

## BE Semester-IIIRD (ENV) Question Bank

### (ELEMENTS OF MECHANICAL & ELECTRICAL ENG.)

All questions carry equal marks(10 marks)

Q.1	Explain elementary principles of working fuel consumptions, performance characteristics.
Q.2	Explain uses of IC engines in civil engineering
Q.3	Explain types of IC engines in brief.
Q.4	Explain method of ignition, cooling, and scavenging of engines in detail.
Q.5	What are the types of pumps ? Explain each in brief.
Q.6	Explain the characteristics of different types of pumps.
Q.7	Explain applications of pumps in detail.
Q.8	Explain reciprocating and rotary types of compressor.
Q.9	Explain uses of compressed air
Q.10	Explain Air motors in detail
Q.11	Explain Carburettor pump in detail
Q.12	Explain Central air conditioning in detail
Q.13	Explain Single stage and multi stage compressor.
Q.14	Explain working principle and construction and types of transformer.
Q.15	Explain construction, working principle and applications of D.C.machines.
Q.16	What are the different factors affecting the selection of electrical motors.
Q.17	What is energy audit? Explain its importance.
Q.18	What is power factor? What are the disadvantages of poor power factor? What are the methods to improve power factor.
Q.19	Explain environmental effects of various power stations in detail.
Q.20	Explain LVDT and its applications.
Q.21	Explain Air pollution measurement and its sensors.
Q.22	Explain various methods of measurement of vibrations
Q.23	Explain nuclear power station safety and its hazards to environment
Q.24	Explain Water pollution measurements and its sensors.

Q.25	Explain Electrical strain gauges and application.
Q.26	Explain Holographic interferometry frequency meters.
Q.27	Classify various types of I.C. Engine used in the market.
Q.28	Describe the function of (a)Piston(b)Crank(c)Connected rod
Q.29	Explain Applications of Induction motor in industries
Q.30	Explain the various effects of various power station on environment
Q.31	Explain the disadvantages of low power factor & how can we improve it.
Q.32	Explain Water pollution measurement and it's sensors
Q.33	Comparison between centrifugal & reciprocating pump
Q.34	Explain the function of priming in the centrifugal pump
Q.35	Explain thermal power station safety and its hazards to environment
Q.36	Classify various types of air compressors
Q.37	Describe centrifugal type air compressor with neat sketch
Q.38	Explain working principle and construction and types of transformer.
Q.39	Explain construction, working principle and applications of D.C.machines.
Q.40	What are the different factors affecting the selection of electrical motors.