

2112E096

DIPLOMA OF VOCATION
Industrial Electronics
Subject: Engineering Science
Subject Code: EDSC-201
Semester: Third
December 2021
Theory (External): 35 Marks
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 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 labeled

Roll Number

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==END OF PAPER==

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

- A. Which of the following instruments indicate the instantaneous value of the electrical quantity being measured at the time at which it is being measured?
- Absolute instruments
 - Indicating instruments
 - Recording instruments
 - Integrating instruments
- B. Find the true statement
- Ammeter is an used to measure potential difference across any element in a circuit.
 - Voltmeter is an instrument used to measure current in a circuit
 - Galvanometer constant is dimensionless
 - Current sensitivity is expressed as exact reverse of the galvanometer constant
- C. A dynamometer type wattmeter has
- Square law scale
 - Non-linear scale
 - Logarithmic scale
 - Uniform scale
- D. The household energy meter is
- An indicating instrument
 - A recording instrument
 - An integrating instrument
 - None of the above
- E. The primary unit of measurement for engineering drawings and design in the mechanical industries is the
- Millimeter
 - Centimeter
 - Meter
 - Kilometer
- F. Conventionally, the negative terminals are shown as a
- long thin line

- (ii) short fat line
(iii) long wavy line
(iv) short wavy line
- G. In our home, the electrical appliances are connected
- in parallel with the source only if it is a higher power appliance
 - in series with the source
 - some series and parallel with the source
 - in parallel with the source
- H. The maximum current rating capacity of HRC fuse is
- 250 Amp
 - 300 Amp
 - 350 Amp
 - 400 Amp
- I. Ground resistance should be designed such that
- Grounding resistance should be always zero
 - Grounding resistance should be as low as possible
 - Grounding resistance should be as high as possible
 - All of the above
- J. Gloves used for electrical protection must be electrically tested every...
- 3 months
 - 5 months
 - 6 months
 - None of these

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

1. Explain the construction and working of dynamometer type