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Session: 2024-2025

Class : VII **Subject : Social Science** **Topic : Geography** **Chapter 2**

INSIDE THE EARTH

1. Multiple Choice Type Questions. (Needs to be done in Book)

(a). The innermost layer of the Earth is _____.

(i) core **(ii) mantle**
(iii) rock **(iv) crust**

(b). Fossil fuels are found in _____.

(i) metamorphic rocks **(ii) sedimentary rocks**
(iii) igneous rocks **(iv) SIMA**

(c). Temperature of the inner core is _____.

(i) 2200°c **(ii) 3200°c**
(iii) 3500°c **(iv) 5000°c**

(d). Which of the these in not an igneous rock?

(i) basalt **(ii) marble**
(iii) granite **(iv) dolorite**

(e). Which of the following layer is associated with NIFE?

(i) core **(ii) mantle**
(iii) crust **(iv) mountain**

2. Fill in the blanks. (Needs to be done in book)

(a) The earth is made up of three layers called crust, mantle, and core.

(b) The crust is formed by solid materials called rocks.

(c) Rocks are classified as igneous, sedimentary, and metamorphic.

(d) Primary rocks is another name for the igneous rocks.

(e) Sand stone is an example of sedimentary rock.

3. State whether the following statements are 'True' or 'False'. (Needs to be done in Book)

(a) The mantle extends upto a depth of 1100 km. **FALSE**

(b) The oceanic crust is called SIAL. **FALSE**

(c) Rocks undergo a cycle of transformation. **TRUE**

(d) Rocks determine the soil type of any area and are useful for construction. **TRUE**

(e) Minerals are used in the construction of roads and buildings. **TRUE**

4. Match the Following. (Needs to be done in Book)

Column A	Column B
(a) Natural environment	(i) barysphere
(b) Core	(ii) sedimentary rocks
(c) Sandstone	(iii) water
(d) Hydrosphere	(iv) outermost solid layer
(e) Lithosphere	(v) biotic and abiotic

ANS- **a-v, b-i, c-ii, d-iii, e-iv**

5. Very Short Answer Type Questions.

(a) Name the distinct layers of the Earth.
The distinct layer of the Earth are the crust, the mantle & the core.

(b) Define the term lava.
The red molten magma erupts from the interior of the Earth through the volcanoes and is called Lava.

(c) What do the terms 'SIMA' and 'SIAL' stand for?
The oceanic crust is known as SIMA and the continental crust is known as SIAL.

(d) What are minerals?
Minerals are substances which are found inside the earth's crust.

(e) What is the inner core of the Earth composed of?
The inner core of the earth is composed of iron and nickel.

(f) What is the thickness of the crust and the mantle?
The crust can be extended upto 35km and the mantle can be extended 2900km below the crust.

6. Short Answer Type Questions.

(a) What are two different types of minerals? Explain them with examples.

The two different types of minerals are:-

1) Metallic Minerals:

i) Metallic minerals form and found in igneous and metamorphic rocks. The metallic properties include lustrous appearance, conductivity of electricity and heat, ductility and malleability.

ii) Examples of such minerals are iron, gold, silver, copper, lead, zinc, etc.

2) Non-Metallic Minerals:

i) Non-Metallic Minerals are associated with sedimentary rocks. These minerals absent the metallic properties.

ii) Examples of these minerals are clay, sulphur, coal, petroleum, salt, etc.

(b) On the basis of their origin, what are the two types of igneous rocks? Define them.

The two types of igneous rocks on the basis of their origin are:-

When the molten lava comes on the Earth's surface and cools down rapidly on the crust, it forms extrusive igneous rocks.

When molten magma cools down deep inside the Earth's crust, the cooling process is slow and the rocks so formed have large grains. These are called intrusive igneous rocks.

(c) What are the main characteristics of igneous rocks?

The main characteristics of igneous rocks are:

1) Igneous rocks are hard and compact.

2) They do not contain the remains of animals or plants.

(d) Explain the formation of metamorphic rocks.

1) It is formed when igneous and sedimentary rocks get changed due to heat and pressure.

2) It is very hard.

3) Formation takes a long time and much more resistant than the other two types.

(e) What are the chief characteristics of metamorphic rocks?

The chief characteristics of metamorphic rocks are:

1) Metamorphic rocks are hard and take a long time in its formation.

2) They are harder than the other rocks and have a high specific gravity.

(f) Why igneous rocks called primary rocks?

They are called primary rocks because other types of rocks are formed from these rocks. Basalt, Granite, dolorite, etc. are some of the examples of igneous rocks.

7. Long Answer Type Questions.

(a) Describe different layers of the Earth in detail.

The Earth is made up of the three concentric layers:-

1) Lithosphere:

i) It is the outermost layer of the Earth.

ii) The oceanic crust is known as SIMA and the continental crust is known as SIAL.

iii) It is about 8 to 35 km thick.

2) Mesosphere:

i) It is the middle or second layer of the Earth.

ii) It is about 2900 km thick.

iii) It is made up of Silica, Magnesium and Iron.

3) Barysphere:

i) It is the innermost layer of the Earth.

ii) It is about 3500 km thick.

iii) It is called NIFE as it is composed of Iron and Nickel.

(b) Distinguish between:

(i) Rocks and Minerals

ROCKS	MINERALS
1) All solid materials of the Earth's crust, whether hard or soft, are called Rocks. **2)**They do not have a definite chemical composition. **3)**They are a store house of fossil fuels and minerals.	**1)**Minerals are substances which are found inside the Earth's crust. **2)** They have a definite chemical composition. **3)** They provide us metals and chemicals.

(ii) Crust and Mantle

CRUST	MANTLE
1) The crust is the outermost layer of the earth. **2)** Its thickness varies between 5-8 km under the ocean floors and about 35 km under the continental masses. **3)** Silica, Alumina and Magnesium are the major components of the crust.	**1)** The mantle is the second layer of the earth. **2)** It extends upto a depth of 2900 km below the crust. **3)** Iron, Magnesium and Silica are the major components of the mantle.

(iii) Igneous and Sedimentary rocks

IGNEOUS ROCKS	SEDIMENTARY ROCKS
1) They are formed by cooling down of magma.	**1)** They are formed by deposition, hardening and cementing together of sediments of the particles brought by wind, ice or water.
2) They are hard and compact.	**2)** They are soft in nature.
3) They are impervious and do not contain remains of animals or plants.	**3)** They contain fossils of plants and animals.
4) Examples- basalt, granite	**4)** Examples- Sandstone, limestone

(c) Describe the rock cycle and draw a labelled diagram of rock cycle.

1) Rocks undergo a cycle of transformation. Molten magma cools down and solidifies to form igneous rocks.

2) These are broken down, transported and deposited to form sedimentary rocks.

3) Both igneous and sedimentary rocks change to metamorphic due to extreme heat and pressure.

4) Extreme heating will lead to melting of rocks forming new magma. This molten magma again cools down and solidifies into igneous rocks.

For diagram referred to page no. 99