PART-B: Descriptive

Time: 2 hrs. 40 min. Marks: 50

[Answer question no.1 & any four (4) from the rest]

1.	a. How did plate tectonic theory overcome limitations of continental drift hypothesis? Expalin.b. Write a note on Indian Monsoon	5x2=10
2.	What are different types of glaciers? Write about formation and movement of glaciers.	3+4+3 =10
3.	Write about different environmental problems associated with extraction of minerals.	10
4.	Define: Ice berg, Denudation, Asthenosphere, aquifers, Hydrologic budget	2x5=10
5.	What is insolation? Discuss the factors that affect insolation?	2+8=10
6.	Write about origin, classification and types of clouds.	3+3+4 =10
7.	Write short notes on: Radiation windows, Net radiation budget	5x2=10
8.	What are the needs and objectives of climate classification? Explain salient features of different climate classification schemes.	4+6=10

REV-00 MEV/19/24 2018/06

M. Sc. ENVIRONMENTAL SCIENCE SECOND SEMESTER

ENVIRONMENTAL GEOSCIENCES & METEOROLOGY

MEV-202

(Use Separate Answer Scripts for Objective & Descriptive)

Duration: 3 hrs. Full Marks: 70

[PART-A: Objective]

Time: 20 min. Marks: 20

Choose the correct answer from the following:

1×20=20

1. The surface temperature of sun is about

These subatomic particles move is tremendous speed that are thrown violently

into space

a. Solar particlesb. Solar protonsc. Space protonsd. Solar wind

3. Climatic stress is caused by insufficient and excessive regime of

a. Teperature

b. Humidity

c. Solar radition

d. All of the above

4. Teperature in troposphere

a. Decreases with height

b. Rapidly increases with height

c. Slowly increases with height

d. Remain constant

5. The heighest temperature on the earth is recorded at

a. 20° N

b. 10° N

c. 15° N

d. Equator

6. The main cause of high pressure belt in the sub tropical region is

a. Air subsidence

b. Long winter nights

c. Cyclonic weather

d. Anticyclonic weather

7. Xerophytic vegetation are

a. Microtherms

b. Mesotherms

c. Megatherms

d. Hepistotherms

8.	If the atmosphere is cooler, its capacity to hold water vapour is				
	a. Constant	b. Increased			
	c. Decreased	d. None of the above			
9.	Which one of the following is not included in earth's climate system				
	a. Hydrosphere	b. Solarosphere			
	c. Atmosphere	d. None of the above			
10.	0. Radiation inversion occur due to				
	a. Clouds covering the sky in a winter night				
	b. Clouds reflecting sunlight in a winter day c. Solar radiation reaching on sun				
	d. Cooling of earth's surface due to emission of radiation				
11.	The albedo of the earth as a whole is				
	a. 10%	b. 25%			
	c. 35%	d. 50%			
12.	The immediate cause of wind is				
	a. Humidity differences	b. Temperature differences			
	c. Pressure differences	d. Rotation of the earth			
13.	13. Which of the following areas is/are best suited for formation of air masses?				
	1. an extensive area with broadly uniform surface of earth.				
	2. areas having cyclones.				
	3. hot deserts in tropical regions.				
	a. 1 and 2 only	b. 1 and 3 only			
	c. 1 only	d. 1, 2 and 3 only			
14.	4. Seven major lithospheric plates account for% of Earth's surface area				
	a. 72	b. 84			
	c. 94	d. None of above			
15.	5. Almost 70% of the Earth's freshwater is stored in the				
	a. Hydrosphere	b. Atmosphere			
	c. Cryosphere	d. None of above			
10.	Thickness of sea ice is	h I ass than E			
	a. 2–3 m	b. Less than 5 m			
	c. 5–10 m	d. More than 100 m			
17 iron of the minerals is oxidized to iron.					
	a. Ferric Ferrous	b. Ferric hydrated			

18. Process of weathering of rocks under the combined action of atmospheric carbon dioxide and moisture is called a. Oxidation and reduction b. Carbonation c. Hydration d. Solution 19. What are the causes of low pressure in the equatorial region? 1. high temperature 2. air convergence 3. high humidity a. 1 only b. 1 and 2 only c. 1 and 3 only d. 1, 2 and 3 only 20. % of the total flood prone areas in the country is in the Ganga-Brahmaputra-meghna basin b. 60 a. 40 c. 80 d. 100

d. None of above

c. Ferrous, Ferric