Rai University
EVOLVING THINKING MINDS
A LEADING RESEARCH DRIVEN UNIVERSITY

School of Engineering and Applied Science

B.Tech. ELECTRICAL
Semester VIII
Major Assignment

Important Instructions to Student:

1. Last date for Assignment Submission – **30-May-2020**
2. This assignment carries the major **weight age of 50 Marks**. Kindly prepare it very carefully and in a very detailed manner. For any help in this regard, kindly contact your faculties.
3. Front Page of Assignment should clearly include details like:
    - **a.** Your Name
    - **b.** UID Number
    - **c.** Subject
    - **d.** Class
    - **e.** Semester

    In the event of no such information, we may not be able to assign marks for your assignment, for which responsibility lies with students.
4. You can write and submit an assignment through any of the following options:
    a. Handwritten Assignment – Prepare softcopy of your assignment through suitable apps and send the assignment as one PDF to your respective faculty as mentioned above.
    b. Typed Assignment – Prepare Assignment with following font setting and submit the assignment to your respective faculty as mentioned above.
        i. Font Type – Times New Roman or Arial
        ii. Headings – Font Size 14
        iii. Text (Except Heading) – 12
        iv. Normal Margin and Line Spacing maximum of 1.15
5. After this lockdown ends, you all have to submit the physical assignment copies to your respective Faculties. So, keep the assignment carefully for submission.
6. While submitting assignment through email, kindly use the subject line as Name of the Programe_Name of Course/Branch_Semester_Name of the Subject. For Example B.Tech._Electrical_IV_Degital Electronics and Microprocessor.

Electrical Machine Design II - VIII Prof. Jaydeep Sejpal	**Mode of Submission: jaydeep.sejpal@gmail.com (Submit it within time limit, after that no submission will be accepted)**
1.	State the factors on which stator slots depend upon? (Answer- tooth pulsation, ventilation, leakage reactance, cost & magetizng current)
2.	State the operating principle of synchronous machine
3	Explain the speed control of three phase induction motor , explain any 1
4	Explain the construction of rotor with figure
5.	Give the comparison between squirrel cage and wound rotor.
Commissioning, Testing and Maintenance of Electrical Equipment- VIII Prof. Jaydeep Sejpal	**Mode of Submission: jaydeep.sejpal@gmail.com (Submit it within time limit, after that no submission will be accepted)**
1.	Give all the names for routine test for transformer and explain any two.
2.	State all the factors necessary for the selection of conductor size.-
3.	Explain all the necessary steps required for protection of transformer..
4.	Explain the maintenance of Transformer.
5.	Explain how electricity works with diagram.
Energy Conservation & Audit - VIII Prof. Jaydeep Sejpal	**Mode of Submission: jaydeep.sejpal@gmail.com (Link will be open from 21st May, 2020 up to 30th May, 2020. Submit it within time limit, after that no submission will be accepted)**
1.	What do you understand by the term fuel substitution? Give examples..
2	State the importance of energy policy for industries
3.	Explain the energy audit format with an example
4.	Explain Energy conservation and opportunities.
5.	Explain Detailed Energy audit steps.
Power System Practices and Design- VIII Prof. Jaydeep Sejpal	**Mode of Submission: jaydeep.sejpal@gmail.com (Submit it within time limit, after that no submission will be accepted)**
1.	Explain general consideration of Mechanical designing of overhead lines
2.	Explain difference between radial and ring main distribution system with detail.
3.	Explain HVDC system.
4.	Explain evaluation of line performance
5.	Explain factors affecting on sag.

NOTE: After completing your assignments, contact your respective faculty member and submit the assignment for assessment.