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School of Engineering**B.TECH Electrical Engineering
Mid Term Examination - May 2024****Duration : 90 Minutes
Max Marks : 50****Sem VI - G2UB604C - Electric Drives**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*

- 1) Explain multi motor electric drive with some examples. K2 (2)
- 2) What is a Group Electric Drive (Shaft Drive)? K1 (3)
- 3) Explain the assumptions made while performing heating & cooling calculation of an electric motor. K2 (4)
- 4) Explain the classes of duties. K2 (6)
- 5) Draw the typical temperature rise-time curve and derive the equation for temperature rise in an electric drive K3 (6)
- 6) Explain different types of loads and the choice of selection of the motor for different loads K3 (9)
- 7) How a motor rating is determined in a continuous duty and variable load? K4 (8)
- 8) What is the effect of variation of armature voltage on N-T curve and how it can be achieved? K4 (12)

OR

Derive the transfer function of separately excited dc motor with armature voltage control. K4 (12)