

Model Question Paper
Communication systems - Part II

12th Standard

Physics

Reg.No. :

--	--	--	--	--	--

I. Answer all questions.

II. Use blue pen only.

Time : 01:00:00 Hrs

Total Marks : 75

5 x 1 = 5

Section-A

- 1) The RF channel in a radio transmitter produces
(a) audio signals (b) high frequency carrier waves (c) both audio signal and high frequency carrier waves (d) low frequency carrier waves
- 2) The purpose of dividing each frame into two fields so as to transmit 50 views of the picture per second is
(a) to avoid flicker in the picture (b) the fact that handling of higher frequencies is easier (c) that 50Hz is the power line frequency in india
(d) to avoid unwanted noises in the signal
- 3) printed documents to be transmitted by fax are converted into electrical signals by the process of
(a) reflection (b) scanning (c) modulation (d) light variation
- 4) In frequency modulation when the frequency deviation is Δf , then the carrier swing is given by
(a) $2 + \Delta f$ (b) $2 \times \Delta f$ (c) $\Delta f/2$ (d) $\Delta f - 2$
- 5) The first radio communication device was made up of
(a) a) transistors (b) b) IC chips (c) c) electronic valves (d) d) all

Section-B

5 x 3 = 15

- 6) Define modulation factor
- 7) Define bandwidth.
- 8) Define directivity.
- 9) What is meant by scanning?
- 10) What is interlaced scanning?

Section-C

7 x 5 = 35

- 11) Explain the wave propagation in ionosphere.
- 12) Explain amplitude modulation.
- 13) What are the limitation of amplitude modulation?

Generic 10

2X10=20

- 14) a) Explain the function of FM transmitter with neat block diagram.
b) Mention the principle of RADAR and write its applications.
- 15) a) Explain the function of FM transmitter with neat block diagram.
b) Explain frequency modulation.
