

2019

GEOGRAPHY

(Major)

Paper : 2.1

(Theory)

(Oceanography and Climatology)

Full Marks : 60

Time : 3 hours

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

1. Choose the correct answer of the following : $1 \times 7 = 7$

(a) In which year Lowthian Green initiated the tetrahedral hypothesis?

(i) 1875

(ii) 1785

(iii) 1587

(iv) 1890

(b) The single landmass that included all the continents as suggested by Alfred Wegener is known as

(i) Angaraland

(ii) Pangaea

(iii) Laurasia

(iv) Panthalassa

- (c) Nebular hypothesis was suggested by
- (i) Immanuel Kant
 - (ii) Laplace
 - (iii) Chamberlin
 - (iv) Edwin Hubble
- (d) 'Puerto Rico deep' is located in the
- (i) Atlantic Ocean
 - (ii) Indian Ocean
 - (iii) Arctic Ocean
 - (iv) Pacific Ocean
- (e) The greenhouse gas that destroys the ozone layer of the atmosphere is
- (i) carbon dioxide
 - (ii) methane
 - (iii) chlorofluorocarbon
 - (iv) sulphur dioxide
- (f) Atmosphere is heated mainly by
- (i) incoming shortwave radiation
 - (ii) terrestrial longwave radiation
 - (iii) reflected radiation
 - (iv) refracted radiation

- (g) Divergence of wind is related to
- (i) cyclone
 - (ii) anticyclone
 - (iii) occluded front
 - (iv) warm front

2. Answer the following questions in brief : $2 \times 4 = 8$

- (a) Make difference between Pangaea and Panthalassa.
- (b) What is tropopause?
- (c) Write about the importance of ozone layer.
- (d) What do you mean by 'salinity of ocean water'?

3. Answer any *three* from the following questions : $5 \times 3 = 15$

- (a) Write an account on the factors affecting salinity of ocean water.
- (b) How do ocean currents occur?
- (c) Explain the factors affecting the insolation over the earth's surface.
- (d) Discuss the world air pressure system with a neat diagram.
- (e) Write a brief note on 'convergence and divergence of wind'.

(4)

4. Describe the nature and scope of oceanography. 10

Or

Write an account on ocean resources and their influence on man. 10

5. Define airmass. Classify airmasses on the basis of their source regions and explain the characteristics of any one of them. $2+6+2=10$

Or

With a neat diagram, discuss the structure, composition and characteristics of earth's atmosphere. 10

6. Write an account on the horizontal distribution of temperature over the earth's surface. 10

Or

Discuss the bottom configuration of the Indian Ocean with a neat diagram. 10
