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BIEL-026

DIPLOMA – VIEP – ELECTRONICS AND COMMUNICATION ENGINEERING (DECVI) / ADVANCED LEVEL CERTIFICATE COURSE IN ELECTRONICS AND COMMUNICATION ENGINEERING (ACECVI)

00843

Term-End Examination

December, 2016

BIEL-026 : PCB DESIGN AND TESTING

Time : 2 hours *Maximum Marks : 70*

Note : *Attempt any **five** questions. All questions carry equal marks.*

1. Explain the procedure for determining the value of resistance, capacitance and inductance in a laboratory, without employing the use of analog/digital multimeter. *14*

2. (a) Draw and explain the characteristics of an n-p-n transistor in common-emitter configuration. *7*

(b) List the various types of power supply available in a laboratory. What are the different trouble-shooting methods to identify faults in a power supply ? *7*

3. (a) List the advantages of a digital multimeter over an analog multimeter. 7

(b) Explain the operation of a digital multimeter. 7

4. (a) Differentiate between manual and computer aided artwork. 7

(b) Draw and explain the characteristics of SCR. 7

5. Explain the various steps involved during the fabrication of a PCB. 14

6. (a) List out various limitations experienced while making measurement with DMM. 7

(b) Briefly explain the procedure for determining the frequency of an unknown signal using an oscilloscope. 7

7. Write short notes on the following : 2×7=14

(a) Multilayer PCB

(b) Circuit Simulation Tool