

**M.Tech. II Semester Degree Examination, September/October - 2022****MINERAL PROCESSING****21MNP2C5L : Ore Genesis and Ore Microscopy**

Time : 3 Hours

Maximum Marks : 70

Instructions : (i) Answer **any 5** of the following.
(ii) Question number **1** is **compulsory**.

1. Discuss the magmatic differentiation of ore formation. **14**
2. Explain hydrothermal deposits. **14**
3. Answer the following :
 - (a) With a neat diagram, explain the Vicker's Hardness Test and write its test procedure. **7**
 - (b) Explain the procedure for preparation of polished sections. **7**
4. Explain oxidation and supergene enrichment process of ore genesis and, mention the factors affecting the process of oxidation and supergene enrichment. **14**
5. What do you mean by Residual Concentration ? Explain the genesis of Bauxite deposits. **14**
6. Define metamorphism and explain any one metamorphic ore deposit. **14**
7. With a neat ray diagram explain different parts of an Ore microscope. **14**
8. What are the methods to determine hardness of ores under ore microscope ? Describe. **14**

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