IES COLLEGE OF TECHNOLOGY, BHOPAL

B.E. (Fifth Semester) Assignment I

(Electrical & Electronics Eng)

UEE (EX-501)

Date of Assign: 24/07/2014 **Date of Submission:01/08/2014**

1	State the law of illumination. **(Dec 2012)**
2	A lamp of 100 C.P. is hung 10 m over the centre floor of hall 15 m^2.Find the illumination at the point below lamp and at the corner, neglecting reflection from walls and ceilings. **(Dec 2011)**
3	Define : (i) m.h.c.p (ii) lamination flux (iii) Luminous intensity **(Dec 2012)**
4	Explain the following : (i) Inverse squre law (ii) Lambert's cosine law of illumination.**(Dec 2013)**
5	Compare gas discharge lamps with fluorescent lamps.**(Dec 2011)**

IES COLLEGE OF TECHNOLOGY, BHOPAL

B.E. (5^{th} SEM) Assignment -1

Microprocessor & Microcontroller (EX-502)

Date of Assign: 24/07/2014 **Date of Submission:01/08/2014**

Q.1	Explain in detail the working of 8086 microprocessor in minimum & maxmimum modes (Dec 2012)	
Q.2	Draw 8086 pin diagram? Explain the functionality of each pin? (Dec 2013)	
Q.3	Describe the architecture of 8086?	
Q.4	Enlist and compare the silent features of 8086, 80286, 80386? (June 2004)	
Q.5	Write short notes on 8086 interrupts? (June 2004)	

IES COLLEGE OF TECHNOLOGY, BHOPAL

B.E. (Fifth Semester) Assignment-I

(Electrical & Electronics Eng.Branch)

Electrical Machine-II (EX-503)

Date of Assign: 24/07/2014 **Date of Submission:01/08/2014**

1	Derive the emf equation of D. C. Generator? **(Dec 2012)**
2	What is meant by armature reaction? Show that the effect armature mmf on the field is entirely cross magnetizing. **(Dec 2012)**
3	Draw and explain the drooping characteristics of D. C shunt generator. **(Dec 2013)**
4	Explain the voltage build-up process in DC shunt generators. It is found that the voltage of DC shunt generator does not build up. Explain the various possible cause of this machine. **(Dec 2013)**
5	A lap wound D. C. Generator having 80 slots with 10 conductors per slot generates at no load on emf of 400V when running at 1000 rpm. At what speed should it be rotated to generate a voltage of 220 V on open circuit. **(Dec 2012)**

IES COLLEGE OF TECHNOLOGY, BHOPAL

B.E. (Fifth Semester) Assignment-I

(Electrical & Electronics Eng.Branch)

PED&C (EX-504)

Date of Assign: 24/07/2014 **Date of Submission:01/08/2014**

1	1 Draw and explain the single phase full wave half controlled rectifier. Draw the waveform across the load. .(DEC 2010) . (JUN 2009)
2	230V 50Hz ac supply is fed to a fully controlled bridge converter the fully angle is 45 and the load current is 5A. Find the output voltage and active power input and reactive power input. .(DEC 2010)
3	3 Discuss the operation of a three phase a fully controlled bridge converter feeding an RLE load. Draw waveform of input voltage firing pulses and output voltage for alpha=30(DEC 2011)
4	Explain to single phase half wave rectifier with RL load. Draw the waveform across the load.
5	Explain to single phase half wave rectifier with RL load. Draw the waveform across the load with freewheeling diode.

IES COLLEGE OF TECHNOLOGY, BHOPAL

B.E. (Fifth Semester) Assignment-I

(Electrical & Electronics Eng.Branch)

Power System-I (EX-505)

Date of Assign: 24/07/2014 **Date of Submission:01/08/2014**

1	Define: Demand factor, Diversity factor, Utilization factor, load factor. **(Dec 2013)**
2	What is the major component of thermal power station? Give the names and their function. **(Dec 2011 & June 2011)**
3	Write A short note on economic load dispatch. **(Dec 2011 & June 2011)**
4	Determine the maximum value of a load which consumes 500 kWh per day at a load factor of 50%.If the consumer increases the load factor to 60% without increasing the maximum demand. Also calculate the daily energy consumption.
5	A generating station supplies the following load 15000 kW, 12000 kW, 8500 kW, 6000 kW, 450 kW. The station has a maximum demand of 22000 kW. The annual load factor of the station is 48%.Calculate: (i) The number of units supplied annually. (ii) The diversity factor. (iii) The Demand factor. **(Dec 2013)**