9th Social Science Lesson 19 Questions in English

19] Lithosphere – I Endogenetic Processes

1. Assertion (A): Earth is divided into three physical spheres and one only one biological sphere.
Reasoning (R): The Biosphere is the biological zone includes all the living organisms.

a) Both A and R is True and R is the correct explanation of A.

b) Both A and R is True but R is not the correct explanation of A.

c) A is True but R is False.

d) Both A and R is False.

Explanation

The Earth can physically be described as a ball of rock (the lithosphere), partly covered by water (the hydrosphere) and wrapped in an envelope of air (the atmosphere).To these three physical zones it is convenient to add a biological zone which includes all the living organisms (the biosphere)."

2. How many abiotic spheres are available in the Earth structure?

a) 4

b) 3

c) 1

d) 2

Explanation

Earth's surface is a vast area of 510 million sq.km, where four spheres of the Earth interact. The abiotic spheres are the lithosphere, atmosphere and hydrosphere. The biotic sphere is the biosphere. Together, these spheres constitute the planet, Earth.

3. Which of these are the bifurcation processes of lithosphere?

a) Endogenic

b) Internal

c) Exogenetic

d) All the above

Explanation

Lithosphere has been bifurcated for the sake of convenience. It is divided into Endogenetic processes (Internal processes) and Exogenetic processes (External processes).

4. Which of this interfacing sphere made up of soil and dirt?

a) Hydrosphere

b) Atmosphere

c) Pedosphere

d) Biosphere

Explanation

The 'Pedosphere' is a part of the lithosphere made up of soil and dirt. It exists at the interface of lithosphere, atmosphere, hydrosphere and biosphere.

5. Identify the incorrect match.

A. Hydrosphere	i) Ocean
B. Lithosphere	ii) Outer part
C. Biosphere	iii) Two types
D. Atmosphere	iv) Layer of gas

a) i only
b) ii only
c) iii only
d) iv only

Explanation

The lithosphere is the solid outer part of the Earth. The atmosphere is a thin layer of gases that surrounds the Earth. The hydrosphere is the watery part of the Earth's surface including oceans, rivers, lakes and water vapor. The biosphere is the layer of Earth where life exists.

6. How many Earth's interior layers are present in earth's structure?

a) 3
b) 4
c) 5
d) 2

Explanation

The outer surface and inner core of the Earth are totally different in their nature and structure. The structure of the Earth's interior is divided into three layers namely the crust, the mantle and the core.

7. Name the outer layer of Earth surface?

a) Atmosphere
b) Mantle
c) Core
d) Crust

Explanation

Crust is the outer layer of the Earth, where we live. It is the skin of our Earth,

8. Choose the correct statements regarding crust layer.

i) The Crust range between 5 to 30 km of earth.
ii) It is the semisolid layer of the earth.
iii) Thickness of crust is greater below the ocean floor.

a) i only
b) ii only
c) iii only
d) All the above
Explanation
Crust ranges between 5 to 30 km. It is the solid and rigid layer of the Earth. The thickness of the crust is greater below the continents than the ocean floor.

9. How many crust layers are classified?
a) 3
b) 2
c) 5
d) 4
Explanation
The crust is classified as continental crust and oceanic crust.

10. Which is a major element of crust?
a) Sodium
b) Silver
c) Silica
d) Santonium
Explanation
The major elements of crust are Silica (Si) and Aluminum (Al) and thus, it is termed as SIAL.

11. Assertion (A): Lithosphere and Crust are same based on the components.
Reasoning(R): Lithosphere includes the crust and uppermost part of the mantle.
a) Both A and R is True and R is the correct explanation of A.
b) Both A and R is True but R is not the correct explanation of A.
c) A is True but R is False.
d) Both A and R is False.
Explanation
The terms 'lithosphere' and 'crust' are not the same. The lithosphere includes the crust and the uppermost part of the mantle.

12. Choose the correct statements.
i) Lithosphere of Mercury, Venus and Mars are thicker than Earth.
ii) Only some terrestrial planets have lithosphere layer.
a) i only
b) ii only
c) Both i and ii

d) Neither i nor ii

Explanation

All terrestrial planets have lithosphere. The lithospheres of Mercury, Venus, and Mars are much thicker and more rigid than that of the Earth.

