

**B. Voc Automotive Manufacturing/ Mechatronics****Subject: Basic of Electronics****Subject Code: BEC-101****Semester- 1<sup>st</sup> Semester, Re-appear (2017-20)****Theory (External): 35****Time: 03 hours****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 6 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

Roll Number					

**SECTION -A (OBJECTIVE TYPE QUESTIONS)**

**(10x1=10 Marks)**

1. Define electronic emission.
2. What do you mean by electric conductivity?
3. Define rectifier.
4. Difference between P type and N type semiconductor.
5. What do you mean by barrier voltage?
6. What do you mean by BJT?
7. Draw VI characteristics of diode.
8. What do you mean by voltage gain?
9. Difference between ripple factor and ripple frequency.
10. Draw circuit diagram of CE amplifier.

**SECTION -B (ESSAY TYPE QUESTIONS)**

**(5x5=25 Marks)**

1. Explain the difference between conductor, semiconductor and insulator.
2. Find equivalent resistance and capacitance in parallel circuit.
3. Discuss the concept of amplification and small signal amplification using BJT power gain.
4. Explain transducer and its classifications with examples.
5. Describe working principle and characteristics of thermocouple and its applications.
6. Draw and explain block diagram of CRO in details.

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