



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)



COIMBATORE-35

Accredited by NBA-AICTE and Accredited by NAAC – UGC with A+ Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

COURSE NAME: 23EEB203 Electrical Machines-I

II YEAR / III SEMESTER

Unit 2 – DC Motor

Topic 3: Characteristics of DC Motor





What We'll Discuss

TOPIC OUTLINE



A Case
Characteristics of DC Motor
Assessment



A CASE



Think what type of motors are used in

1. Train and Escalators
2. Spinning mills and lathe machines

& Why





Characteristics of DC Motor



- Torque – Armature current characteristics
- Speed – Armature current characteristics
- Speed-Torque characteristics



DC Series Motor

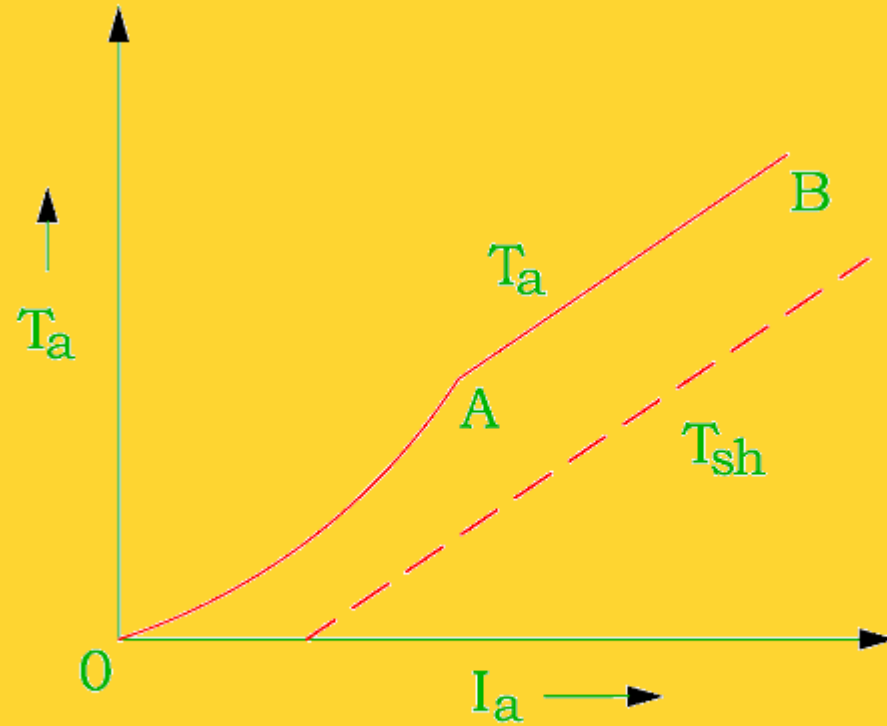


FIG A : TORQUE - ARMATURE CURRENT CHARACTERISTIC

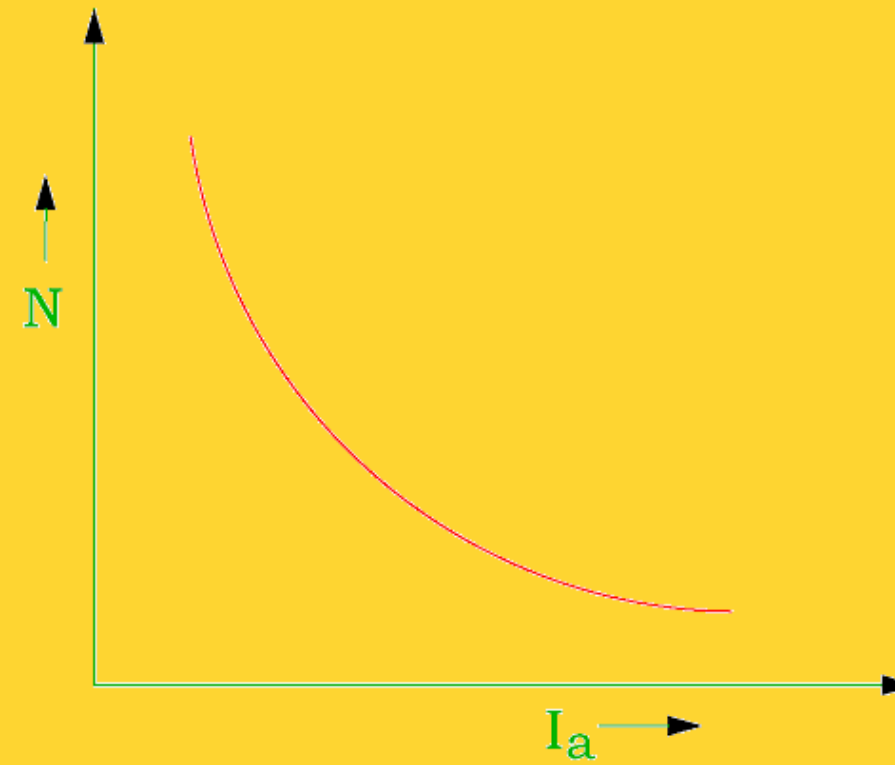