13. Which are the major components of the Mantle?

a) Silica, Aluminium

b) Magnesium, Strontium

c) Sodium, Aluminium

d) Silica, Magnesium

Explanation

Mantle: The interior part beneath the crust is called mantle, which is about 2,900 km thick. The major elements of the mantle are Silica (Si) and Magnesium (Mg) and hence it is also termed as SIMA.

14. Assertion (A): Magma is the molten rock inside the earth.

Reasoning(R): Magma is available in both solid and molten form in the mantle.

a) Both A and R is True and R is the correct explanation of A.

b) Both A and R is True but R is not the correct explanation of A.

c) A is True but R is False.

d) Both A and R is False.

Explanation

In the upper part of the mantle, the rock remains solid, whereas in the lower part of the mantle, rocks are in molten form. This molten rock inside the Earth is called 'magma'.

15. Which of this is called as NIFE?

a) Core

b) Mantle

c) Magma

d) Crust

Explanation

The core is the innermost and hottest layer of the Earth which lies below the mantle. It is composed mainly of Nickel (Ni) and Iron (Fe). Hence it is called NIFE.

16. Assertion (A): Large quantity of iron is present in the core of the Earth.

Reasoning(R): The single layer of iron core is responsible for the Gravitational force of Earth.

a) Both A and R is True and R is the correct explanation of A.

b) Both A and R is True but R is not the correct explanation of A.

c) A is True but R is False.

d) Both A and R is False.

Explanation
The core is divided into Solid inner core and Liquid outer core. The presence of large quantities of iron in the core is responsible for the Earth's gravitational force.

17. Choose the correct statements.
i) The liquid form of core spins over the solid inner core due to earth's rotation.
ii) High pressure makes the inner core to remain solid and immovable.
a) i only
b) ii only
c) Both i and ii
d) Neither i nor ii
Explanation
As the Earth rotates on its axis, the liquid outer core spins over the solid inner core and generates the Earth's magnetic field. This is responsible for the functioning of the magnetic compass. Due to high pressure, the materials in the inner core are unable to move and hence remain solid.

18. Which is the deepest place reached by human technology till 2011?
a) Germany
b) Russia
c) Bulgaria
d) Mexico
Explanation
The Deepest Place ever reached by human technology vary from time to time. Till 2011 Kola Super Hole (12,262m) in Murmansk, Russia was the deepest place.

19. When Chavyo well was announced as the deepest place in the world?
a) 2011
b) 2015
c) 2012
d) 2000
Explanation
In 2012, Z-44 Chavyo Well (12,376m) broke the record, and is supposed to be 15 times the height of Burj Khalifa in Dubai.

20. What is the crust is made up of?
a) Gas
b) Chemicals
c) Sand
d) Rocks
Explanation

The crust is a storehouse of rocks. An aggregate of minerals on the Earth's crust is called 'rock'. It may be hard and compact like 'granite' or soft as 'clay' or loose as 'sand'.

21. How many types of rock are classified based on formation?

a) 3

b) 5

c) 4

d) 7

Explanation

Types of Rock Based on formation, rocks are classified as Igneous, Sedimentary and Metamorphic.

22. Which of these places are examples for the rock-cut architectures in India?

a) Ajanta

b) Mamallapuram

c) Konark temple

d) All the above

Explanation

The ancient city of Petra in Jordan is an example of an entire city carved out of rocks. There are many specimens of magnificent rock-cut architecture in India, like the Ajanta and Ellora caves in Maharashtra, the Aihole and Badami temples in Karnataka, the Konark temple in Odisha and Mamallapuram in Tamil Nadu.

23. Match

A. Crust	i) Iron Oxides
B. Inner Core	ii) Peridodite
C. Upper Mantle	iii) Magnesium Oxide
D. Lower Mantle	iv) Silicic Rocks

a) iv, i, ii, iii

b) i, iv, iii, ii

c) ii, iii, iv, i

d) i, iv, ii, iii

Explanation

DATA ON THE EARTH'S INTERIOR				
Layers	Thickness (km)	Top density (g/cm3	Bottom density (g/cm3)	Types of rock found
Crust	30	2.2	-	Silicic Rocks
			2.9	Andesite, Basalt at base, Aluminum
Upper mantle	720	3.4		Peridodite, Eclogite, Olivine, Spinel, Garnet, Pyroxene
		-	4.4	Perovskite, Oxides
Lower mantle	2,171	4.4	-	Magnesium and Silicon oxides
		-	5.6	
Outer core	2,259	9.9	-	
	-		12.2	Iron oxides, Sulphur, Nickel Alloy
Inner core	1,221	12.8	-	Iron oxide, Sulphur, Nickel Alloy

