

BE Semester-V (ELECTRICAL) Question Bank

(DIGITAL AND POWER ELECTRONICS)

All questions carry equal marks (10 marks)

Q.1	Draw and explain V-I characteristic of SCR.
Q.2	Write a short note on construction of SCR.
Q.3	Describe turn on and turn off characteristics of SCR.
Q.4	Write a short note on series operation of SCR.
Q.5	Write a short note on parallel operation of SCR.
Q.6	Explain di/dt and dv/dt protection for scr.
Q.7	Explain working of snubber circuit with necessary diagrams.
Q.8	Enlist different types of turn on methods. Explain any one with necessary diagrams.
Q.9	Draw and explain V-I characteristic of UJT.
Q.10	Write a short note on UJT as a relaxation oscillator.
Q.11	Draw and explain TRIAC firing circuit using DIAC.
Q.12	Write a short note on GTO.
Q.13	Draw and explain V-I characteristic of IGBT.
Q.14	Draw and explain gate drive circuit of IGBT.
Q.15	Write a short note on 3 bit counter.
Q.16	Explain single phase half wave rectifier with R-L load with necessary waveforms.
Q.17	Explain single phase half wave rectifier with R-L –E load with necessary waveforms.
Q.18	Write a short note on synchronous counter.
Q.19	Write a short note on multiplexer.
Q.20	Explain three phase half wave rectifier with R-L-E load with necessary waveforms.
Q.21	Write a short note ripple counter.
Q.22	Explain single phase full wave rectifier with R-L load with necessary waveforms.
Q.23	Explain single phase full wave rectifier with R-L –E load with necessary waveforms.
Q.24	Write a short note on demultiplexer.
Q.25	Explain three phase full wave rectifier with R-L load with necessary waveforms.
Q.26	Explain three phase full wave rectifier with R-L-E load with necessary waveforms.
Q.27	Write a short note on dual converter.
Q.28	Write a short note on zero voltage switching.
Q.29	Write a short note on Class C commutation.
Q.30	Write a short note on Class E commutation.
Q.31	Write a short note Jone's commutation.
Q.32	Write a short note on AC line commutation.
Q.33	Explain K map with suitable examples.
Q.34	Write a short note on SOP and POS.
Q.35	Write a short note on TTL logic.
Q.36	Write a short note on CMOS logic.
Q.37	Write a short note on 7490 as decade converter.
Q.38	Write a short note on up and down counter.
Q.39	Write a short note on 7496 as shift register.
Q.40	Write a short note on bi directional register.