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National Testing Agency

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Earth System Science

Group Number :	1
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Earth System Science-1

Section Id :	864351515
Section Number :	1
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Number of Questions to be attempted :	100
Section Marks :	100
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	864351553
Question Shuffling Allowed :	Yes

**Question Number : 1 Question Id : 8643519206 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0**

Earth science includes subjects like Oceanography, Meteorology, Astronomy and Geology. What is Petrology? Petrology is study of

1. Rocks
2. Minerals
3. Fossils
4. Animals

Options :

- 86435129131. 1
- 86435129132. 2
- 86435129133. 3
- 86435129134. 4

**Question Number : 2 Question Id : 8643519207 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0**

Scientists believe that the visible Universe has 100 times more invisible matter than visible matter. Invisible matter in the Universe is called

1. Dark Matter
2. Light Matter
3. Blue Matter
4. Red Matter

Options :

- 86435129135. 1
- 86435129136. 2
- 86435129137. 3
- 86435129138. 4

Question Number : 3 Question Id : 8643519208 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The stars produce their energy by two processes: the proton-proton chain and the carbon cycle. The Sun's energy is because of which process?

1. Fusion
2. Fission
3. Solar cells
4. The Earth

Options :

- 86435129139. 1
- 86435129140. 2
- 86435129141. 3
- 86435129142. 4

Question Number : 4 Question Id : 8643519209 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the speed of light?

1. 300000 km/s
2. 30000 km/s
3. 3000 km/s
4. 300 km/s

Options :

86435129143. 1
86435129144. 2
86435129145. 3
86435129146. 4

Question Number : 5 Question Id : 8643519210 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A Black hole is formed due to gravitational collapse. Can Black holes emit sound and light?

1. Yes
2. No
3. It has very low gravity so it can emit sound.
4. It has very low gravity so it can emit light.

Options :

86435129147. 1
86435129148. 2
86435129149. 3
86435129150. 4

Question Number : 6 Question Id : 8643519211 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The quasi-stellar objects, larger than million Suns put together burn a hundred times brighter than our entire galaxy. What are these objects called?

1. Quasars
2. Supernova
3. Black holes
4. None of the above

Options :

- 86435129151. 1
- 86435129152. 2
- 86435129153. 3
- 86435129154. 4

Question Number : 7 Question Id : 8643519212 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Asteroids are rocky bodies made of rock and metal. Asteroids orbit around which of the following?

1. Sun
2. Earth
3. Jupiter
4. Venus

Options :

- 86435129155. 1
- 86435129156. 2
- 86435129157. 3
- 86435129158. 4

Question Number : 8 Question Id : 8643519213 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A special meteorite was found in Shergoty, Bihar and is named as Shergotite. Shergotite is a type of meteorite that is supposed to have come from

1. Mars
2. Mercury
3. Moon
4. Asteroid

Options :

86435129159. 1
86435129160. 2
86435129161. 3
86435129162. 4

Question Number : 9 Question Id : 8643519214 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What are small fragments of a comet or asteroid that orbit the Sun called?

1. Meteorite
2. Meteoroid
3. Meteor
4. Moons

Options :

86435129163. 1
86435129164. 2
86435129165. 3
86435129166. 4

Question Number : 10 Question Id : 8643519215 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

It takes the Earth 365.24 days for one complete revolution. For what there is a deficit of 4 minutes each day?

1. For the earth to catch up the Sun's position.
2. For the Sun to catch up the Earth's position.
3. For both the Sun and the Earth to catch up the planets' position.
4. For all the planets to catch up the Sun's position.

Options :

- 86435129167. 1
- 86435129168. 2
- 86435129169. 3
- 86435129170. 4

Question Number : 11 Question Id : 8643519216 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The Sun's displacement is calculated with respect to which one of the following?

1. Star Ceres
2. Star Vega
3. North star
4. None of the above

Options :

- 86435129171. 1
- 86435129172. 2
- 86435129173. 3
- 86435129174. 4

Question Number : 12 Question Id : 8643519217 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the shape of the path on which the Earth travels around the Sun?

1. Circular
2. Elliptical
3. Vertical
4. Horizontal

Options :

86435129175. 1
86435129176. 2
86435129177. 3
86435129178. 4

Question Number : 13 Question Id : 8643519218 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Who proposed the SNDM (Solar Nebular Disc Model) for the origin of the Earth?