24. Which of this layer is highly thick in the earth's interior?

a) Lower mantle

b) Outer Core

c) Upper Mantle

d) Inner Core

Explanation

Layers	Thickness (km)
Crust	30
Upper mantle	720
Lower mantle	2,171
Outer core	2,259
	-
Inner core	1,221
Total Thickness	6,401

25. Which of this language is the origin for the word Igneous?

a) Persian

b) Roman
c) Latin
d) Arabic
Explanation
Igneous Rocks: The word 'igneous' is derived from the Latin word Ignis meaning 'Fire'. The interior of the Earth contains very hot molten material called 'Magma.

26. Which of these cools and formed as igneous rocks?
a) Silica
b) Lava
c) Hydrogen atoms
d) Solid dusts
Explanation
The magma reaches the Earth's surface, it is referred to as 'Lava'. The lava on the surface cools down and gets solidified as rocks called igneous rocks.

27. What are the other names for the igneous rocks?
a) Primary rocks
b) Secondary rocks
c) Mother rocks
d) Both a and c
Explanation
Granite and basalt are examples of such rocks. Igneous rocks are also called Primary or Mother rocks because all other rocks are directly or indirectly formed from them.

28. Which of these transport the rocks and soils to form sedimentary rocks?
a) Rivers
b) Glaciers
c) Winds
d) All the above
Explanation
These sedimentary rocks are named after the Latin word 'sediment' meaning ' settle. Rivers, glaciers and winds carry bits of rock and soil and deposit them in layers.

29. Which of these rocks are used in construction works?
a) Igneous rocks
b) Sedimentary rocks
c) Metamorphic rocks
d) All the above

30. What is an example of a metamorphic rock?
a) Basalt
b) Gypsum
c) Diamond
d) Limestone
Explanation

Types of Rocks	Examples	Uses
Igneous	Granite	Construction work
	Basalt	Laying roads
Sedimentary	Gypsum	Manufacturing of wall board, cement, plaster of Paris etc.
	Limestone	Construction and purification of Iron in blast furnaces
Metamorphic	Diamond	Jewellery making
	Marble	Sculpture and Construction

31. Which of these are formed to form fossils?
a) Plants
b) Animals
c) Both a and b
d) Only a
Explanation
The bodies of plants and animals that fall on the deposits get embedded in the layers and form Fossils.

32. Which is not a sedimentary rock?
a) Gypsum
b) Marble

c) Chalk
d) Coal
Explanation
Sandstone, limestone, chalk, gypsum, coal and conglomerate are examples of sedimentary rocks.

33. From which of this word the term metamorphic was derived?
a) Metalomic
b) Matapho
c) Metamorphosis
d) Metamo
Explanation
The term 'metamorphic' is derived from the word 'metamorphosis', which means, 'change of form'.

34. Match the transformed rocks with origin.

A. Basalt	i) Marble
B. Limestone	ii) Quartzite
C. Granite	iii) Schist
D. Sandstone	iv) Gneiss

a) i, iii, ii, iv
b) iii, i, iv, ii
c) iv, i, iii, ii
d) ii, iv, i, iii
Explanation
When igneous or sedimentary rocks are subjected to extreme heat and pressure, they undergo a complete change in their form and character in course of time, granite may get transformed to gneiss, basalt to schist, limestone to marble and sandstone to quartzite.

35. Assertion (A): Rock cycle is a continuous process of transforming one form to another form.
Reasoning(R): Igneous, sedimentary and metamorphic rocks are involved in rock cycle process.
a) Both A and R is True and R is the correct explanation of A.
b) Both A and R is True but R is not the correct explanation of A.
c) A is True but R is False.
d) Both A and R is False.
Explanation
The Rock cycle is a continuous process through which igneous, sedimentary and metamorphic rocks are transformed from one form to another.

