QP CODE: 18103689

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Reg No : .....

Name : .....

B.Sc.DEGREE(CBCS)EXAMINATION, DECEMBER 2018

First Semester

B.Sc Physics Model II Applied Electronics

Vocational Course - AE1VOT02 - ELECTRONICS APPLICATION

2018 Admission only

625ED2CE

Maximum Marks: 60 **Time: 3 Hours**

Part A

Answer any **ten** questions.

Each question carries **1** mark.

1. Give details of the deflecting plates in CRO.
2. What is blanking interval?
3. What do you mean by resonance?
4. Classify filters.
5. Explain return time or fly back time.
6. What is a transducer?
7. Name two photoelectric transducers.
8. State any one advantages of piezoelectric transducer.
9. Which type of materials is used to make PCB?
10. What is a schematic layout?
11. What are the advantages of PCB?
12. Why is forced cooling of the hot joint not desirable?

(10×1=10)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain with a diagram how PMMC works as Volt meter?
14. A 3 ½ digit voltmeter is used for measuring voltage: (i) Find the resolution of the instrument (ii) How would a voltage of 14.42 is displayed on 10 V range (iii) How would a voltage of 14.42 is displayed on 100 V range.

15. Draw and explain the circuit of any three simple coupled circuits.

16. Draw the circuit diagrams of a transistor constant current sweep generator. With the help of input-output waveforms, explain its working.

17. Discuss the working of a Miller sweep circuit.

18. Describe the construction, theory and working of thermocouples.

19. How information is stored on the CD? What are the applications of CD?

20. Explain the method of fabrication of single sided PCB.

21. Explain Ultrasonic soldering and what are its Advantages?

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

22. Describe the operation of a CRO with a suitable diagram and give applications.

23. Explain the variation of output voltage and displacement in an LVDT with the help of diagrams. Write down the advantages and disadvantages of LVDT.

24. Distinguish between soldering and desoldering. What are the different tools used for desoldering?.

25. What are the tools used for desoldering? Write down the steps for soldering and desoldering.

(2×10=20)