BIEL-037

DIPLOMA – VIEP – ELECTRONICS AND COMMUNICATION ENGINEERING (DECVI)

Term-End Examination

00096 **December, 2014**

BIEL-037 : MAINTENANCE OF ELECTRONIC EQUIPMENT

Time : 2 hours *Maximum Marks : 70*

Note : *Attempt any **five** questions. Question no. **1** is **compulsory**.*

1. (a) Define Mean time to repair (MTTR) and Mean time to fail (MTTF).

    (b) Discuss the importance of voltage analysis in Data manuals.

    (c) How can electronic equipments be protected from the electromagnetic interference ?

    (d) What is electrical acceleration in electronic equipments ? $4 \times 3\frac{1}{2} = 14$

2. Explain the Generalized reliability curve for electronic equipments with neat diagram. What is Damp heat acceleration ? *14*

3. Discuss Corrective and Qualitative Maintenance for electronic equipments and also highlight the differences between these maintenance methods. *14*

4. (a) How is the fault establishment and fault correction done in electronic equipments ? 7

   (b) Differentiate between Di-assembly and Re-assembly. 7

5. (a) What is the role of diagnostic software and fault finding flow check in trouble-shooting ? 7

   (b) How is pre-trouble-shooting technique performed ? 7

6. (a) Discuss the divergent path, convergent path and feedback path in trouble-shooting procedure. 7

   (b) What is the effect of humidity, shocks and vibrations in the maintenance of electronic equipment ? 7

7. Explain the role of Data analysis and information tags in the maintenance management. 14

8. Write short notes on any *four* of the following : $4 \times 3\frac{1}{2} = 14$

   (a) Quality standards

   (b) Functional analysis

   (c) Signal tracing

   (d) Visual check

   (e) Test and Measuring tools

   (f) Out of circuit test

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