1. I. Kant
2. M. Laplace
3. Victor Sofronov
4. Harold Urey

Options :

86435129179. 1
86435129180. 2
86435129181. 3
86435129182. 4

Question Number : 14 Question Id : 8643519219 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the age of the Earth according to Uranium-Lead ratio?

1. 4600 Ma
2. 13.6 Ma
3. 1000 Ma
4. 1600 Ma

Options :

86435129183. 1
86435129184. 2
86435129185. 3
86435129186. 4

Question Number : 15 Question Id : 8643519220 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Radioactive disintegration remains unaffected by which one of the following?

1. Heat or pressure
2. Chemical reaction
3. Any physical force
4. All of the above

Options :

86435129187. 1
86435129188. 2
86435129189. 3
86435129190. 4

Question Number : 16 Question Id : 8643519221 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The Earth has a magnetic field. What is the unit for measuring Magnetic field intensity?

1. Tesla 'T'
2. Gauss 'G'
3. Gamma 'γ'
4. All of the above

Options :

86435129191. 1
86435129192. 2
86435129193. 3
86435129194. 4

Question Number : 17 Question Id : 8643519222 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The Earth's magnetic field is generated by electrical currents flowing in which part of the Earth?

1. Liquid outer core
2. Solid outer core
3. Liquid inner core
4. Solid inner core

Options :

86435129195. 1
86435129196. 2
86435129197. 3
86435129198. 4

Question Number : 18 Question Id : 8643519223 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What drives the Convection in the Outer Core in the interior of the Earth?

1. Heat
2. Crystallization of the inner core
3. Heat and crystallization of the inner core
4. None of the above

Options :

86435129199. 1

86435129200. 2

86435129201. 3

86435129202. 4

Question Number : 19 Question Id : 8643519224 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

We cannot reach the mantle inside the Earth by drilling. Which one of the following is the deepest borehole on the Earth?

1. Kola Superdeep borehole is 12262 meters.
2. Oil well in Arab is 15000 meters.
3. Bore hole at copper mine in India.
4. Bore hole in Australia.

Options :

86435129203. 1

86435129204. 2

86435129205. 3

86435129206. 4

Question Number : 20 Question Id : 8643519225 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is a mushy zone between the Outer Core and the Inner Core of the Earth called?

1. Perovskite zone
2. Transition zone
3. Rigid zone
4. Stishovite zone

Options :

86435129207. 1
86435129208. 2
86435129209. 3
86435129210. 4

Question Number : 21 Question Id : 8643519226 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which one of the following helps in interpreting the composition of the Core of the Earth?

1. Iron meteorites
2. Spectral bends
3. Remote sensing
4. None of the above

Options :

86435129211. 1
86435129212. 2
86435129213. 3
86435129214. 4

Question Number : 22 Question Id : 8643519227 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

By which type of plates or faults, the Himalayan mountains have evolved?

1. Diverging plates
2. Converging plates
3. Transform fault
4. All of the above

Options :

86435129215. 1
86435129216. 2
86435129217. 3
86435129218. 4

Question Number : 23 Question Id : 8643519228 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Tethys divided Pangaea into two portions. Of these two portions, what is the northern portion called?

1. Laurasia
2. Gondwana
3. Rodinia
4. None of the above

Options :

86435129219. 1
86435129220. 2
86435129221. 3
86435129222. 4

Question Number : 24 Question Id : 8643519229 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following mark subduction belts?

1. Earthquakes
2. Mountains
3. Deep-sea trenches
4. All of the above

Options :

- 86435129223. 1
- 86435129224. 2
- 86435129225. 3
- 86435129226. 4

Question Number : 25 Question Id : 8643519230 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The Earth is divided into many plates which are not stationary. What is the range of Plate movements?

1. 1 to 4 cm/y
2. 1 km/y
3. 1 km/y to 5 km/y
4. Plates do not move

Options :

- 86435129227. 1
- 86435129228. 2
- 86435129229. 3
- 86435129230. 4

Question Number : 26 Question Id : 8643519231 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The concept of plate tectonics helps in the exploration of minerals. Where does the concentration of minerals occur?

