

DECVI

Term-End Examination

June, 2013

01780

BIEL-037 : MAINTENANCE OF ELECTRONIC EQUIPMENT

Time : 3 hours

Maximum Marks : 70

Note : (i) Attempt total five questions.

(ii) Question No.1. is compulsory.

1. (a) What do you mean by reliability of an electronic equipment ? 7x2=14
 - (b) Define the term failure rate and MTBF.
 - (c) Why the service manual and reference library is required in maintenance procedure ?
 - (d) What is EMI ?
 - (e) Explain fundamental steps to troubleshoot the system with help of block diagram.
 - (f) Comment on functional analysis.
 - (g) List various diagnostic softwares.
2. Draw and explain generalized and traditional bath tub reliability curve and their different parts. 14
3. (a) What is availability of an electronic equipment ? Explain need for maintenance. 7
 - (b) What is M.T.T.R. ? Discuss factors determining it. 7

4. Explain contract maintenance, maintenance work order and reduction in downtime. 14
5. Explain how following are helpful during maintenance and repair ? 14
- (a) Blow up diagram.
 - (b) Schematic diagram.
 - (c) Block diagram.
 - (d) Component layout.
6. (a) Explain different circuit test types. 7
- (b) Discuss signal tracing and functional analysis for troubleshooting procedure. 7
7. Write short notes on Manuals, Catalogs and Handbooks. 14
8. Write short notes on **any four** : $3\frac{1}{2} \times 4 = 14$
- (a) Preventive maintenance.
 - (b) Training maintenance personal.
 - (c) Log book and performa for recording specifications.
 - (d) Functional area approach.
 - (e) Signal tracing.
 - (f) Fault finding flow check.
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