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SEAT No. _____

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SARDAR PATEL UNIVERSITY
B.Sc. – V Semester Examination-2018
Monday, 29th October
10.00 A.M. to 01.00 P.M.
Subject Code: US05CENV04
Title: Earth System Sciences

Total Marks: 70

Q1. Choose the correct option and write it in the answer sheet: [10]

- 1) There are _____ major groups of weathering processes.
a) Six b) Five c) Four d) Three
- 2) Which of these includes the movement of materials through glacier ice?
a) Aggradations b) Degradation c) Glaciations d) None of above
- 3) _____ patterns develop from the disruption of a pre-existing drainage pattern?
a) Deranged b) Radial c) Rectangular d) Trellis
- 4) On Moh's scale of hardness for minerals, the hardness of glass is between _____:
a) 2 and 3 b) 3 and 4 c) 4 and 5 d) 5 and 6
- 5) What is the content of sulphur in the earth's surface?
a) 3-6 % b) 6-8 % c) 5-10 % d) 10-15 %
- 6) What is the number of active volcanoes in the world at present?
a) 550 b) 500 c) 450 d) 300
- 7) Most viscous and pasty lava is characteristics of _____ volcano.
a) Hawaiiin b) Strombolian c) Vulcanian d) Peleean
- 8) What is the time lag between successive tsunami waves?
a) 10 to 20 min b) 20 to 40 min c) 10 to 50 min d) 20 to 60 min
- 9) In Japan tropical cyclones are termed as _____:
a) Bagulo b) Typhoons c) Taifu d) Willy willy
- 10) What is the term used for lightning flash without thunder?
a) Ball Lightning b) Heat Lightning
c) Ribbon Lightning d) Dry Lightning

(1)

- Q2. Answer the following (any ten): [20]
1. Briefly discuss how biological weathering works.
 2. What is meant by dendritic drainage pattern? Explain.
 3. Discuss the term Geomorphology.
 4. What is meant by lustre and write factors on which it depends?
 5. What the role of oxygen in oxygen cycle?
 6. Write a short note on nitrification.
 7. How are earthquakes classified on the basis of causative factors?
 8. Write about volcanic materials.
 9. What are components of volcano? Briefly discuss.
 10. Discuss landslide disaster management in brief.
 11. Write a note on types of tsunami waves.
 12. Define lightning and name different types of lightings.
- Q3. A. Discuss the process of physical weathering. [05]
 B. Write about rock cycle with appropriate diagrams. [05]
- OR
- Q3. A. Discuss in detail about denudational process. [05]
 B. Explain Endogenic process. [05]
- Q4. A. Explain types of minerals on the basis of color. [05]
 B. Discuss the property of fracture in minerals. [05]
- OR
- Q4. A. Write a short note on sulphur cycle. [05]
 B. Write a short note on phosphorus cycle. [05]
- Q5. A. Discuss mechanism and causes of vulcanicity. [06]
 B. Write about mechanism and causes of earthquakes. [04]
- OR
- Q5. A. Write a note on topography produced by volcanoes. [06]
 B. Discuss hazardous effects of earthquakes. [04]
- Q6. A. Discuss the role of following in causing floods: [05]
 (i) Deforestation (ii) Increasing Urbanization
 B. Discuss Tsunamis producing factors. [05]
- OR
- Q6. A. What are different types of avalanches? Discuss. [05]
 B. Write in brief about super cyclone of Orissa. [05]

