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19/11/19

Question Paper Code : 91487

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019
Fourth Semester

Electrical and Electronics Engineering
EE 6401 – ELECTRICAL MACHINES – I

(Regulations 2013)

(Common to PTEE 6401, Electrical Machines – I – for B.E. (Part-Time)
Third Semester – Electrical and Electronics Engineering – Regulations 2014)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions

PART – A

(10×2=20 Marks)

1. What is Hysteresis Losses ?
2. Define Flux Linkage.
3. Define all day efficiency of a transformer.
4. What is Inrush current in a transformer ?
5. Define the synchronous speed. Write the expression also.
6. Define the term pole pitch and coil pitch.
7. Specify the role of Interpoles in DC machine.
8. What is meant by residual emf in DC generator ?
9. State Fleming's Left hand rule.
10. Why DC series motor is called as Variable speed motor ?

PART – B

(5×13=65 Marks)

11. a) Derive the expression for self inductance and mutual inductance and also the coefficient of coupling.

(OR)