1. At subduction margins
2. At mid oceanic trenches
3. At mid plate regions
4. All of the above

Options :

86435129231. 1

86435129232. 2

86435129233. 3

86435129234. 4

Question Number : 27 Question Id : 8643519232 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

“The glacial landforms are found in Western Sahara, which is a desert now, is because it was part of Pangaea 200 million years ago”.

Is the above statement true?

1. True
2. False
3. Glacial landforms are not found in Western Sahara
4. Western Sahara was never a part of Pangaea

Options :

86435129235. 1

86435129236. 2

86435129237. 3

86435129238. 4

Question Number : 28 Question Id : 8643519233 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Deccan Traps is a good example of which one of the following?

1. Eroded plateau
2. Volcanic plateau
3. Cordillera
4. None of the above

Options :

86435129239. 1
86435129240. 2
86435129241. 3
86435129242. 4

Question Number : 29 Question Id : 8643519234 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

If troughs extend to large distances and have a considerable magnitude, they are called

1. Rift valleys
2. Horsts
3. Mountain chains
4. None of the above

Options :

86435129243. 1
86435129244. 2
86435129245. 3
86435129246. 4

Question Number : 30 Question Id : 8643519235 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

All the great mountain chains of the Earth are mostly what type of mountains?

1. Fold mountains
2. Volcanic mountains
3. Dome mountains
4. Plateaus

Options :

86435129247. 1
86435129248. 2
86435129249. 3
86435129250. 4

Question Number : 31 Question Id : 8643519236 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

For the origin of an earthquake, the point of rupture is called

1. Hypocenter or Focus
2. Fault
3. Isoleismal
4. All of the above

Options :

86435129251. 1
86435129252. 2
86435129253. 3
86435129254. 4

Question Number : 32 Question Id : 8643519237 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What are the Near surface (up to 70 km depth) earthquakes called?

1. Deep focus earthquakes
2. Epicentral earthquakes
3. Shallow focus earthquakes
4. Subduction earthquakes

Options :

86435129255. 1

86435129256. 2

86435129257. 3

86435129258. 4

Question Number : 33 Question Id : 8643519238 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

In an earthquake, what happens to the material after the wave passes through?

1. It does not return to its original shape.
2. It returns to its original shape.
3. There is no change (in the material).
4. It remains deshaped.

Options :

86435129259. 1

86435129260. 2

86435129261. 3

86435129262. 4

Question Number : 34 Question Id : 8643519239 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

"S waves travel slower than P waves through the solids and do not travel through the fluids". Is the above statement true?

1. False
2. True
3. S waves travel faster than P waves.
4. S waves travel through fluids.

Options :

- 86435129263. 1
- 86435129264. 2
- 86435129265. 3
- 86435129266. 4

Question Number : 35 Question Id : 8643519240 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

India is divided into Seismic Zones. The north-eastern part of India is placed in which seismic zone?

1. Seismic zone IV
2. Seismic zone V
3. Seismic zone III
4. Seismic zone II

Options :

- 86435129267. 1
- 86435129268. 2
- 86435129269. 3
- 86435129270. 4

Question Number : 36 Question Id : 8643519241 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the difference in the magnitude of earthquakes of magnitudes 7 and 5?

1. 10 times
2. 100 times
3. 1000 times
4. 10,000 times

Options :

86435129271. 1

86435129272. 2

86435129273. 3

86435129274. 4

Question Number : 37 Question Id : 8643519242 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Where from does the material that erupts from a volcano come?

1. Atmosphere
2. Magma chamber
3. Hydrosphere
4. Biosphere

Options :

86435129275. 1

86435129276. 2

86435129277. 3

86435129278. 4

Question Number : 38 Question Id : 8643519243 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What causes the Hot springs?

1. When groundwater gets heated, expanded and mineralized in contact with hot rocks.
2. When lava gets heated, expanded and mineralized in contact with hot rocks.
3. When dust and gases get heated, expanded and mineralized in contact with hot rocks.
4. When Pyroclasts get heated, expanded and mineralized in contact with hot rocks.

Options :

86435129279. 1

86435129280. 2

86435129281. 3

86435129282. 4

Question Number : 39 Question Id : 8643519244 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What are Solfataras ?

