

SSITPOLYTECHNIC, KALAKAD, MAYURBHANJ

3rd SEMESTER INTERNAL EXAMINATION 2023-2024 (WINTER)

SUB:-CIRCUIT & NETWORK THEORY

BRANCH:-ELECTRICAL & ELECTRICAL(I & C)

FULLMARK-20

TIME-1 HOUR

1. Answer all Question .

(2x5=10)

- (a) What is KCL & KVL ?
- (b) State OHM'S LAW ?
- (c) What is current & it's unit ?
- (d) What is power & it's unit ?
- (e) What is coefficient of coupling ?

2. Answer all question .

(5x2=10)

- (a) An air-cored solenoid having a diameter of 4cm and a length of 60cm is wound with 4000 turns. If a current 5amp flows in the solenoid, calculate
 - (i) the inductance
 - (ii) energy stored in joules
- (b) What is the difference between electric and magnetic circuit ?