**ASSIGNMENTS**

**M.Sc. Geology**

**Semester-IV Date-7/6/2020**

**Paper Code: CC GEOL 401 [GEOEXPLORATION] [Marks-30]**

**(Compulsory for all students of M.Sc. Semester IV)**

**As per university orders students are required to answer the following questions *in their own hand writing* as part of assignments against their mid term examinations and submit their assignment files for evaluation immediately when the university opens.**

Q.1) Discuss the different stages and practices of geological prospecting, regional and detailed

exploration.

Q.2) Write notes on the various methods of sampling of-

a) Rocks

b) Soil and stream sediments

c) Vegetation and vapour samples.

Q.3) Explain the following terms-

a) Primary and secondary geochemical dispersion patterns.

b) Background, threshold and anomalies.

Q.4) Discuss the role of geophysics in oil, mineral and ground water exploration.

Q.5) With respect to magnetic method of exploration explain the following-

a) Induced and remnant magnetisation.

b) Magnetic minerals, variation in magnetic susceptibility with rock types.

c) Qualitative interpretation of magnetic anomalies.

Q.6) With respect to seismic method of exploration explain the following-

a) Snell's law.

b) Seismic reflection and refraction method-principle and simple interpretation.

c) Elastic properties of materials.

Instructions-

* The assignments are to be written *strictly in A4 SIZE PAPER* ***(in your own hand writing)*** *and submitted in separate cover slip file for each paper in your semester.*
* Students can refer the notes on my university blog page however **higher marks** will be given for neat, organised and presentable data/diagrams and additional notes related to the topics.