FIG B : SPEED - ARMATURE CURRENT CHARACTERISTIC

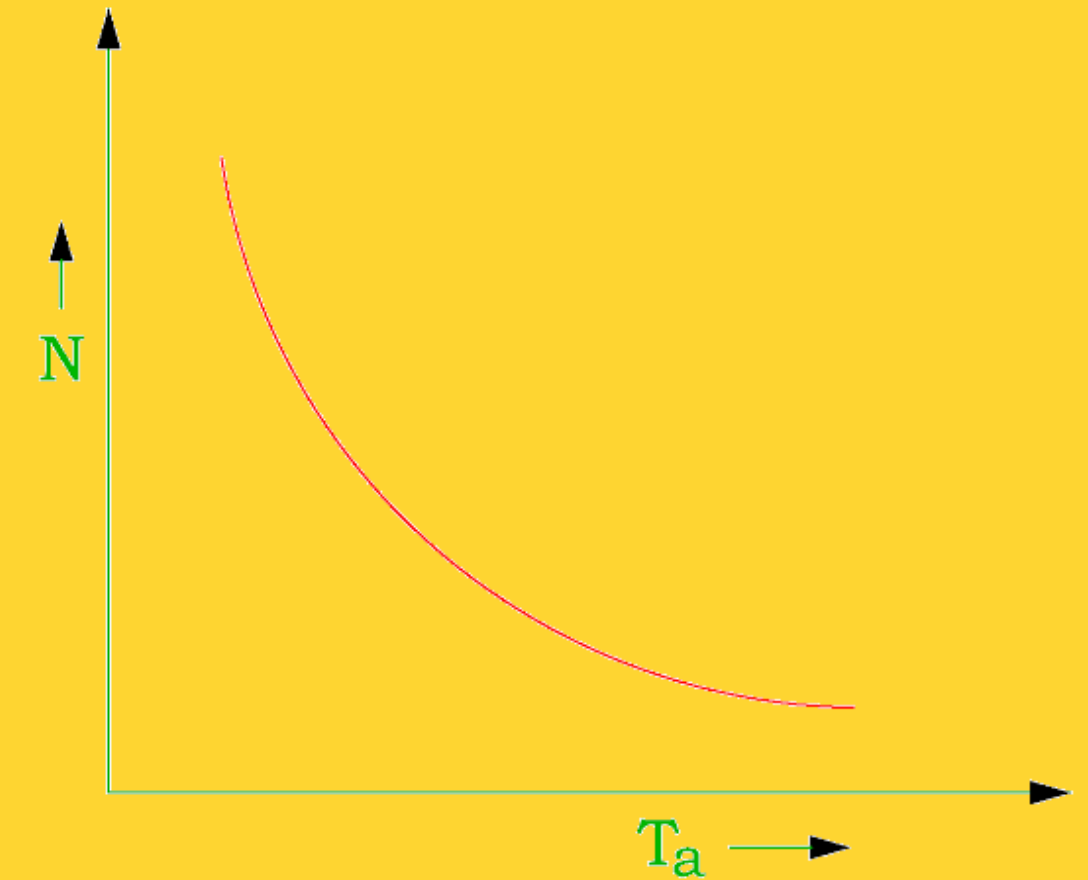


FIG C : SPEED - TORQUE CHARACTERISCTIC



DC Shunt Motor

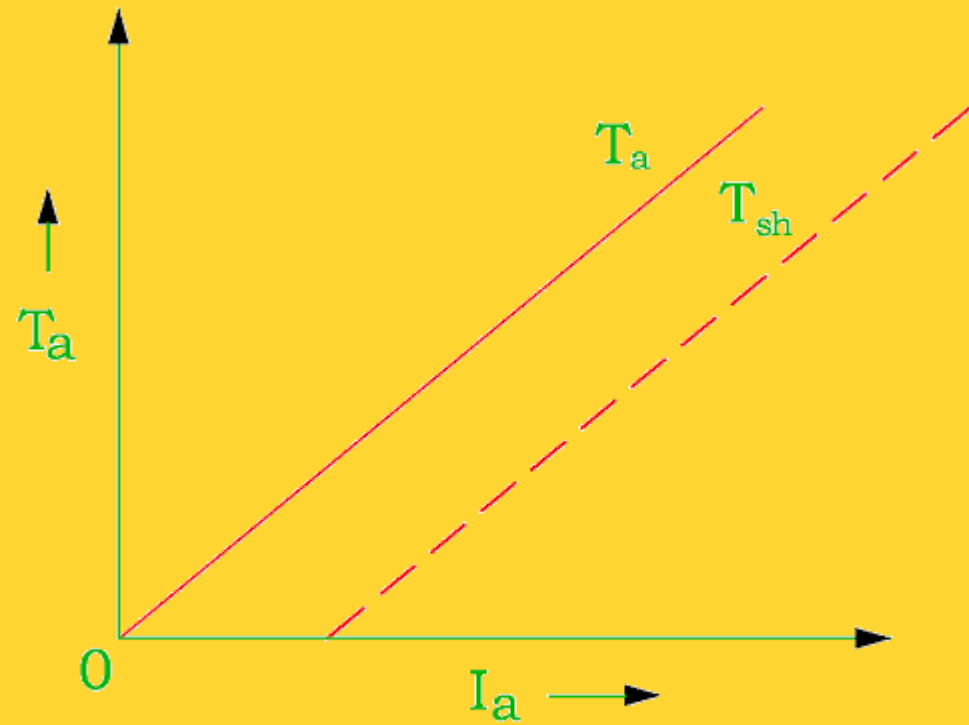


FIG D : TORQUE - ARMATURE CURRENT CHARACTERISTIC

