

Test 30 (Solution)

13 Correct Answer : A

Answer Justification :

Learning: Statement 1: Later Huna history is indicated in the Gwalior Stone Inscription of the year A.D. 528 of the Huna King Mihirakula who succeeded his father Toramana.

This history is further indicated in the literary work Arya-Manju Sri Mula-Kalpa which states.

Statement 2: This pillar was erected by yashodharman commemorating his victory over the Hunas at Daspura, (Modern Mandsaur). These are pieces of two Monolithic pillars. One of the pillar Capitals has lions seated back to back (6th Century AD).

Q Source: Surprises

14 Correct Answer : C

Answer Justification :

Learning: RailTel Corporation of India Limited (RCIL), one of the Public Sector Undertakings of Railways, had entered into an agreement with Mahataa Information India Private Limited (MIPL) a group company of Google Inc. for providing high speed Wi-Fi facility at Railway stations.

The project is cost neutral to Railways and all capital expenditure is to be incurred by RCIL and MIPL.

Railtel will be the ISP, while Google is providing the Wireless Area Networks (WAN) and setting-up the points of access at platforms, which you can already access at many stations.

It should be noted that Google's free WiFi will only work at the platforms and is not meant for the trains.

Q Source: <http://indianexpress.com/article/technology/tech-news-technology/explained-what-is-googles-wifi-at-railway-station-project-and-how-will-it-work/>

15 Correct Answer : B

Answer Justification :

Justification: Statement 1: At lower altitudes, greater biodiversity is found due to ambient temperature, sufficient rainfall and absence of frost. As one moves higher, biodiversity starts shrinking.

Statement 2: At lower latitudes, solar insolation is abundant and temperature conditions are ideal for growth of vegetation. Higher latitudes suffer from insufficient sunlight, low temperatures and frost.

Q Source: 12th NCERT Biology

16 Correct Answer : D

Answer Justification :

Justification: Radiocarbon dating measures radioactive isotopes in once-living organic material.

Because of their unique decay rates, different elements are used for dating different age ranges.

For example, the decay of potassium-40 to argon-40 is used to date rocks older than 20,000 years, and the decay of uranium-238 to lead-206 is used for rocks older than 1 million years.

Because of the fairly fast decay rate of carbon-14, it can only be used on material up to about 60,000 years old.

Dating method	Material dated	Are rage dated
Carbon-14 to nitrogen-14 (radiocarbon)	Organic remains, archaeological artefacts	Up to 60,000 years ago
Luminescence	Tephra, loess, lake sediments	Up to 100,000 years ago
Fission track	Tephra	10,000 to 400 million years ago
Potassium-40 to argon-40	Volcanic rocks	20,000 to over 5 billion years ago
Uranium-238 to lead-206	volcanic rocks	1 million to over 5 billion years ago

Q Source: Improvisation: Past year UPSC papers