36. By how many process the earth's surface is formed and deformed?
a) 5
b) 4

c) 2
d) 3
Explanation
The formation and deformation of landforms on the surface of the Earth is a continuous activity of two broad processes i.e. internal and external

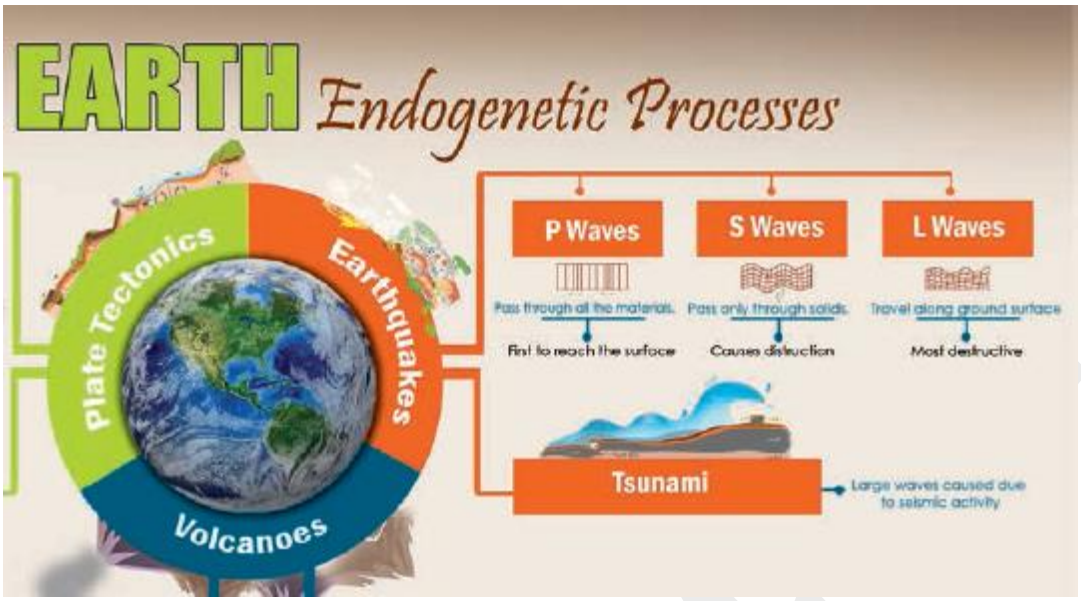
37. Which of this process cause deformities of the earth materials?
a) Internal Process
b) Geomorphic process
c) External process
d) Deformation process
Explanation
These processes cause stress and deformation on Earth materials and finally bring changes on the surface of the Earth. These are referred as Geomorphic Processes.

38. What is the significance of the Endogenetic process?
a) Build Landscapes
b) Create Topographic relief
c) Internal processes
d) All the above
Explanation
The forces that act from the Earth's interior towards the Earth's surface are called internal processes or Endogenetic processes. These forces build the landscape and create topographic relief.

39. Which of this process tear the landscapes into low elevated plains?
a) Internal process
b) Endogenetic process
c) External process
d) Geothermal process
Explanation
The forces that act on the surface of the Earth due to natural agents like running water, glacier, wind, waves etc. are called External processes or Exogenetic processes. These external processes tear the landscape down into relatively low elevated plains.

40. Which of these waves causes Earthquakes?
a) P waves
b) S waves
c) L waves
d) All the above

Explanation



41. Which of these principal sources generate heat below earth crust?

a) Internal radioactivity

b) Geomorphic

c) Magnetic process

d) Volcanic eruptions

Explanation

The internal processes generate heat and eject materials from deep below the Earth's crust. Internal radioactivity is the principal source of power for this process.

42. How many tectonic plates are divided in the lithosphere?

a) 2

b) 3

c) 5

d) 4

Explanation

The lithosphere is divided into a number of huge slabs of rocks called 'Tectonic plates.' These tectonic plates are divided into major and minor plates.

43. Choose the Incorrect statements.

i) The Tectonic plates float independently over the crust layer.

ii) The plate's colloid and produce mountain ranges.

iii) Plate tectonics happen both on land and the ocean floor.

a) i only

b) ii only

c) iii only
d) All the above
Explanation
Plates float independently over the mantle. Collisions of these plates produce mountain ranges and other irregular surface features, both on land and the ocean floor. This phenomenon is called 'plate tectonics.

