

22334

24225

3 Hours / 70 Marks

Seat No.

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- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.

Marks

1. Attempt any FIVE of the following :

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- (a) List types of internal and external noise.
- (b) Draw FM signal in time domain.
- (c) State the formula for total power required for AM wave.
- (d) Define AGC in radio receiver.
- (e) List different methods of generation of FM.
- (f) State the concept of fading in sky wave propagation.
- (g) Draw sketch of folded dipole antenna and its radiation pattern.

2. Attempt any THREE of the following :

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- (a) State the frequency range of the following :
 - (1) High frequency
 - (2) VHF
 - (3) UHF
 - (4) Infrared
- (b) Draw block diagram of AM receiver and state the function of each block.
- (c) Draw label sketch of AM wave in time domain and frequency domain.
- (d) Draw and explain circuit diagram of practical diode detector of AM wave.



