



## M.Tech. II Semester Degree Examination, Sept./Oct. - 2024

### MINERAL PROCESSING

#### Ore Genesis and Ore Microscopy

#### (NEP)

Time : 3 Hours

Maximum Marks : 70

- Note :** (i) Question No. 1 is **Compulsory**.  
(ii) Answer **any five** of the following.

1. (a) List the factors controlling residual concentration. 7  
(b) Explain Reflectance and Bireflectance. 7
2. (a) Explain the Ore deposits associated with Kimberlite. 7  
(b) Write a note on Komatiites. 7
3. (a) Explain the Genesis of Indian Iron ore deposits. 7  
(b) Discuss Uranium and Vanadium deposits and their distribution. 7
4. (a) With neat sketch, explain Oxidation and Supergene enrichment. 7  
(b) Explain ore deposit associated with Graphite. 7
5. (a) Discuss the different textures that are studied under microscope. 7  
(b) How ore microscopy helps in economic geological studies ? 7
6. (a) Write a note on nonferrous ores. 7  
(b) Explain the process of formation of Bauxite and Nickel. 7
7. (a) Explain the ore deposit associated with Kyanite and Garnet. 7  
(b) Explain the process of Residual and Mechanical Concentration. 7
8. (a) With relevant diagram, explain parts of an ore microscope. 7  
(b) Write a note on hydrothermal deposits. 7

