## लोक सेवा आयोग नेपाल इन्जिनियरिङ्ग सेवा, मेटालर्जिकल इञ्जिनिरिङ्ग समूहको राजपत्रांकित द्वितीय श्रेणी (खुला र आन्तरिक प्रतियोगिता) को लिखित परीक्षाको पाठ्यक्रम

## द्वितीय पत्र :- समूह सम्बन्धी

- 1. General overview of mineral resources of Nepal.
- 2. Scope of Metallurgical Engineer in developing countries, like Nepal.
- 3. Scope of ferrous and non-ferrous metallurgical industries in Nepal.
- 4. Principles and processes of ore dressing with reference to few common commercial metals.
- 5. Iron carbon diagram, principles and types of heat treatment processes.
- 6. Common tests, destructive as well as non-destructive of metallurgical products for quality control.
- 7. Principles and processes of steel making from Iron ores.
- 8. Effects of common alloying elements in steel making and principles and process outlines for qualitative and quantitative determination of these elements in steel.
- 9. Role of metallography in steel quality control.
- 10. Types and significance of non-destructive testing (NDT).
- 11. Principles, processes and significance of pyrometallurgy, hydrometallurgy and electrometallurgy.
- 12. Quality management system as applies to metallurgical industries.
- 13. Tools, techniques, method and processes to ensure environmental soundness of metallurgical industries.
- 14. Importance of metallurgical lab for metal industry.
- 15. Role of formerly industry in developing countries like Nepal.
- 16. Steps involves in costing process, costing defects, reasons and remedies.
- 17. Principle, processes and significance, application of powder Metallurgy.
- 18. Principle, process and application of metal coating.
- 19. Importance of rolling mills and some rolled products, like CTDB and TMT.