

B.Sc. (With Credits)-Regular-Semester 2012 Sem I (Old Course)
Geo-02 - Geology Paper-II (Mineralogy and Elementary Mineral Optics)

P. Pages : 2

Time : Three Hours



GUG/S/18/3312

Max. Marks : 50

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- Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat diagrams wherever necessary.

1. Describe the following:-
A) Colour of the minerals
B) Cleavage in the minerals

OR

Give a brief account of Quartz group with reference to chemical, physical properties and their geological occurrence.

2. Give a brief account of Garnet family with reference to chemical composition, physical properties and their geological occurrence.

OR

What is R. I. ? How do you determine the refractive index by Abbe refractometer.

3. Describe the following:-
A) Hardness of the minerals
B) Plagioclase feldspars
C) Chemical composition and physical properties of Sillimantie.
D) Critical angle

OR

- E) Luster
F) Physical properties and chemical composition of orthoclase.
G) Physical properties of tremolite
H) Becke line method
4. Write short notes on the following:-
A) Mineral composition of the earth's crust.
B) Physical properties of Biotite.

- C) Physical properties and chemical composition of Olivine
- D) Nicol Prism

OR

Write the short notes on the following:-

- E) Polymorphism
- F) Inosilicates
- G) Physical Properties of hornblende
- H) Reflection

5. Write on the following in not more than two sentences:- Attempt **any ten**.

- A) Definition of mineral
- B) Ionic bond
- C) Uneven fracture
- D) Nesosilicates
- E) Give a name of Lithium bearing mica
- F) Name any two zeolites
- G) Name the iron bearing Olivine
- H) Alteration in Olivine
- I) Name any two alkali amphiboles
- J) Refraction
- K) Ordinary light
- L) Use of petrological microscope
