

The Assam Royal Global University, Guwahati

Royal School of Environmental and Earth Sciences

B.Sc. Geology 2nd/4th Semester

Semester End Examination, July 2022

Course Title: Earth Resources

Course Code: GEOL162G202/GEOL162G402

Time: 3 Hours

Maximum Marks: 70

Note: Attempt all questions as per instructions given.

The figures in the right-hand margin indicate marks.

Section – A

1. Attempt **all** questions. (Maximum word limit 50) 2 x 8
- a. Define Ore. Add a note on Gangue material.
 - b. Write short note use of mineral as resources in industries.
 - c. Give an example where energy changes its form.
 - d. Differentiate between Energy and Power.
 - e. Differentiate between renewable and non-renewable resources.
 - f. How are natural oil and gas formed?
 - g. What do you mean by Hydrogen power and Fuel cells?
 - h. Define Nuclear Fusion and Nuclear Fission.

Section – B

2. Attempt **any two** of the following: 6 x 2
- a. Write briefly on the classification of mineral deposits on the basis of their potentiality to exploration.
 - b. Write briefly on Open cast mining.
 - c. Write briefly on importance of Geology in exploration of minerals.
3. Attempt **any two** of the following: 7 x 2
- a. Write detail note about significance of renewability.
 - b. What is Primary and Secondary Energy? Give examples.
 - c. Put your view in brief, why we should conserve energy rather wasting it.
4. Attempt **any two** of the following: 7 x 2
- a. Write a detailed note on major types and sources of energy.
 - b. Describe the process of generation of coal.
 - c. Illustrate the potential of solar energy and wind energy.
5. Attempt **any one** of the following: 14 x 1
- a. Elaborate the principle of Hydroelectric power generation. Also add a note on its potential and current scenario in Indian context. 8+3+3
 - b. Define Groundwater. Describe the various types of aquifers (add diagram). Write a note on the role of groundwater in the economic development of a country. 1+5+8