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 / 116

Instructions for Students / Faculty

Mid Term I (Total 40 Marks, 1.5 HRS., Syllabus from Unit-1)

- Part A: Total number of questions to be given are four (2 from CO1 and 2 from CO2), 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 six (3 from CO1 and 3 from CO2), out of which student has to answer four (2 from CO1 and 2 from CO2). They are long answer type (Not More Than 50 Words for Question Only), each carrying 4 marks.
- Part C: Total number of questions to be given are four (2 from CO1 and 2 from CO2), out of which student has to answer two (1 from CO1 and 1 from CO2). They are numerical answer type / fully elaborative type* (Not More Than 70 Words for Question Only), each carrying 8 marks. Total 16 marks.

Mid Term II (Total 60 Marks, 2 HRS., Syllabus from Unit- 2)

- Part A: Total number of questions to be given are ten (5 from CO3 and 5 from CO4), 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 (3 from CO3 and 3 from CO4), out of which student has to answer four (2 from CO3 and 2 from CO4). They are long answer type (Not More Than 50 Words for Question Only), each carrying 4 marks. Total 16 marks.
- Part C: Total number of questions to be given are four (2 from CO3 and 2 from CO4), out of which student has to answer any two (1 from CO3 and 1 from CO4). They are numerical answer type / fully elaborative type (Not More Than 70 Words For Question Only)*, each carrying 12 marks. Total 24 marks.

Mid Term III (Total 60 Marks, 2 HRS., Syllabus from Unit- 3)

- Part A: Total number of questions to be given are ten (5 from CO5 and 5 from CO6), 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 (3 from CO5 and 3 from CO6), out of which student has to answer four (2 from CO5 and 2 from CO6). They are long answer type (Not More Than 50 Words for Question Only), each carrying 4 marks. Total 16 marks.
- Part C: Total number of questions to be given are four (2 from CO5 and 2 from CO6), out of which student has to answer any two (1 from CO5 and 1 from CO6). They are numerical answer type / fully elaborative type (Not More Than 70 Words For Question Only) *, each carrying 12 marks. Total 24 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 - 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).

Instructions For Faculties:

There should be total 6 Course Outcomes (COs) for each subject.

- Mid Term Question Papers are to be submitted as per Course Outcomes (COs) which should be divided equally in Part A, Part B and Part C according to Mid Term Examination and Credit Point.
- In Mid Term-1, the questions are to be given from CO1 and CO2. In Mid Term-2, the questions are to be given from CO3 and CO4. Similarly, in Mid Term-3, the questions are to be given from CO5 and CO6.
- FACULTY MEMBERS, PLEASE ENSURE EXCEPT ABOVE LISTED SUBJECTS, NO THEORITICAL ELABORATIVE QUESTION SHOULD BE GIVEN IN PART 'C' OF QUESTION PAPER

INSTRUCTION FOR STUDENTS

• 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	Mid Term 1	Date of Submission	25/06/2021	
Name of Faculty	Ms. Arima Patel	Date of Examination	28/06/2021	
Course	B.Tech (Mechatronics Engineering)	Semester	SEMESTER: 4	
Batch	Fifth (5)	Subject	4 MH2 - 01 Analog Electronics (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	 Knowledge of physical and electrical conducting properties of semiconductors. Capable of understanding the design and working of BJT / FET amplifiers. 			
Email I'd	arimapatel@soaneemrana.org	Phone No.	638-784-0187	
Student Name		Student Reg No.		

