

Geology Practice Questions and Answers

1) The study of the spatial and temporal relationships between bodies of rock is called_____.

- a. **Stratigraphy**
- b. Geomorphology
- c. Petrology
- d. Palaentology

Ans: Stratigraphy

2) Both_____and absolute scales are included in the geological time scale.

- a. Actual
- b. **Relativistic**
- c. Universal
- d. geological

Ans: Relativistic

3) Beds represent a depositional event. They are__1 cm in thickness

- a. **Greater than**
- b. Less than
- c. Exactly
- d. Non of the above

Ans: Greater than

4) Laminations are similar to beds but are_____1 cm in thickness.

- a. Greater than
- b. **Less than**
- c. Exactly
- d. Non of the above

Ans: Less than

5) The idea that most beds are laid down horizontally or nearly so is called the

- a. Principle of Original Continuity
- b. Principle of Cross-Cutting Relationships
- c. **Principle of Original Horizontality**
- d. Principle of Superposition

Ans: Principle of Original Horizontality

6) The idea that beds extend laterally in three dimensions until they thin to zero thickness is called the

- a. Principle of Cross-Cutting Relationships
- b. Principle of Original Horizontality
- c. **Principle of Original Continuity**
- d. Principle of Fossil Succession
- e. Principle of Superposition

Ans: Principle of Original Continuity

7) The idea that younger beds are deposited on top of older beds is called the

- a. Principle of Original Horizontality
- b. Principle of Cross-Cutting Relationships
- c. Principle of Original Continuity
- d. **Principle of Superposition**

Ans: Principle of Superposition

- 8) The idea that a dike transecting bedding must be younger than the bedding it crosses is called the
- a. Principle of Original Horizontality
 - b. Principle of Original Continuity
 - c. Principle of Fossil Succession
 - d. Principle of Cross-Cutting Relationships**
 - e. Principle of Superposition

Ans: Principle of Cross-Cutting Relationships

- 9) The idea that fossil content will change upward within a formation is called the
- a. Principle of Cross-Cutting Relationships
 - b. Principle of Original Horizontality
 - c. Principle of Fossil Succession**
 - d. Principle of Original Continuity
 - e. Principle of Superposition

Ans: Principle of Fossil Succession

- 10) The most common rock-stratigraphic unit is the _____.

- a. Formation**
- b. Members
- c. beds
- d. group

Ans: Formation

- 11) Formations can be subdivided into _____.

- a. Formation
- b. Members**
- c. Beds
- d. Group

Ans: Members

- 12) Two or more formations compose a _____.

- a. Beds
- b. Group**
- c. Formation
- d. Members

Ans: Group

- 13) Which of the following is not a time-stratigraphic unit?

- a. eonothem
- b. erathem
- c. system
- d. none of the above**

Ans: none of the above

14) A system is subdivided into_____.

- a. System
- b. Series
- c. Member
- d. group

Ans: Series

15) The geologic-time unit representing the longest interval of time is the_____.

- a. Eon
- b. Era
- c. Period
- d. Age

Ans: Eon

16) The geologic-time unit representing the smallest interval of time is the_____.

- a. Eon
- b. Era
- c. Period
- d. Age

Ans: Age

17) The geologic-time unit corresponding to the time that a system was deposited is the

_____.

- a. Eon
- b. Era
- c. Period
- d. Age

Ans: Period

18) The geologic-time unit corresponding to the time that a series was deposited is the_____.

- a. Eon
- b. Era
- c. Period
- d. Epoch

Ans: Epoch

19) The geologic-time unit corresponding to the time that an erathem was deposited is the

_____.

- a. Eon
- b. Era
- c. Period
- d. Epoch

Ans: Era

20) The geologic-time unit corresponding to the time that an eonothem was deposited is the _____.

- a. **Eon**
- b. Era
- c. Period
- d. Epoch

Ans: Eon

21) What is the oldest age obtained from a mineral or rock on our planet?

