

DECVI

Term-End Examination

December, 2013

**BIEL-037 : MAINTENANCE OF ELECTRONIC
EQUIPMENT**

Time : 3 hours

Maximum Marks : 70

*Note : (i) Attempt total five questions.**(ii) Question No.1. is compulsory.*

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1. (a) Explain the term Redundancy. 7x2=14
 (b) Define the quality standards.
 (c) What is the requirement of spare parts Inventory and its planning ?
 (d) Discuss personal safety issues.
 (e) List fault finding aids.
 (f) Explain basic steps for visual inspection.
 (g) Explain role of service manual in trouble shooting.
 2. What is acceleration test ? Discuss its different types that are used to determine the reliability of an electronic equipment. 14
 3. (a) What is exponential law of reliability ? Explain. 7
 (b) Is operation of electronic equipment affected by environmental conditions ? Justify your answer. 7
 4. (a) Define maintenance policy and different kind of maintenances. 7
 (b) What is the maintenance work order ? And explain, how downtime can be reduced ? 7

5. Write note on Block diagram, Schematic diagram, Logic diagram and Harness diagram. 14
6. (a) What is visual inspection ? How its helpfull ? 7
(b) Explain the procedure and steps to measure voltage levels and presence of signals during troubleshoot. 7
7. (a) What are the main contents of a documents for an electronic system ? 7
(b) Define Signal Injection and signal tracing and explain. 7
8. Write a short note on **any four** : $3\frac{1}{2} \times 4 = 14$
- (a) Qualitative maintenance.
 - (b) Work bench and power for work bench.
 - (c) Planning of new equipments and utilities.
 - (d) Di-assembly and Re-assembly.
 - (e) Functional analysis.
 - (f) Diagnostic softwares as troubleshooting aids.
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