

**PARUL UNIVERSITY**  
**PARUL INSTITUTE OF APPLIED SCIENCES**  
**MID-SEMESTER INTERNAL EXAMINATION, MARCH 2020**  
**M. Sc. Semester II**  
**Subject: Geology**

**Paper Code: 11211251**

**Title of the paper: Environmental Geology**

**Date: 02/03/2020**

**Time: 12:00 to 1:30 pm**

**Maximum Marks: 40**

**Instructions:**

1. *All questions are compulsory and options are given in first and second question only.*
  2. *Numbers to the right of question indicate the marks of respective question.*
- 

**Q. 1** Attempt *any one* question of the following. **(08)**

1. Write a short note on slope stability with diagram.
2. Write the causes, effects and mitigation process of earthquakes.

**Q. 2** Attempt *any three* questions of the following. **(12)**

1. Describe biodiversity and different levels of diversity.
2. "The earth is an open system." Is the statement true or false? Why?
3. Write the classification of the landslides with neat diagrams.
4. How the standard of drinking water is determined?
5. Name the various national legislation made for the preservation and protection of environment in India and its objective.

**Q. 3** Do as directed (*Attempt all five question*). **(05)**

1. What is an environmental hazard?
2. Define uniformitarianism.
3. Write types of volcanoes.
4. Which are the pollutants causing the air pollution?
5. What is seismograph and seismogram?

**Q. 4** Write correct option in your answer sheet for following MCQs. **(15)**

MCQ 1.	According to the principle of uniformitarianism,			
	(A)	Geologic processes we observe today have operated in the past.	(B)	geologic process in the past operated at the same rate as they do today.
	(C)	all of the planets formed from a uniform solar nebula.	(D)	early Earth was covered by a uniform magma ocean.
MCQ 2.	Pick one incorrect statement about minerals			
	(A)	All the minerals are organic	(B)	are crystalline solids
	(C)	have a unique chemical composition	(D)	can be any state (solid, liquid, or gas) as long as that state occurs naturally
MCQ 3.	Tsunami is caused by _____ beneath the water surface.			
	(A)	Earthquakes	(B)	Sedimentation
	(C)	Erosion	(D)	winds.

MCQ 4.	St. Helens is an example of _____ volcanoes.			
	(A)	Crater	(B)	Stratovolcanoes
	(C)	Fissure	(D)	Shield
MCQ 5.	Rocks at mid-oceanic ridges are _____ composition.			
	(A)	Andesitic	(B)	Granitic
	(C)	Grano-diorite	(D)	Basaltic
MCQ 6.	Volcanism is associated with which of the following types of plate boundaries?			
	(A)	convergent plate boundaries	(B)	Divergent plate boundaries
	(C)	transform fault plate boundaries	(D)	divergent and convergent plate boundaries
MCQ 7.	The million tons of snow and ice moving downslope at velocities of 5 to 30 meters per second is called _____.			
	(A)	Landslide	(B)	Subsidence
	(C)	Snow avalanches	(D)	Creep
MCQ 8.	Central Government has the authority to set			
	(A)	Quality of environment	(B)	To regulate the industrial locations
	(C)	Control the pollution	(D)	All of the above
MCQ 9.	Match the following			
	<b>Column A</b> (i) The Water Cess Act (ii) The Air Act (iii) The Environmental Act (iv) The Water Act		<b>Column B</b> (a) 1974 (b) 1986 (c) 1977 (d) 1981	
	(A)	i -c, ii -d, iii -a, iv -b	(B)	i -c, ii -a, iii -b, iv -d
	(C)	i -c, ii -d, iii -b, iv -a	(D)	i -c, iii -d, ii -b, iv -a
MCQ 10.	The difference in the genetic makeup in every individual due to $n$ number of possible combination of genes is called _____.			
	(A)	Mutation	(B)	Species diversity
	(C)	Ecosystem diversity	(D)	Genetic diversity
MCQ 11.	The ____ ecosystems in the world are rarest, richest and most distinctive natural areas called as			
	(A)	200, Global 200	(B)	1000, Global 200
	(C)	221, Global 200	(D)	500, Global 200
MCQ 12.	The diameter of finer particulate matter (PM) is			
	(A)	2 $\mu\text{m}$	(B)	20 $\mu\text{m}$
	(C)	0.2 $\mu\text{m}$	(D)	10 $\mu\text{m}$
MCQ 13.	Which of the following gases is formed due to the incomplete combustion of the fuel?			
	(A)	CO <sub>2</sub>	(B)	SO <sub>2</sub>
	(C)	CO	(D)	HCl
MCQ 14.	_____ metal, an air pollutant, is used as anti-knocking in the gasoline,			
	(A)	CO	(B)	Pb
	(C)	S	(D)	O <sub>3</sub>
MCQ 15.	_____ is the quantity of total ore deposit that can be extracted at profit in the present socio-technological conditions.			
	(A)	Reserve	(B)	Potential resources
	(C)	Resources	(D)	Developed resources