- a. **4.4 billion years**
- b. 3.5 billion years
- c. 2.5 billion years
- d. 1.0 billion years

Ans: 4.4 billion years

22) What is the age of the Earth?

- a. **4.6 billion years**
- b. 4.4 billion years
- c. 3.5 billion years
- d. 2.5 billion years

Ans: 4.6 billion years

23) The first animals with preservable hard parts first appear in the _____?

- a. **Cambrian**
- b. Mesozoic
- c. Tertiary
- d. Cenozoic

Ans: Cambrian

24) The dinosaurs evolved and become dominant during the _____.

- a. Permian
- b. **Mesozoic**
- c. Cenozoic
- d. Tertiary

Ans: Mesozoic

25) What epoch do we live in?

- a. Miocene
- b. **Holocene**
- c. Oligocene
- d. Eocene

Ans: Holocene

26) The principle of uniformitarianism was proposed by

- a. Charles Darwin
- b. William Smith
- c. Charles Lyell

d. James Hutton

Ans: James Hutton

27) Who amongst the following proposed the Principle of Order of Superposition of strata ?

a. Smith

b. Wagener

c. Steno

d. Lyell

Ans:Steno

28) Which of the following represents the longest time period

a. Precambrian

b. Paleozoic

c. Mesozoic

d. Cenozoic

Ans: Precambrian

29) The Paleozoic does not include the

a. Ordovician

b. Jurassic

c. Mississippian

d. Permian

Ans: Jurassic

30) The ___ was an era dominated by the dinosaurs

a. Precambrian

b. Paleozoic

c. Mesozoic

d. Cenozoic

Ans: Mesozoic

31) The boundaries between ___ seem to coincide with major changes in the life forms present on Earth.

a. Precambrian

b. systems

c. eras

d. epochs

Ans: eras

32) Radiometric age is often referred to as ____ age.

a. total

b. absolute

c. historic

d. geologic

Ans: absolute

- 33) An undeformed sedimentary layer is ____ than the layer above and ____ than the layer below.
- younger --- younger
 - younger --- older
 - older --- younger**
 - older --- older

Ans: older --- younger

- 34) Fossils are most common in which rock types?
- Sedimentary**
 - igneous
 - metamorphic
 - all of these commonly contain fossils

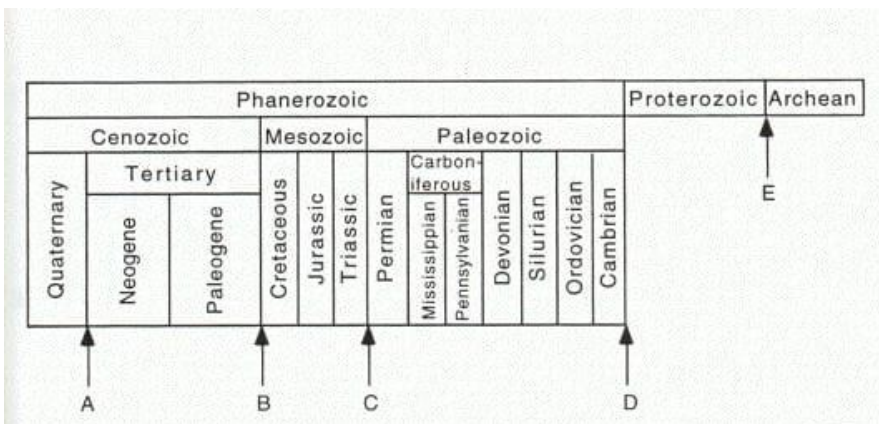
Ans: sedimentary

- 35) The study of faunal succession allows _____ .
- matching of similarly-aged rocks from different outcrops**
 - absolute dating of fossil-bearing strata
 - recognition of the kings of the beasts in past times
 - the study of habits of extinct mammals

