School of Aeronautics (Neemrana)

Instructions For Students / Faculty

Back / Re-back Internal Examination (Total 60 Marks, 2 Hrs, Syllabus From Beginning of The Session)

Total number of questions to be given are 10, each carrying 10 marks and it is compulsory to attend 2 questions from Part A and 4 questions from Part B. There is a choice of two questions out of four in part A and 4 questions out of 6 in Part B. Part A will be theoretical or derivation type **(Not More Than 70 Words For Question).** Part B will be fully numerically oriented questions **(Not More Than 70 Words For Question)**, except for the list of subjects given below. No objective type or fill in the blanks shall be given, but subpart of question can be given for both Part A & B.

* LIST OF ELABORATIVE THEORY QUESTION SUBJECTS: Aircraft Materials, Aircraft System, Aircraft Rules & Regulation-I, Mechanics of Composite Materials, Aircraft Design, Aircraft Rules & Regulation-II, Avionics-I, Helicopter Theory, Maintenance of Airframe and System Design, Avionics-II, Airlines and Airport Management, Maintenance of Power Plant & Systems

FACULTY MEMBERS, PLEASE ENSURE EXCEPT ABOVE LISTED SUBJECTS, NO THEORITICAL ELABORATIVE QUESTION SHOULD BE GIVEN IN PART 'B' OF QUESTION PAPER

STUDENT IS ALLOWED TO ENTER LATE NOT MORE THAN 15 MIN AFTER STARTING OF EXAM, AND MAY LEAVE THE EXAM HALL ON EXPIRY OF ATLEAST OF 1 Hr FROM THE STARTING TIME OF EXAMINATION

Question Paper & Student Details

Name of Faculty*	Mrs Tarun Thukral	**Date of Submission of QP**	15/03/2021
Subject*	7AN1 – Avionics –I (Old)	**Date of Examination***	16/03/2021
Email Id of Faculty:*	tarunthukral@soaneemrana.org	**Course***	B.Tech (Aeronautical Engineering)
Phone Number of Faculty*	750 096 6580	**Semester***	Semester : 7

Student Name		**Student Reg No.**	

Part A

Question : 1*   Explain the crimping and soldering technique and write the advantages of crimping .

Lesson Plan*	2	**Topic***	Crimping and soldering	**Source***	Aircraft Electricity and E

Question : 2*

Give brief description of Magnetron.

Lesson Plan* 11   **Topic*** Magnetron   **Source*** Microwave devices and

Question : 3*

Write the working principle of
a)-VHF communication system
b)- Audio integration system (AIS)

Lesson Plan* 27   **Topic*** VHF and AIS   **Source*** AIRCRAFT RADIO SYSTEI

Question : 4*

Describe the position and velocity determination of GPS .

Lesson Plan* 38   **Topic*** GPS   **Source*** Mike Tooley/ Kendal

Part B

Question : 1*

Explain MTI (Moving Target Indication).

Lesson Plan* 07   **Topic*** MTI   **Source*** Radar System by Merril

Question : 2*

Explain LORAN system.

Lesson Plan* 19   **Topic*** Electronic navigation system   **Source*** AIRCRAFT RADIO SYSTEI

Question : 3*

Name the emergency equipments and explain electronic emergency equipments.

Lesson Plan* 32   **Topic*** Electronic emergency equipme   **Source*** AIRCRAFT RADIO SYSTEI

Question : 4*

Describe Antenna theory. Also define Antenna gain and Polarization.

Lesson Plan* 13   **Topic*** Antenna   **Source*** Antenna theory by Kenr

Question : 5

Describe Cabin Interphone sytem.

Lesson Plan 26   **Topic** AIS   **Source** AIRCRAFT RADIO SYSTEI

Question : 6

Explain the Advisory warnings and guidance of TCAS.

Lesson Plan 22   **Topic** TCAS   **Source** Mike Tooley

Upload Scanned Document In Case of Numerical or Diagram for any of the above question

Mention question number with relevant fig / numerical / equations. Max 150 KB

Choose files or drag here

I have scrutinized the question paper. There is no spelling mistake or any type of irrelevant question.