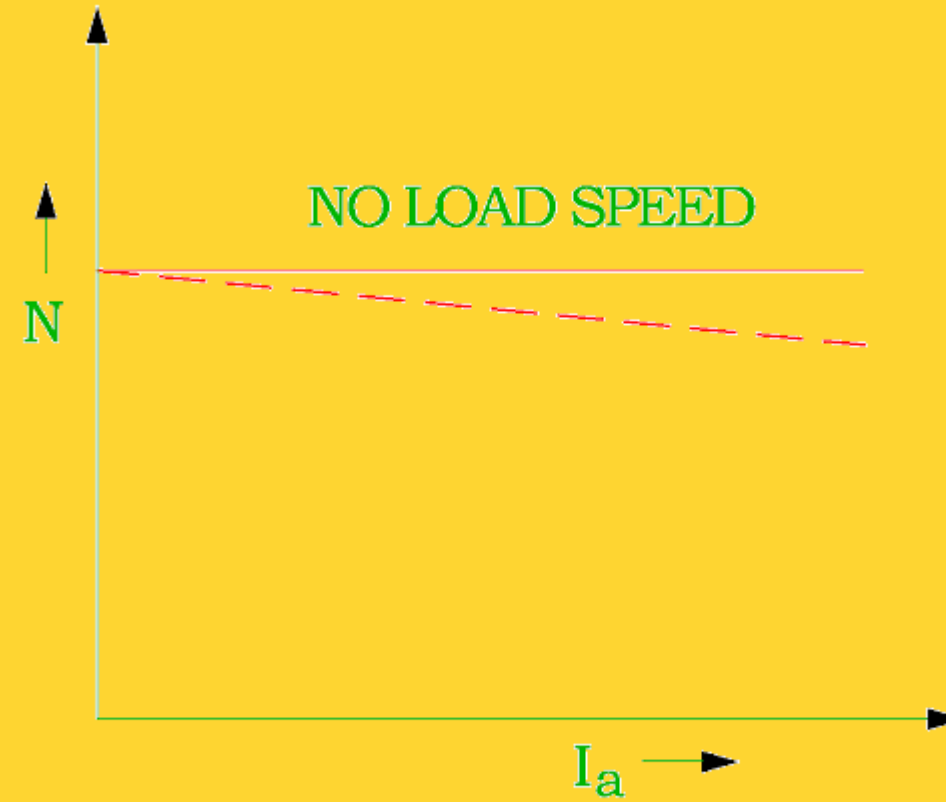


FIG E : SPEED - ARMATURE CURRENT CHARACTERISTIC

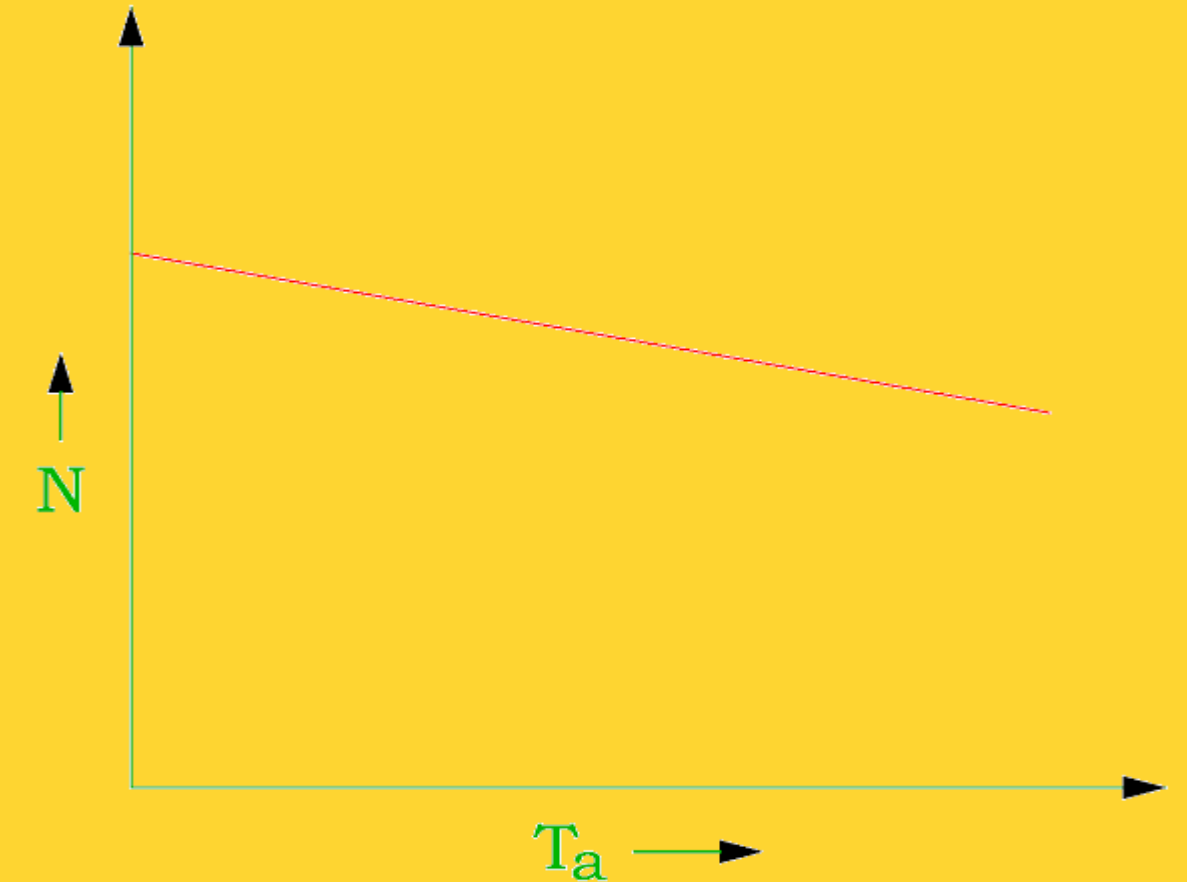


FIG F : SPEED - TORQUE CHARACTERISCTIC



DC Compound Motor

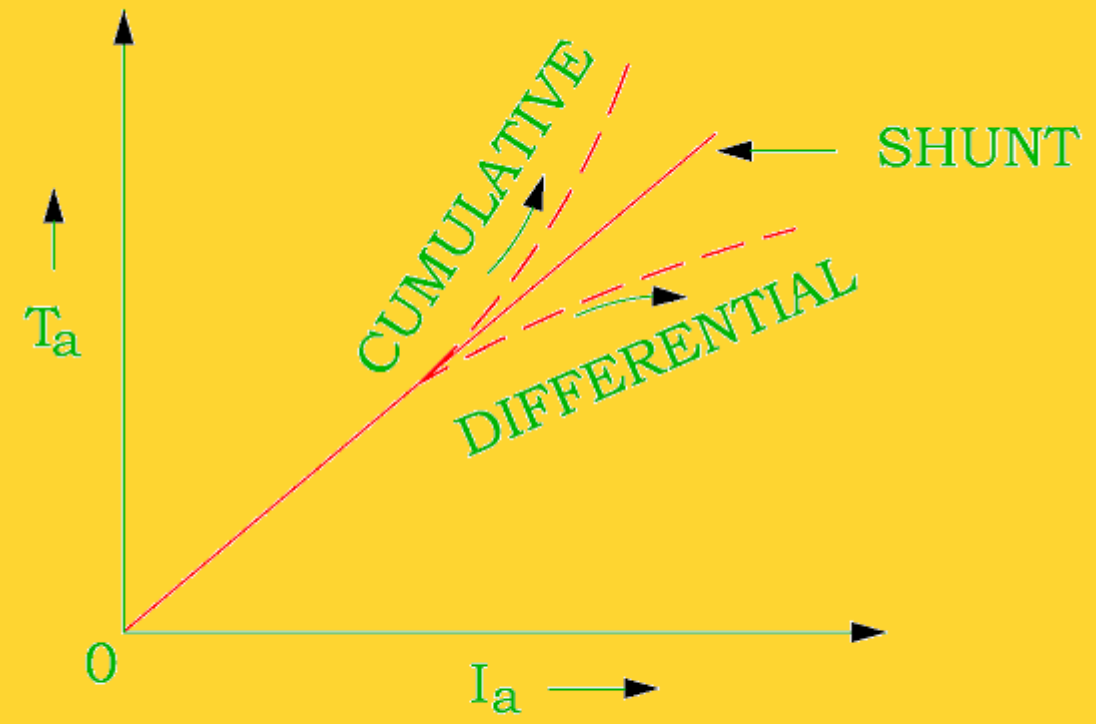


FIG G : TORQUE - ARMATURE CURRENT CHARACTERISTIC