Ans: matching of similarly-aged rocks from different outcrops

- 36) A disconformity is _____ .
- a rock unit that does not contain fossils
 - an erosional surface between igneous and metamorphic rocks
 - rocks an erosional surface between horizontal sedimentary**
 - an erosional surface between different rock types

Ans: rocks an erosional surface between horizontal sedimentary



- 37) The age estimate for point A in the diagram above is __ million years
- 0.16
 - 1.6**
 - 16
 - 160

Ans: 1.6

- 38) The age estimate for point B in the diagram above is __ million years
- 35
 - 65**
 - 245

d. 570

Ans: 65

39) The age estimate for point C in the diagram above is ___ million years

- a. 35
- b. 65
- c. 245
- d. 570

Ans: 245

40) The age estimate for point D in the diagram above is ___ million years

- a. 65
- b. 245
- c. 570
- d. 2500

Ans: 570

41) The age estimate for point E in the diagram above is ___ million years

- a. 570
- b. 2500
- c. 3000
- d. 4500

Ans: 2500

42) Human beings evolved during which geologic era?

- a. Cenozoic
- b. Mesozoic
- c. Paleozoic
- d. Precambrian

Ans: Cenozoic

43) Mammals became abundant during the ____Era?

- a. Cenozoic
- b. Mesozoic
- c. Paleozoic
- d. Precambrian

Ans: Cenozoic

44) Large reptiles became abundant during the ____Era?

- a. Cenozoic
- b. Mesozoic
- c. Paleozoic
- d. Precambrian

Ans: Mesozoic

45) According to the principle of Uniformitarianism :

- a. Geologic processes we observe today have operated in the past.
- b. Geologic process in the past operated at the same rate as they do today.
- c. All of the planets formed from a uniform solar nebula.
- d. Early Earth was covered by a uniform magma ocean.

Ans: Geologic processes we observe today have operated in the past.

46) ____ is called the "father" of geology.

- a. John butler
- b. Art smith
- c. James Hutton
- d. Alfred wegner

Ans: James Hutton

47) Correlate and mark correct one:

- 1. Era (i) System.
 - 2. Period. (ii) Group.
 - 3. Epoch (iii) Stage.
 - 4. Age. (iv) Series.
- a. 1-i, 2-ii, 3-iii, 4-iv,
 - b. 1-iii, 2-i, 3-iv, 4-ii.
 - c. 1--ii, 2-i, 3-iv, 4-iii.
 - d. 1-iv, 2-iii, 3-I, 4-ii.

Ans: c

48) The branch of geology which deals with study of chronology of the earth's past events is called as

- a. historical geology
- b. structural geology
- c. physical geology
- d. none of the above

Ans: a

49) Eparchean unconformity separates :

- a. Kurnool from Cuddapah
- b. Archean from younger formations
- c. Upper Gondwana from lower Gondwana
- d. None of the above

Ans: Archean from younger formations

50) Which of the following is correct in ascending order for Geological time units?

- a. Age, Period, Epoch, Era
- b. Era, Period, Epoch, Age
- c. Age, Epoch, Period, Era
- d. Non of the above

Ans: Age, Epoch, Period, Era

51) Mark the correct stratigraphic succession of the Cuddapah system in ascending order?

- a. krishna:nallamalai:cheyair:papaghni
- b. nallamalai:cheyair: Krishna: papaghni
- c. papaghni: cheyair: nallamalai: Krishna
- d. cheyair: nallamalai:papaghani: Krishna

Ans: papaghni: cheyair: nallamalai: Krishna

52) Gondwana supergroup is economically important because they are rich in :

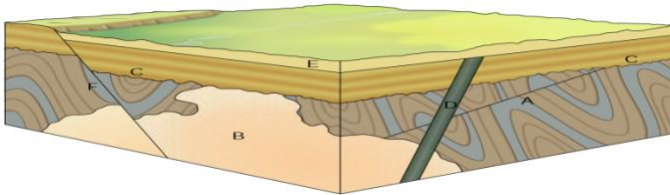
- a. **economic mineral**
- b. coal alone
- c. iron ore alone
- d. sandstone and clay

Ans: economic mineral

53) Where are the volcanic rocks formed?