44. From which of these layer the thermal energy for has emerged for the tectonic movements?
a) Crust
b) Mantle
c) Inner Core
d) Outer Core
Explanation
The movement of tectonic plates is due to thermal energy from the mantle. we have a better understanding about the plate movements and its relation to Earthquake and volcanic activities.

45. What is the name of the location of sinking plates in Convergent Boundary?
a) Divergent Boundary
b) Transform Boundary
c) Subduction zone
d) Folding
Explanation
Convergent Boundary - Here the plate moves toward each other and sometimes, a plate sinks under another. The location where the sinking of a plate occurs is called a subduction zone.

46. In which of these boundaries the plates are pushed up from the mantle?
a) Transform Boundary
b) Convergent Boundary
c) Subduction Boundary
d) Divergent Boundary
Explanation
Divergent Boundary – Here the plates pull away from each other as magma pushes up from the mantle.

47. In the transform boundary the plates slide _____ each other.
a) Vertically
b) Horizontally
c) Upwards
d) Downwards

Explanation
Transform Boundary – Here the plates slide horizontally past each other.

48. Which of these forces cause the folding of the plates?
a) Magnetic force
b) Gravity force
c) Compressional force
d) None of the above
Explanation
Due to lateral compressional forces, the plates are forced to move upwards and downwards. This is called 'Folding'.

49. Which of these mountains are examples for the Fold Mountains?
a) Himalayas
b) Lhotse
c) Makalu
d) Fuji
Explanation
Mountains formed by folding are called Fold Mountains. The Process of folding creates lofty mountain ranges such as the Himalayas and the Alps.

50. Which of these process cause stretch and cracks in rocks?
a) Folding
b) Divergent
c) Faulting
d) Transform
Explanation
The movement of plates creates stress and tension in the rocks, causing them to stretch and crack. This is called 'Faulting'.

51. Which of this process involved in the great rift valley of East Africa?
a) Faulting
b) Folding
c) Compressional forces
d) Exogenetic process
Explanation
The great rift valley of East Africa is a notable example for the process of faulting. The process of folding and faulting together with volcanoes and Earthquakes continually reshape the continents and seafloor.

52. What is the timeline of the Triassic period in earth formation?
a) 100 million years ago
b) 65 million years ago
c) 200 million years ago
d) 145 million years ago
Explanation

53. Assertion (A): The Plates are in constant motion with a few centimeters rate per year.
Reasoning(R): The plate movements are fast and moves the continents a long way.
a) Both A and R is True and R is the correct explanation of A.
b) Both A and R is True but R is not the correct explanation of A.
c) A is True but R is False.
d) Both A and R is False.
Explanation
According to plate tectonics, the plates are in constant motion with an average rate of few centimeters per year. The movement might seem slow, but over millions of years, the plates and the continents riding on them move a long way.

54. Which of these continents were not in the Gondwana land?
a) Africa
b) Antarctica
c) South America
d) North America
Explanation
About 250 million years ago, the Indian Plate was a part of the Gondwana land, which comprised of modern Africa, Australia, Antarctica, and South America.

55. In which direction the Indian plate from Gondwana moved to colloid with Asia?
a) South
b) North
c) West

d) East

Explanation

Approximately 140 million years ago, the Indian plate broke away from the ancient super continent 'Gondwana' and began moving north and collided with Asia.

The collision with the Eurasian Plate along the boundary between India and Nepal formed the Orogenic belt that created the Tibetan Plateau and the mighty Himalayan Mountains.

56. From which of this earth layer the earthquakes are originated?

a) Mantle

b) Core

c) Crust

d) Magma

Explanation

Earthquakes are generally caused by the sudden vibrations in the Earth's crust, which spreads outward in all directions as waves from the source of disturbance.

57. At which of these points the impact of the earthquake is high?

a) Focus

b) Epicenter

c) Hypocenter

d) All the above

Explanation

The point of origin of an Earthquake is called 'Focus' (Hypocenter) which generates a series of elastic waves. 'Epicentre' is a point on the Earth's surface that lies directly above the focus. The impact of the Earthquake is felt the most at the epicentre.

