



C09-EC-604

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**BOARD DIPLOMA EXAMINATION, (C-09)
OCT/NOV—2013
DECE—SIXTH SEMESTER EXAMINATION
ADVANCED COMMUNICATION SYSTEMS**

Time : 3 hours]

[*Total Marks* : 80

PART—A

Instructions : (1) Answer **all** questions.
(2) Each question carries **three** marks.
(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. Give the classification of radar.
2. Write about rectangular and circular waveguides.
3. Write the applications of reflex klystron.
4. Draw the block diagram of fixed microwave link.
5. State the functions of telemetry, tracking and control subsystem.
6. List the Indian communication satellites.

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7. Define numerical aperture and dispersion.
8. Write features of submarine cables.
9. State the use of Global star system.
10. Write the basic concepts of CDMA systems used in mobile communication.

PART—B

Instructions : (1) Answer *any five* questions.
(2) Each question carries **ten** marks.
(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Draw the block diagram of CW radar and explain its working.
12. Explain A scope, B scope and PPI displays.
13. Draw the block diagram of earth station and explain the function of each block.
14. Explain the methods for increasing channel capacity of a satellite system.
15. Explain the principle of DWDM with block diagram.

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- 16.** Explain the operation of PIN diode used as detector in optical fibre communication.
- 17.** Explain about AMPS.
- 18.** Explain the functional architecture of intelligent network.

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