1. Fumaroles rich in sulfur compounds.
2. Volcanoes rich in sulfur compounds.
3. Pyroclasts rich in sulfur compounds.
4. None of the above

Options :

86435129283. 1

86435129284. 2

86435129285. 3

86435129286. 4

Question Number : 40 Question Id : 8643519245 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the temperature range on the Earth?

1. -70°C to $+55^{\circ}\text{C}$
2. -100°C to $+100^{\circ}\text{C}$
3. -70°C to $+300^{\circ}\text{C}$
4. -1°C to $+100^{\circ}\text{C}$

Options :

86435129287. 1
86435129288. 2
86435129289. 3
86435129290. 4

Question Number : 41 Question Id : 8643519246 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Vertical motions in the oceans are driven by density variations. What causes these motions?

1. Temperature gradients
2. Salinity gradients
3. Both, temperature and salinity gradients
4. There are no vertical motions in the oceans

Options :

86435129291. 1
86435129292. 2
86435129293. 3
86435129294. 4

Question Number : 42 Question Id : 8643519247 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

One of the marginal seas where thermohaline circulation drives water flow is:

1. Mediterranean sea
2. Thermohaline circulation cannot drive water flow in the seas.
3. Pacific Ocean
4. Atlantic Ocean

Options :

86435129295. 1

86435129296. 2

86435129297. 3

86435129298. 4

Question Number : 43 Question Id : 8643519248 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is Eustasy?

1. A change of sea level throughout the world.
2. The movements of parts of the earth's crust or melting of glaciers cause eustasy.
3. Increase in the spreading rates of the mid-ocean ridges causes eustasy.
4. All of the above

Options :

86435129299. 1

86435129300. 2

86435129301. 3

86435129302. 4

Question Number : 44 Question Id : 8643519249 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following answer options completes the statement below?

Density changes of the water, for instance, by thermal expansion (thermosteric sea level) or by changes in ocean salinity (halosteric sea level)

1. can cause Eustatic sea level changes.
2. cannot cause Eustatic sea level changes.
3. Both 1 and 2 are incorrect.
4. are the reasons for Monsoons.

Options :

- 86435129303. 1
- 86435129304. 2
- 86435129305. 3
- 86435129306. 4

Question Number : 45 Question Id : 8643519250 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the landform that forms due to deposition of sediment carried by river entering an ocean or a sea or an estuary or a reservoir called?

1. Estuary
2. Delta
3. Barrier island
4. None of the above

Options :

- 86435129307. 1
- 86435129308. 2
- 86435129309. 3
- 86435129310. 4

Question Number : 46 Question Id : 8643519251 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What are the infragravity waves, that are towards the shore of the breaker line and propagate along the shore, called? They are generated by incident waves, their amplitude is maximum at the shoreline and diminishes rapidly in the seaward direction.

1. Edge waves
2. Tides
3. Rip currents
4. All of the above

Options :

- 86435129311. 1
- 86435129312. 2
- 86435129313. 3
- 86435129314. 4

Question Number : 47 Question Id : 8643519252 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the landform that extends from wave base, where waves begin to touch the bottom and shoal, across the near shore zone, through the surf zone to the upper limit of wave swash called?

1. Beach
2. Coast
3. Barrier Island
4. All of the above

Options :

- 86435129315. 1
- 86435129316. 2
- 86435129317. 3
- 86435129318. 4

Question Number : 48 Question Id : 8643519253 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The Earth spins on its axis from west to east. The Coriolis-Force therefore, acts in which direction?

1. North-south direction
2. East-west direction
3. West-east direction
4. South-west direction

Options :

- 86435129319. 1
- 86435129320. 2
- 86435129321. 3
- 86435129322. 4

Question Number : 49 Question Id : 8643519254 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Cyclones need the Coriolis force in order to circulate. For this reason, hurricanes almost never occur in which regions?

1. In equatorial regions
2. In polar regions
3. Coriolis Force has nothing to do with cyclones.
4. None of the above

Options :

- 86435129323. 1
- 86435129324. 2
- 86435129325. 3
- 86435129326. 4

Question Number : 50 Question Id : 8643519255 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The development of weather patterns, such as cyclones and trade winds

1. are examples of the impact of the Coriolis effect.
2. occur because of layers in the Atmosphere.
3. occur because in the Southern Hemisphere, currents are deflected to the left.
4. None of the above

Options :

86435129327. 1

86435129328. 2

86435129329. 3

86435129330. 4

Question Number : 51 Question Id : 8643519256 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The pressure of water vapour is 4.58 mmHg at 0° C and 760 mmHg at 100° C. It is equal to how many atmosphere?

