystone

Q13- The upper layer in the crust is rich in:

- a- Silicon and aluminum b- Silicon and iron c- Iron and magnesium d- Silicon and magnesium

Q14- The most unstable mineral towards weathering is:

- a- Quartz b- Feldspar c- Hornblende d- Olivine

Q15- The Gutenberg discontinuity defines the boundary between:

- a- Inner core and outer core b- Mantle and core c- Crust and mantle d- Continental and oceanic crusts

Q16- How the geochemical survey is used for the exploration of mineral deposits?

Q17- Explain loose on ignition (LOI) and insoluble residue (IR) in the carbonate rocks?

Q18- What are the types of structural traps for oil ?

Q19- Regional seal of Iraq is ?

- a- Hartha b- Ratawi c- Gotnia d- sulaiy

Q20- Secondary migration is following on :

- a-Gas b- water c- rocks d- oil

Q21-Hydrocarbon generation is in strata of :

- a-non permeable shale b- sandstone c- fractured limestone d- anhydrites

Q22- A groundwater recharge area is what?

- a-The area where water enters an aquifer b- water held in the soil c- an underground lake or stream
d – the place that precipitation soaks into the ground

Q23- All the land that contributes water to a particular stream or river is the :

- a-Aquifer b- Runoff zone c- Water table d- Rain shadow e- Watershed

Q24- There are three main "loops" in the hydrologic cycle. These are :

- a-fresh water , salt water, and groundwater
b- the surface runoff loop, the evapotranspiration loop, and the groundwater loop.
c-air , land, and soil

Q25- A mixture of fresh and salt water typically found where rivers meet the ocean is called what?

- a-land-seawater b- saline water c- compound water d- brackish water e- mixture water

Q26- Thrust fault is

- a-tensile fracture. b-shear fracture. c-extension fracture. d-thermal fracture.

Q27- Subduction occurs along what type of plate boundary

- a-divergent. b-transform. c-convergent. d-answer a and c.

Q28- The red sea is a good example of what type of plate boundary:

- a-convergent oceanic- continental. b-oceanic divergent. c-continental divergent. d-transform boundary.

Q29- Discuss how you could construct a structural cross section from a geologic map.

Q 30- Fat clay is:

- a-The clay which have low liquid limit
b- The clay which have low liquid limit with high Shrinkage limit
c- The clay which have high Shrinkage limit
d- No one of that mentioned above

Q 31- which one of the following is not from slope movement

- a-Falls b- Toppling c- Slides d- No one of that mentioned above

Q 32-the application of mechanical energy to the soil to rearrange the particles and exclude the air and water to reduce the volume of soil is called :

- a-Stabilization of soil b- Consolidation of soil c- Compaction of soil d- Compressibility of soil

Q33-Draw block diagrams or section and explain the influence of anticline and syncline on tunnels.