School of Aeronautics (Neemrana)
I-04, RIICO Industrial Area, Neemrana, Dist. Alwar, Rajasthan
Approved by Director General of Civil Aviation, Govt. of India, All India Council for Technical Education
Ministry of HRD, Govt of India & Affiliated to Rajasthan Technical University, Kota & BTU, Bikaner Rajasthan

Question Paper For Internal Assessment Examination (Theory) - Credit 2 / 51

Instructions For Students / FacultyMid Term I (Total 40 Marks, 1.5 HRS. Syllabus From Beginning Of Session)

- Part A: Total number of questions to be given are four, each carrying 2 marks and are compulsory to attend. There is no choice. They are short answer type questions (**Not More Than 25 Words For Both Question & Answer**), no objective type or fill in the blanks. Total 8 marks.
- Part B: Total number of questions to be given are five, out of which student has to answer any three. They are long answer type (**Not More Than 50 Words For Question Only**), each carrying 6 marks. Total 18 marks.
- Part C: Total number of questions to be given are three, out of which student has to answer any two. They are numerical answer type / fully elaborative type* (**Not More Than 70 Words For Question Only**), each carrying 7 marks. Total 14 marks.

Mid Term II & III (Total 60 Marks, 2 HRS. Syllabus From Beginning Of Session)

- Part A: Total number of questions to be given are ten, each carrying 2 marks and are compulsory to attend. There is no choice. They are short answer type questions (**Not More Than 25 Words For Both Question & Answer**), no objective type or fill in the blanks. Total 20 marks.
- Part B: Total number of questions to be given are six, out of which student has to answer any four. They are long answer type (**Not More Than 50 Words For Question Only**), each carrying 5 marks. Total 20 marks.
- Part C: Total number of questions to be given are three, out of which student has to answer any two. They are numerical answer type / fully elaborative type (**Not More Than 70 Words For Question Only**)*, each carrying 10 marks. Total 20 marks.

* LIST OF ELABORATIVE THEORY QUESTION SUBJECTS: 1 FY1 - 04 Communication Skills (Cr 2), 1 FY1 - 05 Human Values (Cr 2), 2 FY1 - 04 Communication Skills (Cr 2), 2 FY1 - 05 Human Values (Cr 2), 3 AN1 - 02 Technical Communication (Cr 2), 4 MH1 - 02 Technical Communications (Cr 2), 4 MH1 - 03 Economics and Financial Accounting (Cr 2), 5 AN5 - 12 Aircraft Maintenance Practices (Cr 2), 6 AN3 - 01 Mechanics of Composite Materials (Cr 2), 6 AN5 - 12 Aircraft Rules and Regulation (Cr 2), 6 MH3 - 01 Automobile Engineering (Cr 2).

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

Type of Exam	Internal Improvement Exam	**Date of Submission**	28/11/2020
Name of Faculty	Mr. Deepak Tomar	**Date of Examination**	02/12/2020
Course	B.Tech (Aeronautical Engineering)	**Semester**	SEMESTER : 1
Batch	Combined Batches 18, 19, SF 2	**Subject**	1 FY3 - 08 Basic Electrical Engineering (Cr 2)

COURSE OUTCOMES FOR REFERENCE TO FRAME QUESTION PAPER
(Faculties are required to mention relevant Course Outcome number against the respective question in QP)

Course Outcome	CO 1. Explain the ground power unit, battery and its connections of an aircraft. CO 2. Exemplify the operation of electrical drives used in aircraft. CO 3. Explain the wiring connection and wiring layout of an aircraft. CO 4. Interpret the lighting systems used in aircraft. CO 5. Attribute the different types of earthing and electrical safety.		
Email I'd	deepaktomar@soaneemrana.org	**Phone No.**	965-454-4096
Student Name		**Student Reg No.**	
Part A			
Question : 1	Define current? also, draw an open circuit connection?		
Lesson Plan No. - 2	Topic - Current	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 1
Question : 2	Define voltage? also, draw a Short circuit connection?		
Lesson Plan No. - 3	Topic - Voltage	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 1
Question : 3	Define the resistor.		
Lesson Plan No. - 1	Topic - Resistor	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 1
Question : 4	What is Inductor?		
Lesson Plan No. - 1	Topic - Inductor	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 1
Question : 5	What is the transformer?		
Lesson Plan No. - 10	Topic - Transformer	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 3
Question : 6	Define regulation.		
Lesson Plan No. - 13	Topic - Regulation	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 2
Question : 7	What are single-phase AC machines?		
Lesson Plan No. - 17	Topic - Machines	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 2
Question : 8	Define MCB.		

Lesson Plan No. - 26	Topic - MCB	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 5
Question : 9	What is a Bipolar Junction Transistor (BJT)?		
Lesson Plan No. - 21	Topic - BJT	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 2
Question : 10	What is a rectifier?		
Lesson Plan No. - 23	Topic - Rectifier	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 4
Part B			
Question : 1	Discuss KVL and KCL detail.		
Lesson Plan No. - 3	Topic - KVL and KCL	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 1
Question : 2	Discuss the series, parallel, and its combination connection of four resistors.		
Lesson Plan No. - 3	Topic - Series & parallel connection	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 2
Question : 3	Explain the superposition theorem with an example.		
Lesson Plan No. - 4	Topic - Superposition theorem	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 2
Question : 4	Explain the Peak value of the sine wave.		
Lesson Plan No. - 6	Topic - Peak value	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 3
Question : 5	Write the characteristics of an ideal transformer?		
Lesson Plan No. - 10	Topic - Transformer	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 3
Question : 6	Describe the phasor representation of the sine waves.		
Lesson Plan No. - 6	Topic - Sine waves	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 2

Part C			
Question : 1	Explain the working of one phase induction motor.		
Lesson Plan No. - 17	Topic - Induction motor	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 5
Question : 2	What is a PN junction diode?		
Lesson Plan No. - 21	Topic - PN junction	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 4
Question : 3	Explain two wattmeter method.		
Lesson Plan No. - 28	Topic - Wattmeter	Source - Electrical technology ,B.L Thareja,neelkanth publication	CO No. - 5
Upload Scanned Document In Case of Numerical or Diagram For Any of The Above Questions. *(Mention question number with relevant fig / numerical / equations. Max 150 KB)*			
I have scrutinized the question paper. There is no spelling mistake or any type of irrelevant question.	Yes		
Corporate Office: H 974, Palam Extension, Part 1, Sector 7, Dwarka, New Delhi 110077			