1. That is equal to 100 atmosphere.
2. That is equal to 1 atmosphere.
3. That is equal to 0 atmosphere.
4. That is equal to 1000 atmosphere.

Options :

86435129331. 1

86435129332. 2

86435129333. 3

86435129334. 4

Question Number : 52 Question Id : 8643519257 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the amount of water vapour per cubic meter of air called?

1. Relative humidity
2. Absolute humidity
3. It is not possible.
4. It is per cubic feet of water.

Options :

86435129335. 1

86435129336. 2

86435129337. 3

86435129338. 4

Question Number : 53 Question Id : 8643519258 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the difference between Hurricanes and Tornadoes?

1. There is an involvement of planetary wind system in the hurricane formation.
2. There is an involvement of only local air masses in the tornadoe formation.
3. There is involvement of planetary wind system in the hurricane formation while there is involvement of only local air masses in the tornadoe formation.
4. All of the above

Options :

86435129339. 1

86435129340. 2

86435129341. 3

86435129342. 4

Question Number : 54 Question Id : 8643519259 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Most of the energy that the Sun radiates is in which form?

1. Visible light
2. Near-infrared light
3. Visible light and near-infrared light
4. None of the above

Options :

86435129343. 1

86435129344. 2

86435129345. 3

86435129346. 4

Question Number : 55 Question Id : 8643519260 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the average distance from the Earth to the Sun, which is 150 million km, called?

1. One light year
2. One Astronomical Unit (AU)
3. One Unit
4. One Tesla

Options :

86435129347. 1

86435129348. 2

86435129349. 3

86435129350. 4

Question Number : 56 Question Id : 8643519261 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which gases are Greenhouse gases?

1. Methane and Nitrous oxide
2. Ozone
3. Carbon dioxide and Water
4. All of the above

Options :

- 86435129351. 1
- 86435129352. 2
- 86435129353. 3
- 86435129354. 4

Question Number : 57 Question Id : 8643519262 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Why does the sky appear blue during the day?

1. Tiny molecules in the Earth's atmosphere prefer shorter wavelengths during scattering of sunlight.
2. Tiny molecules in the Earth's atmosphere prefer larger wavelengths during scattering of sunlight.
3. Tiny molecules in the Sun's atmosphere prefer shorter wavelengths during scattering of sunlight.
4. Tiny molecules in the Sun's atmosphere prefer larger wavelengths during scattering of sunlight.

Options :

- 86435129355. 1
- 86435129356. 2
- 86435129357. 3
- 86435129358. 4

Question Number : 58 Question Id : 8643519263 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the soil formed in humid climates or at mid-latitudes called?

1. Pedalfer
2. Pedocal
3. Laterite
4. Regolith

Options :

86435129359. 1
86435129360. 2
86435129361. 3
86435129362. 4

Question Number : 59 Question Id : 8643519264 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Lateritic soil is rich in which of the following?

1. CaCO_3
2. Soluble minerals
3. Al_2O_3 and Fe_2O_3
4. None of the above

Options :

86435129363. 1
86435129364. 2
86435129365. 3
86435129366. 4

Question Number : 60 Question Id : 8643519265 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The soil in the Tundra regions is mostly stony soil formed due to which one of the following?

1. Shattering caused by frost.
2. Bacterial action.
3. Shattering caused by roots of big trees.
4. Meteoroid impact.

Options :

86435129367. 1
86435129368. 2
86435129369. 3
86435129370. 4

Question Number : 61 Question Id : 8643519266 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is Loess?

1. Wind transported aeolian soil
2. River transported alluvial soil
3. Marine soil
4. Glacial soil

Options :

86435129371. 1
86435129372. 2
86435129373. 3
86435129374. 4

Question Number : 62 Question Id : 8643519267 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What type of soil is Volcanic soil?

1. Non-fertile soil
2. Fertile soil
3. Poor in mineral content
4. There is no such soil

Options :

86435129375. 1

86435129376. 2

86435129377. 3

86435129378. 4

Question Number : 63 Question Id : 8643519268 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What type of soil is Podsol?

