# School of Aeronautics (Neemrana)

Question Paper For Back / Re-back Internal Assessment Examination (Theory) - Old Scheme i.e 2012 Syllabus

#### 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

Name of Faculty*		Kuldeep		Date of Submission of QP		13/03/2021		
Subject*	5MH4 - 04 - Electrical Machines (New)			Date of Examination*		22/03/2021		
Email Id of Faculty:*		kulde	ep@soaneemrana.org		Course* B.Tech (Mec		hatronics Engineering)	•
Phone Number of Faculty*			809 496 3883		Semester* Semester : 5			•
Student Name					Student Reg	No.		

### **Question Paper & Student Details**

Part A

Question : 1*	Define and explain the magneto motive force and magnetic field strength.							
Lesson Plan*	2	Topic*	Magneto motive force.	Source*	Electrical machinery by			

Question : 2*	Define and explain	n the permanent	magnet and their applications.				
Lesson Plan*	7	Topic*	Permanent magnet	Source*	Electrical machinery by		
Question : 3*	Describe and expl	ain the construc	tions of DC generator in detail.				
Lesson Plan*	8	Topic*	DC generator	Source*	Electrical machinery by		
Question : 4*	Describe and expl	ain the various c	haracteristics DC shunt and series	s generator.			
Lesson Plan*	13	Topic*	DC shunt and series generato	Source*	Electrical machinery by		
Part B							
Question : 1*	Define and descril	be the introducti	on of DC motor with their principl	e			
Lesson Plan*	19	Topic*	DC motor	Source*	Electrical machinery by		
Question : 2*	Explain and define	e the DC motor s	tarting with their 3 point starter				

Lesson Plan*	21	Topic*	DC motor	Source*	Electrical machinery by	
Question : 3*	Describe and expl	ain the DC moto	r electric braking system with thei	r application.		
Lesson Plan*	21	Topic*	DC motor	Source*	Electrical machinery by	
Question : 4*	Describe and expl	ain the electrom	echanical energy conversion with	their basic principle		
Lesson Plan*	25	Topic*	Electromechanical energy	Source*	Electrical machinery by	
Question : 5	Describe and expl	ain the special e	electric machine for example stepp	per motor with their prir	nciple and types.	
Lesson Plan	33	Торіс	Special electric machine	Source	Electrical machinery by	
Question : 6	Describe and expl	ain the brushles	s DC motor construction and princ	ciple of working.		
Lesson Plan	40	Торіс	Brushless DC motor	Source	Electrical machinery by	
Upload Scanned Document In Case of Numerical or Diagram for any of the above question Mention question number with relevant fig / numerical / equations.		Choose files or drag here				

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