58. Which of these seismic wave characteristics are decided by the medium of passing?

a) Nature

b) Force

c) Speed

d) All the above

Explanation

Earthquakes generate seismic waves. The nature, force and speed of these seismic waves depend on the nature of the medium through which it passes.

59. How many major types of seismic waves are classified?

a) 5

b) 3

c) 4

d) 6

Explanation
There are three major types of seismic waves depend on the nature of the medium through which it passes.

60. In which of these years the highest Richter scale was recorded?
a) 1957
b) 1960
c) 1923
d) 1982
Explanation
The highest magnitude ever recorded is 9.5 on Richter scale (Bio-Bio, Chile in 1960).

61. Which of the earthquake factor is measured by the C.F.Richter scale?
a) Origin
b) Frequency
c) Magnitude
d) Speed
Explanation
C.F. Richter devised a scale to measure the magnitude of Earthquakes.

62. Choose the correct statements regarding the Richter scale.
i) It is a closed ended scale.
ii) The scale value relates to the energy released at the epicentre.
a) i only
b) ii only
c) Both i and ii
d) Neither i nor ii
Explanation
This Richter scale relates to the energy released at the epicentre and provides an estimation of the severity of an Earthquake. It is an open ended scale.

63. Which is the fastest earthquake wave?
a) P-Waves
b) S-Waves
c) L-Waves
d) All the above
Explanation
Primary or P-waves are the fastest of all the Earthquake waves and the first to reach the epicentre.

64. What is the average velocity of the Primary waves?

a) 3.7km/s
b) 2.5km/s
c) 10.6km/s
d) 1.9km/s
Explanation
The P-waves waves pass through solids, liquids and gases, either through push or pull with an average velocity of 5.3km per second to 10.6 km per second.

65. Choose the correct statements regarding S-waves.
i) S-waves or the secondary waves travel through solids, liquids and gas.
ii) These are transverse waves that are perpendicular to the propagating direction.
iii) The average velocity is from 1km/s to 2.5km/s.
a) i only
b) ii only
c) iii only
d) All the above
Explanation
Secondary or S-waves travels only through solids. These transverse waves shake the ground perpendicular to the direction in which they propagate. The average velocity of these waves is 1Km per second to 8 km per second.

66. Which of these are the most destructive waves?
a) Primary waves
b) Secondary waves
c) Surface Waves
d) Seismic Waves
Explanation
Surface Waves (or) L-waves are similar to P-waves but they travel primarily along the ground surface. These waves travel comparatively slower and are the most destructive waves. The average velocity of these waves is 1 km per second to 5 km per second.

67. Which of these instrument records the earthquake waves?
a) Seismograph
b) Richter scale
c) Seismology
d) All the above
Explanation
The instrument which records the Earthquake waves is called 'seismograph' or 'seismometer'. The science that deals with Earthquakes is called 'seismology.

68. What is the meaning of the word Tsunami in Japanese?
a) Shallow Waves
b) Destructive Waves
c) Harbour Waves
d) Killer Waves
Explanation
The word 'Tsunami' is a Japanese term, meaning harbour waves. It is adopted to describe large seismically generated sea waves caused by Earthquakes, submarine explosions and landslides.

69. What is the maximum speed of the Tsunami waves?
a) More than 500km per hour
b) More than 100km per hour
c) More than 50km per hour
d) More than 250km per hour
Explanation
The Tsunami waves travel at a great speed (more than 500 km per hour) and the length of the waves exceeds 600 km. These waves reach to a height of more than 15 m near the sea shore and are capable of causing destruction along the coastal area.

70. What is the speed of the Tsunami waves caused by an earthquake in Indian Ocean in 2004?
a) 250 km per hour
b) 600 km per hour
c) 120 km per hour
d) 55 km per hour
Explanation
The 2004 Indian Ocean Earthquake that caused tsunami is the sixth-deadliest natural disaster which travelled at a speed of 600 km per hour with an estimated death toll of 2,80,000.The Earthquake which occurred near Indonesia at 00.58 hours took nearly 7 hours to reach Chennai.

71. Which of these plates were involved in the 2004 Tsunami in Indian Ocean?
a) Indo-Australian
b) Antarctic
c) Arctic
d) Pacific
Explanation
On 26 December 2004 a tsunami occurred in the Indian Ocean. It was the result of the Indio-Australian Plate subduction below the Eurasian Plate. It was caused by an Earthquake measuring a magnitude of above 9 in the Richter scale. The Earthquake caused the seafloor to uplift, displacing the seawater above.