- a. Under the surface of earth
- b. **On the surface of earth**
- c. Inside the core
- d. Between mantle

Ans: On the surface of earth



54)

The above figure indicates which principles of stratigraphy?

- a. Principle of Original Horizontality
- b. Principle of Original Continuity
- c. Principle of Fossil Succession
- d. **Principle of Cross-Cutting Relationships**
- e. Principle of Superposition

Ans: Principle of Cross-Cutting Relationships

55) Which one is chrono-stratigraphic unit?

- a. member
- b. Formation
- c. group
- d. **Age**

Ans: Age

56) Mark the correct stratigraphic succession of the gondwana system in ascending order?

- a. Talchir:panchet:damuda:mahadeva:rajmahal:Jabalpur
- b. **Talchir: damuda: panchet: mahadeva: rajmahal:Jabalpur**
- c. Talchir: damuda: Jabalpur: panchet: mahadeva: rajmahal
- d. panchet: mahadeva: rajmahal: Talchir: damuda: : Jabalpur

Ans: Talchir: damuda: panchet: mahadeva: rajmahal:Jabalpur

57) Mark the correct stratigraphic succession of the Cuddapah system in ascending order?

- a. **Papaghni: Cheriya: Nallamalai: Krishna**
- b. Cheriya Papaghni Nallamalai Nallamalai
- c. Krishna Nallamalai Cheriya Papaghni
- d. Nallamalai Cheriya Papaghni Krishna

Ans: Papaghni: Cheriya: Nallamalai: Krishna

58) Mark the correct stratigraphic succession of the Vindhyan system in ascending order?

- a. Semri: Rewa:Kaimur: Bhandar
- b. Kaimur: Semri: Rewa:Bhandar
- c. **Semri:Kaimur:Rewa:Bhandar**
- d. Bhandar:Rewa:Kaimur:Semri

Ans : Semri:Kaimur:Rewa:Bhandar

59) Mixture of ore minerals and gangue minerals from which one or more metals can be extracted at a profit called_____?

- a. Ores
- b. Rocks
- c. Metals
- d. **Soils**

Ans: Ores

60) The metal content of an ore:

- a. Ore minerals.
- b. Gangue minerals
- c. **Tenor**
- d. Grade

Ans: Tenor

61) The useless/valueless minerals present in an ore are called _____

- a. Non-metallic minerals
- b. Metallic minerals
- c. **Gangue minerals**
- d. Flux minerals

Ans: Gangue minerals

62) Aggregates of minerals is called:

- a. **Rock**
- b. Ore
- c. Tenor
- d. Ore mineral

Ans: Rock

63) Rocks which are made up of one mineral are called as

- a. **monomineralic**
- b. polymineraleic
- c. both
- d. none of these

Ans: monomineralic

64) The ore deposits which are formed simultaneously with the enclosing rock are called _____

- a. **Syngenetic**
- b. Epigenetic
- c. Syncgenetic
- d. Sinclongenetic

Ans: Syngenetic

65) Pb-Zn mineralisation in Zawar belt of Rajasthan occurs at :

- a. Mocha Magma.
- b. Barai Magma.
- c. Zawar Maia hills.
- d. All-the above.

Ans: All-the above.

66) Mn-ore of chemical grade should have :

- a. 95% of Mn.
- b. 82-87% of Mn.
- c. 74-78% of Mn.
- d. 60-63% of Mn.

Ans: 82-87% of Mn

67) Noamundl Iron-mines are situated in

- a. Madhya Pradesh.
- b. Maharashtra.
- c. Bihar.
- d. Orissa.

Ans: Bihar.

68) How many types of rocks are there on the basis of time of formation?