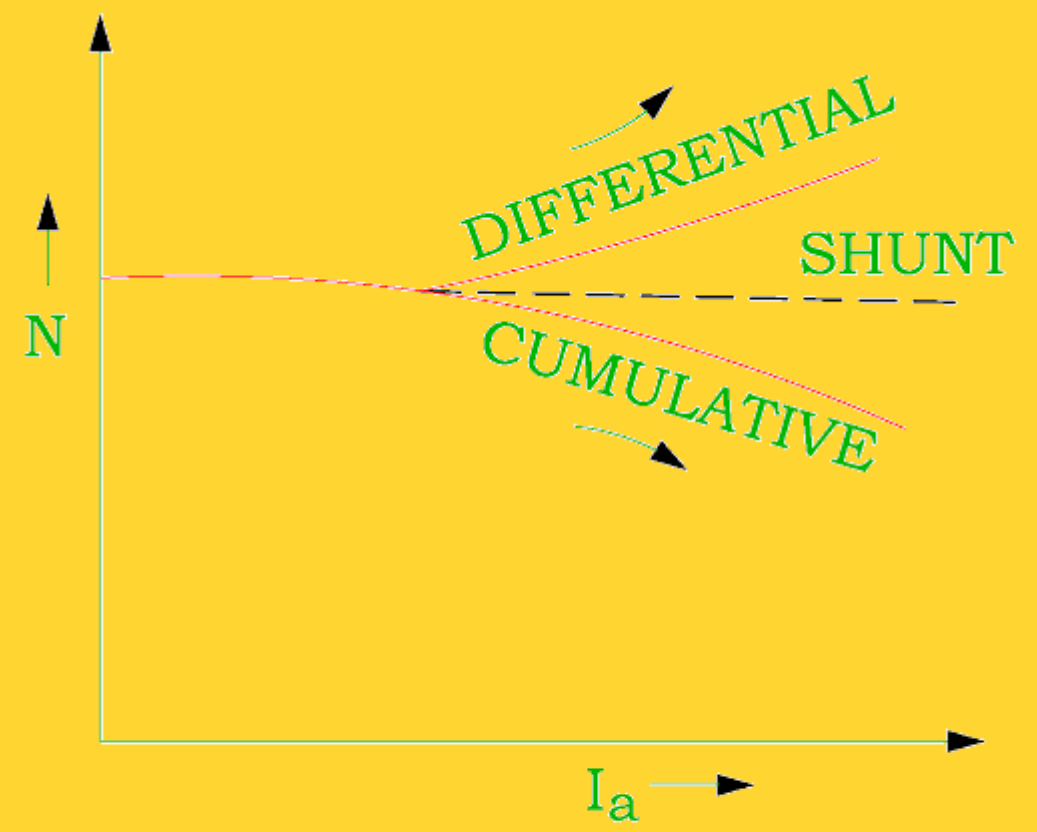


FIG H : SPEED - ARMATURE CURRENT CHARACTERISTIC

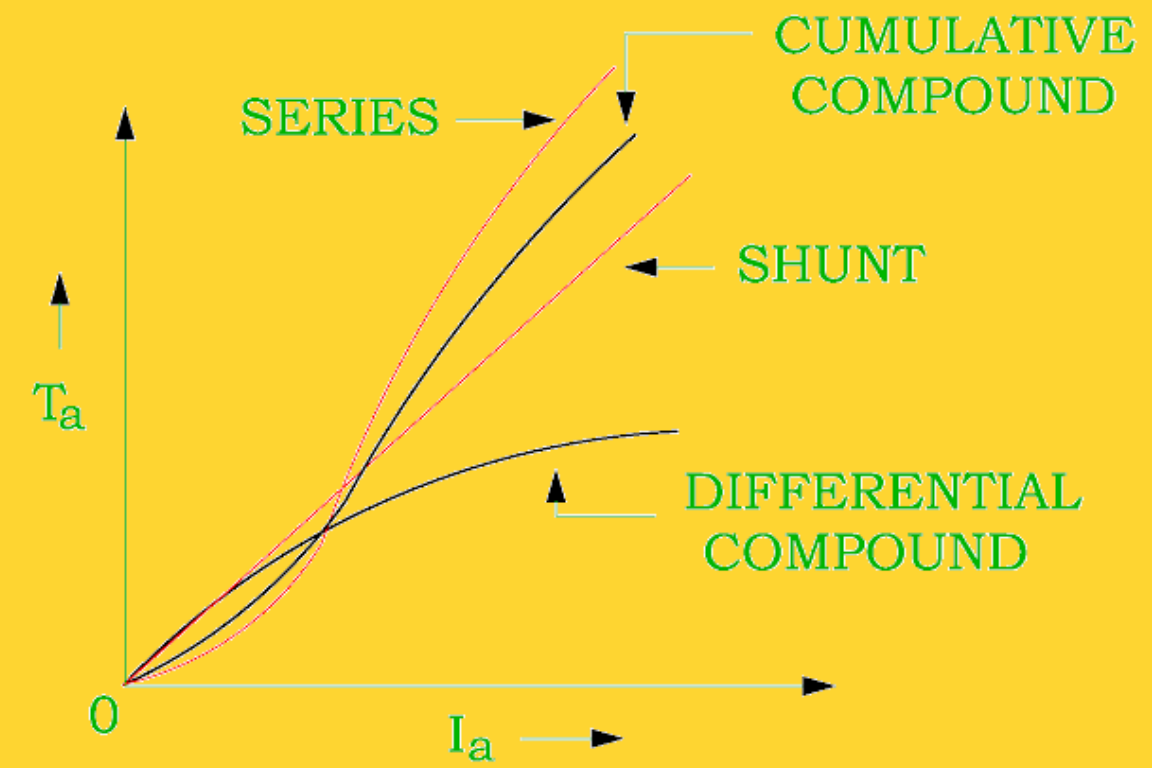


FIG I : COMPARISION OF T - I_a CHARACTERISTICS OF ALL TYPES DC MOTORS



RECALL



1. List the characteristics of DC Motor



THANK YOU