

GOBINDA PRASAD MAHAVIDYALAYA
DEPARTMENT OF GEOGRAPHY

SIX MONTHS ADD-ON COURSE ON GEOGRAPHY

COURSE TITLE: - "IDENTIFICATION OF ROCKS AND MINERALS WITH SPECIAL
REFERENCE TO GEOLOGY & PHYSIOGRAPHY OF BANKURA DIST."

COURSE STRUCTURE: -

MODULE- I
(Theoretical)

1. Definition of Minerals and Rocks.
2. Concept of stress, strain and deformation of rocks.
3. Characteristics of Rocks
 - i. On the basis of its origin.
 - ii. On the basis of its texture and structure.
 - iii. On the basis of its ductility and elasticity.
4. Classification of Rocks.
 - i. Igneous rocks and igneous petrology.
 - ii. Sedimentary rocks and Sedimentology.
 - iii. Metamorphic rocks and Metamorphic Petrology.

N.B.- Here all will be discussing on primary basis.
5. Geological formation, lithology and stratigraphy and its impact on physiography of Bankura district.
6. Igneous rocks and Igneous Petrology: -
 - i. Definition of Igneous rock.
 - ii. Characteristics
 - iii. Classification of Igneous rocks.
 - iv. Example of such Igneous rocks from Amarkanan and its adjacent region.
 - v. Some uses of various Igneous rocks.

(Practical)

1. Some megascopic specimen identification of Rocks and Minerals.
2. Analyzing some geological as well as stratigraphic maps of Bankura Dist. with special emphasis on Amarkanan and adjacent region.
3. Showing some specimen of igneous rocks and their distribution in Amarkanan and its surrounding.

MODULE- II
(Theoretical)

1. Sedimentary rocks and sedimentology: -
 - i. Definition of Sedimentary rocks.
 - ii. Some characteristics of Sedimentary rocks.
 - iii. Classification of sedimentary rocks.
 - iv. Example and some specimen of sedimentary rocks from Amarkanan and its surrounding.

2. Metamorphic rocks and metamorphic petrology: -
 - i. Definition of Metamorphic rocks.
 - ii. Some characteristics of Metamorphic rocks.
 - iii. Classification of Metamorphic rocks.
 - iv. Example and some specimen of Metamorphic rocks from Amarkanan and its surrounding.

(Practical)

1. Megascopic Identification of sedimentary and metamorphic rocks. (Sandstone, conglomerate, grit, limestone, gneiss, schist, marble, phyllite).
2. Showing some maps of Gondwana coal belt of Bankura dist.

MODULE- III

(Theoretical)

1. Rock cycle.
2. Concept about minerals and characteristics, its uses
3. Mineral's hardness with special reference to Moho's hardness scale.
4. Some megascopic mineral identifications- such as Quartz, feldspar, mica, galena, hematite, magnetite, bauxite.

(Practical)

1. Showing those minerals with their basic characteristics.

N.B.- a practical laboratory copy should be prepared by the students who will be join this add on course.