

**Set A**

<b>Sl. No. of Question Paper</b>	:	
Unique Paper Code	:	32197501
Name of the Course	:	<b>B. Sc. Hons. Geology</b>
Name of the Paper	:	Exploration Geology : DSE-I
Semester	:	V
<b>Duration : 3 Hrs</b>		<b>Maximum Marks : 75</b>

Instructions for the candidates:

- a) Attempt any four questions
- b) All questions carry equal marks

1. Elaborate on the role of mineral industry in the national economy. Discuss major environmental concerns associated with minerals and mining industry.
2. Briefly describe the necessity and the stage at which the subsurface exploration is carried out. Elaborate on the radiometric survey and its application in exploring ore deposits.
3. Discuss the basic premises and major limitations of the geophysical surveys. Elaborate upon the magnetic method while discussing its application in exploration of ore deposits.
4. Elaborate on the criterion for selection of the borehole sites illustrating the answer with suitable diagrams. Discuss the parameters taken into consideration while selecting a particular type of drilling.
5. Describe about the basic assumptions applied during the estimation of the ore reserves. Discuss in brief, various conventional methods used for calculating ore reserves
6. What do you understand by the UNFC method of codification of ore deposits? Describe sub-divisions of the G-axis in detail.