(DEC 421)

B. Tech. DEGREE EXAMINATION, MAY - 2015

(Examination at the end of Final Year)

ELECTRONICS & COMMUNICATION ENGG.

Paper - I : Radar and Navigational Aids

Time : 3 Hours **Maximum Marks : 75**

1) Write short note on :

a) Doppler Effect.

b) Range ambiguities.

c) MII improvement factor.

d) Clutter Atenuation.

e) Duplexer.

f) Radome.

g) PRF (pulse repetition frequency)

h) Limitations of CW-Radar.

UNIT - I

2) a) i) Draw and explain the block diagram of Pulse Radar.

   ii) What are the applications and limitations of Radar.

OR

b) i) Derive the simple form of Radar equation.

   ii) Explain RCS of simple and multiple targets.

UNIT – II

3) a) Draw and explain frequency response of single delay line canceller.

   b) Explain staggered PRF.

<div align="center">OR</div>

   c) Explain mono pulse tracking Radar by using amplitude comparision method.

   d) Explain sequential lobing & conical scaning.

UNIT – III

4) a) What are the different types of duplexers.

   b) Discuss stealth applications.

<div align="center">OR</div>

   c) Draw and explain super heterodyne receiver.

   d) Different types of Electronic counter measures.

UNIT – IV

5) a) Give features of DECCA.

   b) Explain ILS.

<div align="center">OR</div>

   c) Explain Automatic direction finder.

   d) Explain features of OMEGA.

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