



2107032

**DIPLOMA OF VOCATION**  
**Industrial Electronics**  
**Subject: Electronic Device Circuits**  
**Subject Code: EDDC-307**  
**Semester: Fifth**  
**July 2021**  
**Theory (External): 35 Marks**  
**Time: 03 Hours**

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**Instructions to the Students**

1. This Question paper consists of two Sections. All sections are compulsory.
2. Section A comprises 10 questions of objective type in nature. All questions are compulsory. Each question carries 1 mark.
3. Section B comprises 8 essay type questions out of which students need to do any 5. Each question carries 5 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled

<b>Roll Number</b>									

**SECTION –A (SHORT/OBJECTIVE TYPE QUESTIONS)**  
(10x1=10 Marks)

- A. Write Einstein relation.
- B. A germanium is used for \_\_\_\_\_ semiconductors.
- C. Define steady state condition.
- D. What should be the internal resistance of photo diode
- E. Write uses of MOSFETs.
- F. What is the usual operating region of Transistors in Digital Circuits?
- G. Write any three n-type semiconductors.
- H. What is the full form of BJT?
- I. What do you mean by the internal capacitance of MOSFET?
- J. Why do we use feedback?

**SECTION –B (ESSAY TYPE QUESTIONS)**  
(5x5=25 Marks)

1. Explain the phenomena of carrier concentration.
2. Explain Quasi-Fermi level.
3. What is Equilibrium Conditions?
4. Explain the formation of forward and reverse biased junctions.
5. Explain the working of MOSFET as switch.
6. Draw frequency response of CE amplifier.
7. Write general feedback structure.
8. Explain the series-series feedback amplifier.

==END OF PAPER==