- a. 1
- b. 2
- c. 3
- d. 4

Ans: 2

69) Which mineral is also used in chemical industry for manufacture of chromates?

- a. Iron
- b. Chromite
- c. Bauxite
- d. Copper

Ans: Chromite

70) State where copper is not mined?

- a. Jammu and Kashmir
- b. Bihar
- c. Maharashtra
- d. Rajasthan

Ans: Jammu and Kashmir

71) Where is the Singhbhum copper belt located?

- a. Karnataka
- b. Madhya Pradesh
- c. Sikkim
- d. Bihar

Ans: Bihar

72) Which is the most common ore of Lead?

- a. Sphalerite
- b. Galena
- c. Chromite

d. Bauxite

Ans: Galena

73) Iron is commonly precipitated as:

- a. Siderite
- b. Limonite
- c. Hematite
- d. All of the above

Ans: All of the above

74) What is the chemical formula for illeminite?

- a. FeSO_4
- b. Fe_3O_4
- c. Au
- d. FeTiO_3

Ans: FeTiO_3

75) What is the chemical formula for Chalcopyrite?

- a. CuFeS_2
- b. $\text{Cu Co}_3 \text{Cu}(\text{OH})_2$
- c. CuS
- d. Cu_2S

Ans: CuFeS_2

76) What is the chemical formula of Malachite?

- a. Cu_2O
- b. $\text{CuCO}_3\text{Cu}(\text{OH})_2$
- c. Cu_2S
- d. CuS

Ans: $\text{CuCO}_3\text{Cu}(\text{OH})_2$

77) What is the chemical formula of Tenorite?

- e. Cu_2O
- f. $\text{CuCO}_3\text{Cu}(\text{OH})_2$
- g. Cu_2S
- h. CuO

Ans: CuO

78) What is the chemical formula of Chalcocite?

- i. Cu_2O
- j. $\text{CuCO}_3\text{Cu}(\text{OH})_2$
- k. Cu_2S
- l. CuS

Ans: Cu_2S

79) Limonite is an ore mineral of

- a. Iron
- b. Manganese
- c. Copper
- d. Lead

Ans:Iron

80) Khetri copper deposits are located in:

- a. Orissa
- b. Andhra Pradesh
- c. Rajasthan
- d. Jharkhand

Ans: Rajasthan

81) Malanjkhand copper deposits are located in:

- a. Orissa
- b. Andhra Pradesh
- c. Madhya Pradesh
- d. Jharkhand

Ans :Madhya Pradesh

82) Which of the following metals is extracted from Cerussite?

- a. Iron
- b. Aluminium
- c. Lead
- d. Zinc

Ans:Lead

83) Which of the following metals is extracted from Hemimorphite?

- a. Iron
- b. Aluminium
- c. Lead
- d. Zinc

Ans: zinc

84) The branch of geology which deals with various aspects of rocks is _____

- a. Petrology
- b. Mineralogy
- c. Lithology
- d. Rockology

Ans:Petrology

85) On the basis of which content igneous rocks are classified as acid and basic rocks?

- a. Magnetite
- b. Hematite
- c. Bauxite
- d. Silica

Ans:Silica

86) Aggregates of minerals is called:

- a. **Rock**
- b. Ore
- c. Tenor
- d. Ore mineral

Ans:Rock

91) Which mineral is used in paints, rubber textiles?

- a. Asbestos
- b. **Barytes**
- c. Corundum
- d. Quartz

Ans: Barytes

92) Which of the following is not a constituent of coal ?

- a. Hydrogen
- b. **Manganese**
- c. Nitrogen
- d. Carbon

Ans: Manganese

91) Calorific value for coal (in kcal/kg) is

- a. 1000-2500
- b. 2500-4000
- c. **4000 – 7000**
- d. 5000 – 8000

Ans: 4000 – 7000

92) Variety of coal having highest calorific value is

- a. Steam coal
- b. Lignite
- c. **Bituminous coal**
- d. Anthracite coal

Ans: Bituminous coal

93) What fossil fuel is in the image?



