

# SSC JE Syllabus

## Part I

### A. General intelligence & reasoning

1. Analogies,
2. Similarities,
3. differences,
4. space visualization,
5. problem solving,
6. Analysis,
7. judgment,
8. decision making,
9. visual memory,
10. discrimination,
11. observation,
12. relationship concepts,
13. arithmetical reasoning,
14. verbal and figure classification,
15. arithmetical number series

### B. General Awareness

1. History,
2. Culture,
3. Geography,
4. Economic Scene,
5. General Polity and
6. Scientific Research

### C. General Engineering

#### Civil Engineering

1. Building Materials,
2. Estimating,
3. Costing and Valuation,
4. Surveying,
5. Soil Mechanics,
6. Hydraulics,
7. Irrigation Engineering,
8. Transportation Engineering,
9. Environmental Engineering.

#### Electrical Engineering

1. Basic concepts,
2. Circuit law,
3. Magnetic Circuit,

4. AC Fundamentals,
5. Measurement and Measuring instruments,
6. Electrical Machines,
7. Fractional Kilowatt Motors and single phase induction Motors,
8. Synchronous Machines,
9. Generation,
10. Transmission and Distribution,
11. Estimation and Costing,
12. Utilization and Electrical Energy,
13. Basic Electronics.

### **Mechanical Engineering**

1. Theory of Machines and Machine Design,
2. Engineering Mechanics and Strength of Materials,
3. Properties of Pure Substances,
4. 1st Law of Thermodynamics,
5. 2nd Law of Thermodynamics,
6. Air standard Cycles for IC Engines,
7. IC Engine Performance,
8. IC Engines Combustion,
9. IC Engine Cooling & Lubrication,
10. Rankine cycle of System,
11. Boilers,
12. Classification,
13. Specification,
14. Fitting & Accessories,
15. Air Compressors & their cycles,
16. Refrigeration cycles,
17. Principle of Refrigeration Plant,
18. Nozzles & Steam Turbines.
19. Properties & Classification of Fluids,
20. Fluid Statics,
21. Measurement of Fluid Pressure,
22. Fluid kinematics,
23. Dynamics of Ideal fluids,
24. Measurement of Flow rate,
25. Basic principles,
26. Hydraulic Turbines,
27. Centrifugal Pumps,
28. Classification of steels.