23104683

QP CODE: 23104683

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) REGULAR/IMPROVEMENT/REAPPEARANCE EXAMINATIONS, FEBRUARY 2023

First Semester

B.Sc Physics Model II Applied Electronics

Vocational Course - AE1VOT02 - ELECTRONICS APPLICATION

2017 Admission Onwards

203D6DD9

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Define resolution of a digital meter.
2. What is the function of cathode in a CRT?
3. How to improve quality factor?
4. What are filters?
5. What is the essential element in all sweep circuits and explain how it generates a sweep voltage?
6. What is a thermistor?
7. Draw the voltage displacement characteristics of an LVDT.
8. State any one disadvantages of piezoelectric transducer.
9. In what 'direction' is data stored on a CD?
10. List out different types of PCBs.
11. What are the functions of flux used in soldering?
12. How desoldering is needed in a PCB?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. When will you use the external sweep in CRO . Explain.
14. What is a tuned transformer? Give its applications.
15. Draw and explain the circuit of any three simple coupled circuits.
16. Discuss the working of a Miller sweep circuit.
17. Briefly explain the structure and working of a photo transistor. What are the advantages of a photo transistor over a photo diode?
18. With neat structural diagram explain the working principal of a moving coil microphone.
19. How to prepare a layout of simple circuits?
20. What are the advantages of Printed Circuit Board?
21. How to make the perfect solder joint?

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. With a complete circuit diagram, describe working of a PMMC multimeter, used to measure multirange a.c. /d.c. voltages and currents.
23. With necessary wave forms and circuit diagrams explain the working of
(i) exponential sweep circuit (ii) Sweep circuit using transistor switch.
24. With neat block diagrams, explain the method of fabrication of PCB. Also explain the steps to make a multilayer PCB.
25. What are the tools used for soldering ? Write down the steps for soldering and desoldering.

(2×10=20)