1. Clayey and fertile
2. Sandy and not fertile
3. Peaty and has good water retaining capacity
4. Rich with humus

Options :

86435129379. 1

86435129380. 2

86435129381. 3

86435129382. 4

Question Number : 64 Question Id : 8643519269 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

By what name we know 'Present is key to the past' as?

1. Catastrophism
2. Neptunism
3. Uniformitarianism
4. Plutonism

Options :

86435129383. 1

86435129384. 2

86435129385. 3

86435129386. 4

Question Number : 65 Question Id : 8643519270 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Precambrian and Phanerozoic are

1. two Eras
2. two Eons
3. two Groups
4. two Periods

Options :

86435129387. 1

86435129388. 2

86435129389. 3

86435129390. 4

Question Number : 66 Question Id : 8643519271 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Silurian is

1. older than Ordovician
2. younger than Devonian
3. younger than Ordovician
4. older than Cambrian

Options :

86435129391. 1

86435129392. 2

86435129393. 3

86435129394. 4

Question Number : 67 Question Id : 8643519272 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Jurassic is

1. younger than Cretaceous
2. older than Cretaceous
3. older than Triassic
4. older than Cambrian

Options :

86435129395. 1

86435129396. 2

86435129397. 3

86435129398. 4

Question Number : 68 Question Id : 8643519273 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Free Oxygen was available in the atmosphere after the emergence of

1. Blue green algae
2. Cyanobacteria
3. Photosynthesis by Cyanobacteria
4. All of the above

Options :

86435129399. 1
86435129400. 2
86435129401. 3
86435129402. 4

Question Number : 69 Question Id : 8643519274 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

When did the human civilization begin?

1. Cambrian
2. Paleocene
3. Holocene
4. Precambrian

Options :

86435129403. 1
86435129404. 2
86435129405. 3
86435129406. 4

Question Number : 70 Question Id : 8643519275 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which two periods does the Cenozoic era have?

1. Tertiary and Quaternary
2. Paleozoic and Mesozoic
3. Precambrian and Phanerozoic
4. Hadean and Proterozoic

Options :

86435129407. 1

86435129408. 2

86435129409. 3

86435129410. 4

Question Number : 71 Question Id : 8643519276 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the purpose of reading stratigraphy?

1. To determine the age of a rock from its fossils or by some other methods.
2. To determine the environment in which the rocks got deposited.
3. To correlate rocks of different continents or regions.
4. All of the above

Options :

86435129411. 1

86435129412. 2

86435129413. 3

86435129414. 4

Question Number : 72 Question Id : 8643519277 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The time the surface of the rocks were exposed to the atmosphere, can be determined with the help of

1. Cosmogenic isotopes
2. Dendrochronology
3. Lichenometry
4. None of the above

Options :

- 86435129415. 1
- 86435129416. 2
- 86435129417. 3
- 86435129418. 4

Question Number : 73 Question Id : 8643519278 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

"Cratons are plate areas that have never subducted". Is the above statement true?

1. True
2. False
3. Such places do not occur on the Earth's crust.
4. All of the above

Options :

- 86435129419. 1
- 86435129420. 2
- 86435129421. 3
- 86435129422. 4

Question Number : 74 Question Id : 8643519279 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the name of the highest peak of the Aravalli range?

1. Zawar
2. Moti Dungari
3. Neemach Mata
4. Gurushikhar

Options :

86435129423. 1
86435129424. 2
86435129425. 3
86435129426. 4

Question Number : 75 Question Id : 8643519280 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following rivers flow towards the west of India?

1. Ganga and Yamuna
2. Krishna and Kaveri
3. Narmada and Tapti
4. Godavari and Mahanadi

Options :

86435129427. 1
86435129428. 2
86435129429. 3
86435129430. 4

Question Number : 76 Question Id : 8643519281 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which rivers presently represent the Vedic Saraswati River that vanished in the Holocene?

