

2015

(5th Semester)

GEOLOGY

SIXTH PAPER

(**Earth Surface Processes**)

Full Marks : 55

Time : 2½ hours

(PART : B—DESCRIPTIVE)

(Marks : 35)

*The figures in the margin indicate full marks
for the questions*

Answer **five** questions, selecting **one**
from each Unit

UNIT—I

1. Write a note on the movement of the earth
enumerating on their significance. 7
2. Discuss on any *two* of the following : $3\frac{1}{2} \times 2 = 7$
 - (a) Elemental abundance in crust
 - (b) Radioactivity
 - (c) Shape of the earth

G16/157a

(Turn Over)

UNIT—II

3. Describe the internal structures of the earth with suitable sketches. 7
4. Write an account of different applications of geophysics in understanding the dynamics of the earth. 7

UNIT—III

5. Elucidate on the distribution and evolution of continents and oceans through different times. 7
6. Describe various evidences to support continental drift theory. Enrich your answer with neat sketches. 7

UNIT—IV

7. Explain the meaning and function of mid-oceanic ridges. Add a note on the geologic activities taking place at MOR. 5+2=7
8. Describe different types of plate margin. Support your answer with neat figures. 7

UNIT—V

9. Define active fault. Write a descriptive note on different indicators of recent tectonic activity. 2+5=7
10. What are the causes of coastal erosion? Discuss the role of forest and trees in protecting coastal erosion. 3+4=7

2015
(5th Semester)

GEOLOGY

SIXTH PAPER

(Earth Surface Processes)

(PART : A—OBJECTIVE)

(Marks : 20)

The figures in the margin indicate full marks for the questions

SECTION—A

(Marks : 5)

1. Choose the correct answer and put its number within the brackets provided : 1×5=5

(a) The earth has an estimated mass of

(i) 5.9736×10^{34} kg

(ii) 6.9736×10^{24} kg

(iii) 5.9736×10^{25} kg

(iv) 6.9736×10^{25} kg

[]

(b) An object weighs about — more at the poles than at the equator.

(i) 5%

(ii) 0.5%

(iii) 10%

(iv) 11.5%

[]

(c) Two of the largest rift valleys in the world are the mid-Atlantic ridge and the

(i) Pacific-Antarctic ridge

(ii) East African ridge

(iii) East Pacific rise

(iv) Nazca ridge

[]

(d) Passive margins are found on the edges of most landmasses bordering the

(i) Indian Ocean

(ii) Atlantic Ocean

(iii) Pacific Ocean

(iv) Antarctic Ocean

[]

(e) Cyclones are usually developed in

- (i) high-pressure area
- (ii) low-pressure area
- (iii) low-temperature region
- (iv) thunderstorms

[]

(4)

SECTION—B

(Marks : 15)

2. Write on the following in 3-4 sentences each : 3×5=15

(a) Size of the earth

(b) Magnetic inclination

(i) high pressure area

(ii) low pressure area

(iii) low-temperature region

(iv) thunderstorm

(c) Epeirogeny

2. Write on the following in 3-4 sentences each. 3-5-15

(a) Size of the earth

(d) Hot spots

(5th Semester)

GEOLOGY

SHORT PAPER

(Earth Science Programme)

(PART - A - OBJECTIVE)

(Marks : 20)

The figures in the margin indicate full marks for the questions

SECTION - A

(Marks : 5)

1. Choose the correct answer and put the number within the brackets provided : 1x5=5

(a) The Earth has an estimated mass of

(A) 5.9736×10^{24} kg

(B) 6.9736×10^{24} kg

(C) 5.9736×10^{25} kg

(D) 6.9736×10^{25} kg

(e) Uses of tree rings in paleoclimatology

data at the equator

(i) 3%

(ii) 0.5%

(iii) 20%

(iv) 11.5%

(f) Two of the largest rift valleys in the world are the mid-Atlantic ridge and the

(i) Pacific-Antarctic ridge

(ii) East African ridge

(iii) East Pacific rise

(iv) Nazca ridge

(g) Positive margins are found on the edges of most landmasses bordering the

(i) Indian Ocean

(ii) Atlantic Ocean

(iii) Pacific Ocean

(iv) Antarctic Ocean ***