



SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107



AN AUTONOMOUS INSTITUTION

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

I Semester

B.E-Mechanical Engineering

19EE101 – Basic Electrical and Electronics Engineering

Regulations 2019

QUESTION BANK FOR IAE II

PART A	
1	For the given data, calculate number of turns of a single phase Transformer, $E_1=2100V$, $E_2=250V$, $f=50Hz$, Flux= $3.16mWb$.
2	Name the types of motor used in ceiling fan.
3	For the given data, calculate the number of turns. $E_1=2200V$, $E_2=250V$, $f=50Hz$, Flux= $2.16mWb$.
4	What are the main advantages of capacitor run motor.
5	Mention the factors to be considered before electrical wiring.
6	Name the types of wiring.
7	Mention the advantages of Grounding.
8	List some of the wiring accessories needed for electrical wiring.
9	Elaborate TRS and CTS.
10	Mention the advantages of neutral grounding.
11	State the principle of three phase induction motor.
12	List any three wiring rules.
13	List the disadvantages of single phase induction motor.
PART B	
1	Elaborate the types of single phase induction motor.
2	With neat sketch explain operating principle of a single phase transformer along with its construction.
3	Derive the EMF equation of single phase Transformer.
4	Explain the construction and working of single phase induction motor in detail.
5	(i) The no-load ratio required in a single-phase 50Hz transformer is 6600/300V. If the maximum value of flux in the core is to be about 0.09 Weber, find the number of turns in each winding. (ii) The no-load ratio required in a single-phase 50Hz transformer is 3300/300V. If the maximum value of flux in the core is to be about 0.06 Weber, find the number of turns in each winding.
6	What is the need for electrical grounding? Explain the different methods of grounding in detail.
7	(i) Explain the safety measures that have to be followed to avoid electrical accidents. (ii) List the BIS Rules related to Wiring.
8	Elaborate the different types of electrical wiring with neat sketch.
9	Discuss the need for wiring, tools required and its types in detail.
10	With neat sketch explain staircase wiring and fluorescent lamp wiring.
11	Design the wiring layout for domestic building using DT concept.