1. Ghaggar-Hakra-Nara rivers
2. Ganga-Yamuna-Sindhu rivers
3. Ravi-Beas-Satluj rivers
4. Damodar-Kosi-Gandak rivers

Options :

86435129431. 1

86435129432. 2

86435129433. 3

86435129434. 4

Question Number : 77 Question Id : 8643519282 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

In the early Tertiary, the first phase of the Himalayan orogeny, the Karakoram phase occurred. The Himalayan orogeny

1. has stopped after this phase.
2. has continued to the present day.
3. is dormant at the present time.
4. None of the above

Options :

86435129435. 1

86435129436. 2

86435129437. 3

86435129438. 4

Question Number : 78 Question Id : 8643519283 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

It is generally believed that the Indian Plate separated from Madagascar about 90 Million years ago and then collided with which plate?

1. The Eurasian Plate about 50 Million years ago
2. The Nazca Plate about 50 Ma ago
3. The Pacific Plate about 50 Ma ago
4. The African Plate about 50 Ma ago

Options :

- 86435129439. 1
- 86435129440. 2
- 86435129441. 3
- 86435129442. 4

Question Number : 79 Question Id : 8643519284 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

India was once a part of the supercontinent Pangaea. Its southwest coast was attached to Madagascar and southern Africa, its east coast was attached to which of the following?

1. Australia
2. Antarctica
3. Africa
4. America

Options :

- 86435129443. 1
- 86435129444. 2
- 86435129445. 3
- 86435129446. 4

Question Number : 80 Question Id : 8643519285 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Indian Shield (continental nucleus) consists of four cratons viz., the Dharwar Craton (South India), the Bastar Craton (Central India), the Singbhum Craton (Eastern India) and the Bundelkhand Craton (Northwestern India). All the four cratons of India contain the oldest

1. Basaltic rocks
2. Fossiliferous limestones
3. Granitic rocks
4. None of the above

Options :

86435129447. 1
86435129448. 2
86435129449. 3
86435129450. 4

Question Number : 81 Question Id : 8643519286 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

"Bastar Craton is bound by Godavari Graben in the south, Mahanadi Graben in the north-east, Satpura mobile belt in the north, Eastern Ghats in the east and Deccan Traps in the west". Is the above statement true?

1. False
2. True
3. It does not cover such big area.
4. Bastar craton is not a craton.

Options :

86435129451. 1
86435129452. 2
86435129453. 3
86435129454. 4

Question Number : 82 Question Id : 8643519287 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Why has the Dharwar Craton, a stable block, been divided into two?

1. Vindhyan Basin is running in between.
2. Chitradurga Shear Zone is running in between.
3. Son Narmada river is running in between.
4. None of the above

Options :

- 86435129455. 1
- 86435129456. 2
- 86435129457. 3
- 86435129458. 4

Question Number : 83 Question Id : 8643519288 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What type of fossils are found in the Cambrian strata?

1. Trilobites
2. Echinoderms
3. Insects
4. None of the above

Options :

- 86435129459. 1
- 86435129460. 2
- 86435129461. 3
- 86435129462. 4

Question Number : 84 Question Id : 8643519289 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Where are the Lipak limestones and Po shales exposed?

1. Spiti-Lahaul Basin
2. Rajasthan Basin
3. Gujarat Basin
4. None of the above

Options :

- 86435129463. 1
- 86435129464. 2
- 86435129465. 3
- 86435129466. 4

Question Number : 85 Question Id : 8643519290 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

"During 370-290Ma (Devonian) an orogenic activity started and formed mountains called "Hercynian Mountain System". Is the above statement true?

1. False
2. True
3. Mountain building activity happened only during Proterozoic.
4. It is called Himalaya Mountain System.

Options :

- 86435129467. 1
- 86435129468. 2
- 86435129469. 3
- 86435129470. 4

Question Number : 86 Question Id : 8643519291 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The elements that are synthesized within stars are distributed by which one of the following?

1. Stellar explosions
2. Industries
3. Man
4. Animals

Options :

- 86435129471. 1
- 86435129472. 2
- 86435129473. 3
- 86435129474. 4

Question Number : 87 Question Id : 8643519292 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the status of elements having completely unstable nuclear arrangement, such as 43, 61, 85 and 87?

1. Are abundant on the Earth.
2. Are absent from the Earth.
3. Have never formed.
4. None of the above

Options :

- 86435129475. 1
- 86435129476. 2
- 86435129477. 3
- 86435129478. 4

Question Number : 88 Question Id : 8643519293 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following helps in obtaining the chemical composition of the Universe?

