MODEL QUESTION PAPER

EN 14 107: BASICS OF ELECTRICAL, ELECTRONICS & COMMUNIATION ENGINEERING

Time: 3 Hrs. Max Marks: 100

SECTION 2 : BASICS OF ELECTRONICS & COMMUNICATION ENGINEERING

**PART A**

(Answer any four 4×5=20 Marks)

1) What is an amplifier? Explain input impedance and output impedance of an amplifier.

2) Explain the frequency response of an amplifier.

3)Draw a neat schematic of CMOS inverter and explain.

4)Briefly explain the working principle of RADAR with RADAR equation.

5)List out five advantages of optical communication.

**PART B**

(Answer all Questions 2×15=30 Marks)

6 a) Implement the function of the following truth table using

*A B C X*

0 0 0 0

0 0 1 1

0 1 0 0

0 1 1 0

1 0 0 0

1 0 1 1

1 1 0 1

1 1 1 0

i) AND- OR

ii) NAND only

iii) NOR only

**OR**

b) Briefly explain the working of CRO with a neat block diagram

7 a) With a neat block diagram explain the working of super heterodyne AM receiver.

**OR**

b) i) Briefly explain the principle of cellular communication. ii) Draw the architecture and explain the working of GSM.