xv) Explain inter electrode capacitance effect?

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.3 Explain the block diagram of satellite communication.

Q.4 Explain the working of moving target Indicator radar with the help of neat diagram.

Q.5 Define diversity. Describe the most commonly used diversity schemes.

Q.6 Explain construction and principle of two cavity klystron.

Q.7 Draw the structure of a parabolic reflectors and explain its working. Also list its typical applications.

5th Sem. / Eltr.

Subject : Communication Engineering -II

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

Q.1 a) Write the relationship between frequency and wavelength.

b) Write the frequency of C-band.

c) What is work function.

d) Write any two advantages of microwaves.

e) Define propagation constant.

f) Define frequency pulling.

g) Microwaves have _____ band width than common bands.

h) A klystron can be used either as a _____ or as an _____.

i)   Define phase velocity.

j)   Twists.

k)   Antenna

l)   Repeater

m)   Modulator

n)   Write application of CW.

o)   Domestic satellite are generally placed in _____.

p)   What is intel sat.

q)   Shortwave.

r)   Why waveguides are not used at high frequencies.

SECTION-B

Note: Short answer type questions. Attempt any ten parts   10x4=40

Q.2   i)   List two advantages and application of microwaves.

ii)   Explain construction and working procedure of Gunn diode.

iii)   Define modes of wave guide?

iv)   What is the use of directional coupler?

v)   Explain horn antenna. List Advantages of horn antenna.

vi)   Describe troposphere and its various Properties.

vii)   Define FMCW radar, its block diagram with working principles.

viii)   Explain what is mean by saying that satellite is stationary?

ix)   Draw field configuration of TE20 mode.

x)   Explain vsat and Lists its applications.

xi)   Write a short note on PPI.

xii)   What is basic concept of thermionics emission.

xiii)   Which is better cable or satellite? Explain.

xiv)   Why do we use Duplexer?