SCHOOL OF ENGINEERING AND TECHNOLOGY

D.C. COURT JUNCTION, DIMAPUR

FINAL- TERM EXAMINATIONS, NOV-DEC 2022

Course Code:	G1T04	Semester:	I	Total marks:	60
Course Name:	Basic electrical engineering			Time:	3 Hrs.

PART -A

Choose the correct answer 1x10=10.

1. Among The option which one is Active elements.
a) Resistance b) Capacitor c) Inductor
d) Generator

2. Incoming current $I_1=30\sin(400t-60)$ and outgoing current $I_2=30\sin(400t+60)$ find I_3 which is also incoming.

a) 10 sin 400t b) 30 sin400t c) 30sin400t
d) none

3. When the efficiency of transformer is maximum
a) $P_i=P_{cu}$ b) $P_{cu}=P_{core}$ c) $P_{cu}=P_i$ d) $P_{cu}=P_{eu}$

4. During short circuit which is zero among option
a) Voltage b) current c) resistance c) impedance

5. When switch is close, its behave like
a) Open circuit b) close circuit c) short circuit
d) None

6. Direction of force in DC motor can be found out by using
a) Maxwell equation b) Fleming right hand rule c) Kirchhoff's law d) Fleming right hand rule
left

7. Direction of current in DC generator can be found out by using
a) Lenz's law b) Fleming right hand rule
c) Fleming left hand rule d) Maxwell equation

8. What is the necessity of starter
a) To limit current b) To limit voltage c) To limit power d) none

9. The length of short transmission line is
a) 80 km b) (81-240) km c) (241 -600) km
d) 650km

10. There are how many types of torque
a) 1 b) 2 c) 3 d) 4

[illegible]

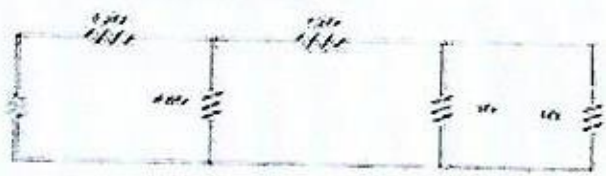
Write any five [illegible]

1. Explain construction and working of [illegible]
2. Explain the types of [illegible]
3. Explain [illegible]
4. Define [illegible]
5. Explain working of transformer and its types?
6. Define [illegible] network and distributed network, dependent and independent source?

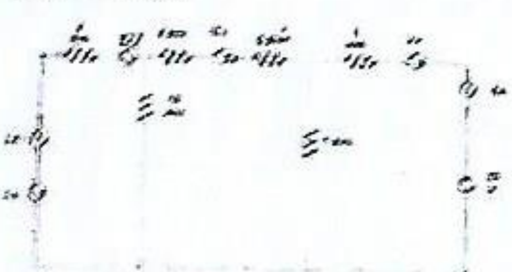
[illegible]

Answer any four questions. [illegible]

1. Explain practical transformer with load condition?
2. Find the current in the circuit using KVL/mesh analysis?



3. By using Nodal analysis, find the voltage at each node and current through each branch?



4. Explain types of distribution system?
5. Explain moving iron instrument?