

QUESTION BANK

(B.E. SEM VI EC EXAM)

GUJARAT UNIVERSITY

Subject Name: Radar and Navigational Aids (elective-I)

Each Question is of 10Marks

Que:1	Discuss the radar navigational parameters in details.
Que:2	Write short note on navigational aids.
Que:3	Derive the equation for receiver noise.
Que:4	Explain targets and clutters in brief.
Que:5	Define the following term with equation: <ol style="list-style-type: none"> 1. Transmitter power 2. Signal to noise ratio 3. Pulse repetition frequency 4. Pulse duration 5. Receiver noise
Que:6	Write short notes on: <ol style="list-style-type: none"> 1. Mixers 2. Duplexers
Que:7	Explain in brief propagation effects.
Que:8	Explain the operation of MTI radar with suitable diagram.
Que:9	Explain in detail the range gated doppler filters.
Que:10	Explain briefly the MTI receiver with delay line canceller.
Que:11	Explain the working principle of MTI Radar. state its applications and limitations.
Que:12	Discuss briefly the MTI radar from a moving platform and state its advantages.
Que:13	Write short notes on: <ol style="list-style-type: none"> 1. Pulse repetition frequencies in MTI 2. MTI receiver with delay line canceller
Que:14	Write the operation of pulse doppler radar with necessary diagram.
Que:15	Discuss how the detection of multiple target moving with different velocities are possible with the help of pulse Doppler radar.
Que:16	Brief the meteorological radar and its applications.
Que:17	Brief the military radar and its applications.
Que:18	Define the term Radar and state the advantages and disadvantages of radar. Also list out the applications of Radar.
Que:19	Write short notes on: <ol style="list-style-type: none"> 1. Airborne radar 2. Navy Radar
Que:20	Write short notes on Airport radar.
Que:21	Explain remote sensing radars.
Que:22	Discuss the Navy radar in brief and the principle of operation.
Que:23	Define the term Receiver Noise and derive its equation.

Que:24	State the full form of Radar. List out the applications of Radar. Discuss any two applications in details.
Que:25	Explain synthetic aperture radara and its working principle.
Que:26	Write short notes on: 1. Loop antenna 2. Antenna used in Radar
Que:27	Discuss distance measuring equipments used in Radar.
Que:28	Explain how the sensitivity of direction finder is increased?
Que:29	Discuss the error occurred in direction finding.
Que:30	Define the term RADAR. Discuss the area where radar is used.
Que:31	Write short notes on: 1. Sense finder 2. Loop antenna
Que:32	Discuss the methods of increasing the Loop voltage.
Que:33	Explain in short the Aircraft Homing system.
Que:34	Write short notes on: 1. Direction finder 2. Errors in direction finding
Que:35	Explain the FMCW altimeter
Que:36	Define VOR and Doppler VOR. Discuss the difference between them.
Que:37	Write notes on LORAN and state its applications.
Que:38	Write short notes on: (1) Direction finder (2) Automatic direction finder
Que:39	Write notes on DECCA and state its applications.
Que:40	Explain in brief Microwave landing System.