72. Choose the correct statements.
i) A Volcano is a vent or opening of earth's core.
ii) Volcanoes also formed by plate movements.
a) i only
b) ii only
c) Both i and ii
d) Neither i nor ii
Explanation
A volcano is a vent or an opening on the surface of the Earth crust, through which hot solid, liquid and gaseous materials (Magma) erupt out to the surface from the Earth's interior. Magma rises up and ejects on the surface as Lava. Volcanoes are also formed when plates move apart.

73. How many major components are categorized for a Volcano?
a) 5
b) 3
c) 4
d) 2
Explanation
Volcanoes generally have the following major components. They are Magma chamber, Vents, Volcanic cone and Crater.

74. Match

A. Vents	i) landform
B. Crater	ii) Outlet
C. Magma Chamber	iii) Bowl shaped
D. Volcanic Cone	iv) Liquid rock

a) iv, i, iii, ii
b) ii, iv, iii, i
c) ii, iii, iv, i
d) i, iii, iv, ii
Explanation
Magma chamber - a large pool of liquid rock found beneath the surface of the Earth
Vents - an opening serving as an outlet for air, smoke, fumes, magma etc
Volcanic cone - a landform built by the magma ejected from the vent in the shape of a cone
Crater - a bowl shaped depression found at the top of the volcano through which the magma flows out.

75. Assertion (A): Volcano is derived from the word VULCAN.
Reasoning(R): VULCAN denotes the roman god of fire in Latin language.
a) Both A and R is True and R is the correct explanation of A.

b) Both A and R is True but R is not the correct explanation of A.
c) A is True but R is False.
d) Both A and R is False.

Explanation

The term 'volcano' is derived from the Latin term VULCAN, which is the name of Roman "God of Fire".

76. How many types of volcanoes are classified based on the periodicity of eruptions?
a) 5
b) 3
c) 4
d) 6

Explanation

Based on the periodicity of eruptions, volcanoes are classified into (i) Active volcano, (ii) Dormant volcano, (iii) Extinct volcano.

77. Which of these materials are ejected by an active volcano?
a) Lava
b) Gas
c) Fragmented materials
d) All the above

Explanation

Active volcanoes are those which constantly eject volcanic lava, gases and fragmented materials. (eg.) Mount St. Helens in the United States.

78. Which of these volcanoes are not active for a long time period?
a) Dormant Volcano
b) Extinct Volcano
c) Dead Volcano
d) Both b and c

Explanation

Dormant Volcano: Volcanoes that do not show any sign of volcanic activity for a long period of time are known as dormant volcanoes. Sometimes there may be a sudden explosion which may cause unimaginable loss to life and property (e.g.) Mt. Fuji , Japan

79. Which of these places have an extinct or dead volcano?
a) Fuji
b) Mt. Kilimanjaro
c) Hawaii
d) Mexico

Explanation

Extinct or Dead Volcano: When a volcano permanently stops its volcanic activity, then it is called as extinct or dead volcano (e.g.) Mt. Kilimanjaro, Tanzania

80. Identify the incorrect Match.

A. Active Volcano	i) Mount Alps
B. Dead Volcano	ii) Tanzania
C. Dormant Volcano	iii) Fuji

a) i only

b) ii only

c) iii only

d) All the above

Explanation

Active volcano: Mount St. Helens

Dormant Volcano: Mt. Fuji, Japan

Extinct or Dead Volcano: Mt. Kilimanjaro, Tanzania

81. By which of this factor volcanoes are classified?

a) Eruption period

b) Location and Dimension

c) Structure and composition

d) None of the above

Explanation

Volcanoes can also be classified based on their structure and composition as composite volcano, shield volcano and dome volcano.

82. Which of this is a composite volcano?

a) Strata Volcano

b) Lava Dome

c) Cubical Volcano

d) Shield Volcano

Explanation

Composite volcano, also known as strata volcano, is a conical volcano built by many layers of hardened lava, pumice and volcanic ash. These are commonly found in the Pacific Ocean Eg. Mt. Fuji, Japan.