- a. Natural gas
- b. **Coal**
- c. Petroleum

d. steam

Ans: Coal

94) With increase in the number of carbon and hydrogen atoms in hydrocarbon molecules, the density of petroleum products?

- a. Decreases
- b. **Increases**
- c. Remain Same
- d. Unpredictable from the Data

Ans: increases

95) What is the function of petroleum coke?

- a. Lubrication
- b. In candles
- c. **As fuel**
- d. As solvent

Ans: As fuel

96) What is the hardest form of coal?

- a. Peat
- b. Bituminous
- c. **Anthracite**
- d. Sub- bituminous

Ans: Anthracite

97) The amount of oil that may become available for use is called oil _____.

- a. Reserves
- b. Reservoirs
- c. **Resources**
- d. Traps

Ans: Resources

98) Energy resources derived from natural organic materials are called _____.

- a. geothermal energy sources
- b. **fossil fuels**
- c. biomass
- d. all of these

Ans: Fossil Fuels

99) All oil traps contain _____.

- a. **an impermeable layer**
- b. an anticline
- c. a fault
- d. all of these

Ans: an impermeable layer

100) Which of the following rock types would most likely be the best oil reservoir?

- a. Granite
- b. Shale
- c. Sandstone
- d. salt

Ans: Sandstone

101) Which product is formed after the process of carbonisation?

- a. Charcoal
- b. Coal tar
- c. Coal gas
- d. Coke

Ans: Coke

102) Which one is the main constituent of gaseous formations of petroleum?

- a. Methane
- b. Ethane
- c. Propane
- d. Butane

Ans: Methane

103) Dead organisms are transformed into petroleum and natural gas in

- a. Absence of air
- b. Presence of air
- c. Presence of sun light
- d. None of these

Ans: Absence of air

104) Useful substances obtained from petroleum and natural gases are called

- a. Chemicals
- b. Petroleum products
- c. Petrochemicals
- d. None of these

Ans: Petrochemicals

105) Which of the following is / are fossil fuels

- a. Coal
- b. Petroleum
- c. Natural gas
- d. All of these

Ans: All of these

106) According to the organic theory, from which kind of compound does the petroleum is formed?

- a. Plant debris
- b. Animal and vegetable debris
- c. From the decomposers
- d. From sunlight

Ans: Animal and vegetable debris

107) Digboi oil field is situated in:

- a. Assam
- b. Karnataka
- c. Delhi
- d. Sikkim

Ans: Assam

108) No of void spaces present in rock is called:

- a. Porosity
- b. Permeability
- c. Effective porosity
- d. Transmissibility

Ans: Porosity

109) Jharia is famous for which of the following mines?

- a. Iron
- b. Coal
- c. Manganese
- d. Copper

Ans: coal

110) Oil in Digboi is found in

- a. Tipam formation
- b. Sylhet formation
- c. Jaintia formation
- d. None of the above

Ans: Tipam formation

111) Which one of the following is silicate mineral of copper?

- a. Azurite
- b. Chrysocolla
- c. Covellite
- d. None of the above

Ans: Chrysocolla

112) To which group illeminite belongs to?

- a. Silicate
- b. Oxide
- c. Carbonate
- d. None of the above

Ans: Oxide

113) Lignite in India is available at

- a. Talcher
- b. Ranigang
- c. Neyvelli
- d. None of the above

Ans: Neyvelli

114) Battery grade manganese ore contains

- a. 62-67% Mn
- b. 72-77% Mn
- c. 82-87% Mn
- d. None of the above

Ans: 82-87% Mn

- 115) Magnetite associated with basic igneous rock is formed by
- Magmatic process**
 - Hydrothermal process
 - Mechanical concentration
 - None of the above

Ans: Magmatic process

- 116) Cr bearing mica mineral is called
- Lepidolite
 - Fuchsite**
 - Biotite
 - None of the above

