

School of University Polytechnic

**Diploma in Electrical Engineering
Semester End Examination - Jun 2024**

**Duration : 180 Minutes
Max Marks : 100**

Sem IV - N1DI405T - Switchgear and Protection*General Instructions**Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

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| 1) | Define type of open circuit fault. | K1(2) |
| 2) | Discuss equipments their functions of sub stations. | K2(4) |
| 3) | Express three phase short circuit fault | K2(6) |
| 4) | Illustrate short circuits and their effects. | K3(9) |
| 5) | Write grounding of sub-station and its applications. | K3(9) |
| 6) | Consider smoothing reactors. | K5(10) |
| 7) | compare between tuning reactor and arc-suppression reactor. | K4(12) |
| 8) | Consider grading and co-ordination L.V. fuses. | K5(15) |
| 9) | Consider layout, single line diagram bus bar arrangement of sub stations | K5(15) |
| 10) | Explore operation principles of induction type over current relay | K6(18) |