83. Which of this volcanic structure is rich in silica?

a) Volcanic Dome

b) Shield volcano

c) Composite volcano

d) All the above

Explanation

Volcanic Dome: A lava dome or volcanic dome is roughly a circular mound formed due to the slow ejection of viscous lava from a volcano. As the lava is rich in silica with intense viscosity, it is prevented from flowing far from its vent. e.g. Paricutin, Mexico

84. Choose the correct statements regarding Shield volcanoes.

i) The intense viscous lava with shallow depositions form shield volcano.

ii) Hawaii and Mauna Loa are some examples of shield volcanoes.

a) i only

b) ii only

c) Both i and ii

d) Neither i nor ii

Explanation

Shield Volcano: Shield volcanoes are formed by intense viscous lava. These are shallow depositions with gently sloping sides. Hence the lava flows out in all directions to create a shield. E.g., Mauna Loa, Hawaii

85. Match

A. Fuji	i) Lava Dome
B. Paricutin	ii) Composite Volcano
C. Mauna Loa	iii) Shield Volcano

a) i, iii, ii

b) iii, i, ii

c) ii, i, iii

d) ii, iii, i

Explanation

Composite volcano, also known as strata volcano, is a conical volcano built by many layers of hardened lava, pumice and volcanic ash. These are commonly found in the Pacific Ocean Eg. Mt. Fuji, Japan. Volcanic Dome: A lava dome or volcanic dome is roughly a circular mound formed due to the slow ejection of viscous lava from a volcano. As the lava is rich in silica with intense viscosity, it is prevented from flowing far from its vent. e.g. Parícutin, Mexico.

Shield Volcano: Shield volcanoes are formed by intense viscous lava. These are shallow depositions with gently sloping sides. Hence the lava flows out in all directions to create a shield. E.g., Mauna Loa, Hawaii.

86. Assertion (A): Pacific Ring of wire is one of the major active volcanic eruption areas of earth.

Reasoning (R): Volcanic eruptions and earthquakes occur along the plate boundary region.

a) Both A and R is True and R is the correct explanation of A.

b) Both A and R is True but R is not the correct explanation of A.

c) A is True but R is False.
d) Both A and R is False.

Explanation

Most Earthquakes and volcanic eruptions do not strike randomly, but occur along the plate boundaries. One such area of volcanic eruptions is the circum-Pacific Ring of Fire, where the Pacific Plate meets many surrounding plates.

87. Which is not a major belt of volcanically active zone in the world?
a) Pacific region
b) Himalayas
c) Mid-Oceanic ridges
d) Mid-Continental belts

Explanation

The Ring of Fire is the most seismically and volcanically active zone in the world. The other distinctive major belts are Mid-Oceanic Ridges and Mid-Continental Belts.

88. Which of these is not the constructive effect of volcanic eruption?
a) Fertility of soil is increased.
b) Generates geothermal energy.
c) Used as building material.
d) Balances the global warming.

Explanation

Constructive Effects: Volcanic materials enrich the soil fertility that promotes agricultural activities. The hot volcanic region helps in generating geothermal energy. Many dormant and active volcanoes are the most attractive tourist spots of the world. Most of the volcanic materials are used as building materials.

89. Choose the Incorrect statements regarding the destructive effects of the volcanic materials.
i) Volcanic eruptions cause Earthquakes, floods.
ii) The Dust and ash of volcanic eruptions causes breathing problems.
iii) Weather conditions cannot be altered by the volcanic eruptions.
a) i only
b) ii only
c) iii only
d) None of the above

Explanation

Destructive Effects: Volcanic eruption causes Earthquakes, fast floods, mud slide and rock fall. Lava can travel very far and burn, bury, or damage anything in its path. The large amount of dust and ash makes breathing hard and irritable. Volcanic eruptions can alter the weather conditions and disrupt transport.

90. In which of these place Tsunami hit in recent years?

a) Indonesia

b) Japan

c) Mexico

d) Russia

Explanation

The 28 September 2018 magnitude 7.5 Palu, Indonesia earthquakes (0.178°S, 119.840°E, depth 13 km) occurred at 1002 UTC. The major earthquake triggered catastrophic liquefaction, landslides, and a near-field tsunami that resulted in direct damage, impact, economic loss, and loss of life.