Ans: Fuchsite

- 117) The largest cromite deposit of India is located at
- Mayurbhanj
 - Biramitrapur
 - Sukinda**
 - None of the above

Ans: Sukinda

- 118) Kudremukh in Karnataka is famous for
- Iron ore deposit**
 - Chromite deposit
 - Manganese deposit
 - None of the above

Ans: Iron ore deposit

- 119) A vertical dyke showing transverse veins is known as
- Stockwork
 - Ladder vein**
 - Saddle reef
 - None of the above

Ans: Ladder vein

- 120) Chromite and Nickel ores are generally associated with
- Sedimentary rocks
 - Ultrabasic rocks**
 - Acid igneous rocks
 - None of the above

Ans: Ultrabasic rocks

- 121) Workable deposits of chrysotile asbestos is found in
- Karnataka
 - Jharkhand
 - Andhra Pradesh**
 - None of the above

Ans: Andhra Pradesh

- 122) Which is the host rock for Panchpatmalli bauxite occurrence?
- Granite
 - Khondalite**
 - Basalt
 - None of the above

Ans: Khondalite

123) Nearest Iron ore deposit to Paradeep port is at

- a. **Daitari**
- b. Barbil
- c. Badampahar
- d. None of the above

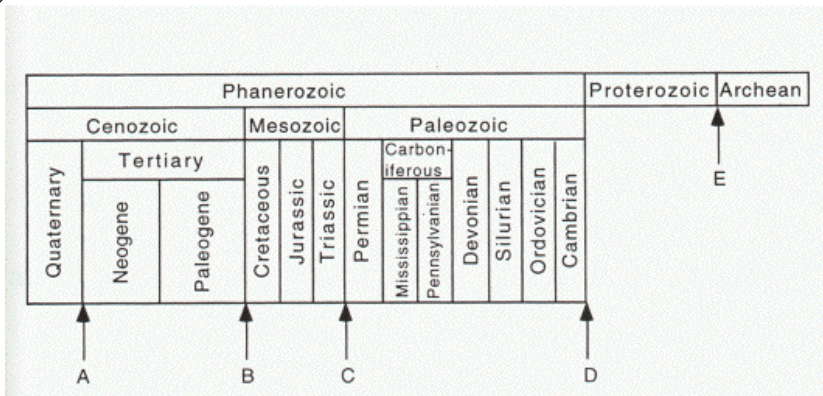
Ans: Daitari

124) Gossan or cap rocks are good indicator of

- a. Hydrothermal deposit
- b. Placer deposit
- c. **Secondary supergene deposit**
- d. None of the above

Ans: Secondary supergene deposit

125)



i) The age estimate for point A in the diagram above is _____ million years

- a. 0.16
- e. **1.6**
- f. 16
- g. 160

ii) The age estimate for point B in the diagram above is _____ million years

- a. 35
- b. **65**
- c. 245
- d. 570

iii) The age estimate for point C in the diagram above is _____ million years

- a. 35
- b. 45
- c. **245**
- d. 570

iv) The age estimate for point D in the diagram above is _____ million years

- a. 65
- b. 245
- c. **570**
- d. 2500

v) The age estimate for point E in the diagram above is _____ million years

- a. 570
- b. 2500**
- c. 3000
- d. 4500

128) The channel sampling is generally done

- a. Parallel the ore body
- b. Oblique the ore body
- c. Across the ore body**
- d. At any direction in the ore body

129) Coning and quartering is :

- a. A mining method employed for the diamond mining
- b. A mining method employed in unconsolidated ground
- c. A method employed for obtaining a laboratory sample from the field sample**
- d. A cutting and filling method employed in underground mining

130) When the material collected to represent a rock type, or a formation or an ore body in the quantitative sense then it is termed as :

- a. Specimen
- b. Sample**
- c. Both specimen and sample
- d. Quantitative specimen