1. Spectroscopic examination of solar and stellar radiation.
2. The analysis of meteorites.
3. Composition of the Earth and other planets.
4. All of the above

Options :

86435129479. 1

86435129480. 2

86435129481. 3

86435129482. 4

Question Number : 89 Question Id : 8643519294 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

99% of the Earth's crust is made up of which elements?

1. 8 elements: O, Si, Al, Fe, Ca, Na, K and Mg
2. Ni and Fe
3. Ni, Fe, P, S and C
4. Oxygen and Silicon

Options :

86435129483. 1

86435129484. 2

86435129485. 3

86435129486. 4

Question Number : 90 Question Id : 8643519295 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Strategic metals like Cu, Pb, Zn etc. are present on the Earth in an amount, which is

1. More than 50% of the total composition.
2. About 20% of the total composition.
3. About 10% of the total composition.
4. Less than 0.01% of the total composition.

Options :

86435129487. 1

86435129488. 2

86435129489. 3

86435129490. 4

Question Number : 91 Question Id : 8643519296 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Uranium and Thorium have very high density but have concentrated on the Earth's surface as oxides. Why?

1. They are strongly electropositive.
2. They are strongly electronegative.
3. They have very low specific gravity.
4. All of the above

Options :

86435129491. 1

86435129492. 2

86435129493. 3

86435129494. 4

Question Number : 92 Question Id : 8643519297 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the boundary between Lower mantle and Outer core called as?

1. Mohorovicic discontinuity
2. Gutenberg discontinuity
3. Goldschmidt discontinuity
4. None of the above

Options :

86435129495. 1

86435129496. 2

86435129497. 3

86435129498. 4

Question Number : 93 Question Id : 8643519298 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The Core of the Earth is composed of which elements?

1. Fe, Ni, S, P, C
2. Fe, Ni
3. Fe
4. O, Si, Ca, Na

Options :

86435129499. 1

86435129500. 2

86435129501. 3

86435129502. 4

Question Number : 94 Question Id : 8643519299 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The values of fractionated isotopes are reported as ' δ ' and ' δ ' is expressed as what?

1. Parts per 1000 (mil)
2. Parts per million (ppm)
3. Parts per billion (ppb)
4. None of the above

Options :

86435129503. 1

86435129504. 2

86435129505. 3

86435129506. 4

Question Number : 95 Question Id : 8643519300 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the investigation of geological phenomena by analyzing stable and unstable isotopes and the changes in their abundance called?

1. Isotope chemistry
2. Isotope geology
3. Isotope physics
4. Isotopism

Options :

86435129507. 1

86435129508. 2

86435129509. 3

86435129510. 4

Question Number : 96 Question Id : 8643519301 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The primary geochemical differentiation occurred because of

1. Gravity
2. Oxidation potential
3. Gravity and oxidation potential
4. Iron

Options :

- 86435129511. 1
- 86435129512. 2
- 86435129513. 3
- 86435129514. 4

Question Number : 97 Question Id : 8643519302 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What are the major sources of energy in the geochemical cycle?

1. Solar Radiation
2. Mechanical energy and Reaction Energy
3. Nuclear Energy and Heat content of the Earth
4. All of the above

Options :

- 86435129515. 1
- 86435129516. 2
- 86435129517. 3
- 86435129518. 4

Question Number : 98 Question Id : 8643519303 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The Earth receives only 6750×10^{20} calories/year (4.2×10^{-3} cal/cm²/sec) of which 0.1% is utilized for photosynthesis, 15% is absorbed by the Earth. What is the rest used for?

1. To evaporate water from the hydrosphere.
2. By the biosphere.
3. By the atmosphere.
4. None of the above

Options :

- 86435129519. 1
- 86435129520. 2
- 86435129521. 3
- 86435129522. 4

Question Number : 99 Question Id : 8643519304 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A large amount of decomposed and dissolved Calcium on the Earth is consumed and precipitated as Calcium carbonate

1. By the marine animals
2. By the marine plants
3. Can not be consumed by animals
4. None of the above

Options :

- 86435129523. 1
- 86435129524. 2
- 86435129525. 3
- 86435129526. 4

Question Number : 100 Question Id : 8643519305 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Options :

86435129527. 1

86435129528. 2

86435129529. 3

86435129530. 4