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Openation particular distance dista	Lesson Plan No. - 1	Topic - PN Junction Diode	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit	CO No		
Lange 2ope- PN Junction DiodeBurne 3: BLT mergis and RS Secha and Jacob Milline Orthon 2Othon -13001551300Topic 1Succe 1Othon -1300155	Question : 2	Explain effect of temperature on V-I Characteristics?				
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Question : ? Write down the applications /> cuestion is cuestion in the applications /> cuestion is cuestion in the applications // cuestion is cuestion in the application	Lesson Plan No 4	Topic - Other Diodes	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit	CO No		
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Part B	Lesson Plan No	Topic -	Source -	CO No		
	Part B					

FOR MIDTERM 1 - Part B: Total number of questions to be given are six (3 from CO1 and 3 from CO2), out of which student has to answer four (2 from CO1 and 2 from CO2). FOR MIDTERM 2 - Part B: Total number of questions to be given are six (3 from CO3 and 3 from CO4), out of which student has to answer four (2 from CO3 and 2 from CO4). FOR MIDTERM 3 - Part B: Total number of questions to be given are six (3 from CO5 and 3 from CO6), out of which student has to answer four (2 from CO5 and 2 from CO4). FOR MIDTERM 3 - Part B: Total number of questions to be given are six (3 from CO5 and 3 from CO6), out of which student has to answer four (2 from CO5 and 2 from CO5).

3. CHOOSE COURSE OUTCOME (CO) NUMBER ACCORDING TO THE TYPE OF MIDTERM, AS PER INSTRUCTIONS ABOVE.						
Question : 1	what is photodiode?					
Lesson Plan No 5	Topic - Other Diodes	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit	CO No			
Question : 2	Explain the Transition time?					
Lesson Plan No 3	Topic - PN Junction Diode	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit	CO No			
Question : 3	Explain the varactor diode.					
Lesson Plan No 5	Topic - Other Diode	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit	CO No			
4. CHOOS PER INST	E COURSE OUTCOME (CO) RUCTIONS ABOVE.	NUMBER ACCORDING TO THE TYPE OF MIDTERM, AS	2			
Question : 4	Define the condition of unbiased p-n junction.					
Lesson Plan No 2	Topic - PN Junvtion Diode	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit	CO No			
Question : 5	Explain the working principle of Zener diode?					
Lesson Plan No 4	Topic - Other Diodes	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit	CO No			
Question : 6	What is light emitting diode?					
Lesson Plan No 5	Topic - Other Diodes	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit	CO No			
Part C						
FOR MIDTERM 1 - Part C: Total number of questions to be given are four (2 from CO1 and 2 from CO2), out of which student has to answer two (1 from CO1 and 1 from CO2). FOR MIDTERM 2 - Part C: Total number of questions to be given are four (2 from CO3 and 2 from CO4), out of which student has to answer any two (1 from CO3 and 1 from CO4). FOR MIDTERM 3 - Part C: Total number of questions to be given are four (2 from CO5 and 2 from CO6), out of which student has to answer any two (1 from CO5 and 1 from CO4). FOR MIDTERM 3 - Part C: Total number of questions to be given are four (2 from CO5 and 2 from CO6), out of which student has to answer any two (1 from CO5 and 1 from CO6).						
5. CHOOSE COURSE OUTCOME (CO) NUMBER ACCORDING TO THE TYPE OF MIDTERM, AS PER INSTRUCTIONS ABOVE.						
Question : 1	What is solar cell ? and explain its V-I characteristics ?					
Lesson Plan No. - 5	Topic - Other Diodes	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit4	CO No			
Question : 2	Distinguish between light emitting diode and photo diode?					
Lesson Plan No. - 5	Topic - Other Diodes	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit4	CO No			
6. CHOOS PER INST	E COURSE OUTCOME (CO) RUCTIONS ABOVE.	NUMBER ACCORDING TO THE TYPE OF MIDTERM, AS	2			

Question : 3	Explain the junction Diode switching times & characteristics?			
Lesson Plan No. - 3	Topic - PN Junction Diode	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit4	CO No	
Question : 4	Explain the biasing condition for p-n junction diode?			
Lesson Plan No 2	Topic - PN Junction Diode	Source - B.L.Theraja and R.S.Sedha and Jacob Millman Christos C Halkias Satyabrata Jit4	CO No	
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.		AZ		
Corporate Office: H 974, Palam Extension, Part 1, Sector 7, Dwarka, New Delhi 110077				

The message has been sent from 115.242.250.134 (India) at 2021-06-25 15:48:20 on Firefox 89.0 Entry ID: 116