

Syllabus for the post of Workman Trainee Fitter (Total 100 marks)

PART-A (80 marks)

1. Fitter Theory

- Trade introduction and safety precautions
- Measurement and measuring instruments
- Common hand tools
- Marking and marking tools
- Properties of metals
- Drilling machine
- Forging, Heat treatment
- Sheet metal work, Solder.
- Welding, Drill, Reaming
- Screw threads, Grinding
- Interchangeability
- Metals, Scraping
- Precision measuring instruments
- Plant maintenance
- Assembly and related techniques
- Lath, Fasteners, Files
- Gauge and template
- Surface finishing, Bearing.
- Case hardening
- Soldering and Brazing
- Jigs and Fixture
- Pipe Fitting, Fire
- Conservation of the finished surface Non-Ferrous metals

2. Engineering Drawing

- Introduction to Engineering drawing
- Drawing instruments, Lines
- Drawing of geometrical figures
- Lettering and numbering
- Dimensioning, Projection
- Conventional and symbolic representation.

3. Workshop Calculation and Science

- Units, Fraction, Square root
- Ratio and proportion, Percentage
- Heat and temperature, Basic electricity
- Levers and simple machines

4. Fitter practical

- Safety and precautions in a workshop
- Hand tools and machining
- Necessities of forging process
- Miscellaneous sheet metal processes.

- Welding, Drilling and boring
- Threading operation
- Standard fit making
- Lathe machine operations
- Making keys and shafts
- Work for fittings
- Adjustment operations
- Use of trade and machine tools
- Pipe valve fitting and testing
- Fire extinguisher and their management
- Marking process
- Assembly of various parts and their repairing in fitting
- Machine maintenance and related documentation.

PART-B (20 marks)

- Logical Reasoning (5 questions),
- Quantitative Aptitude (5 questions),
- English (5 questions)
- General Knowledge/ Awareness (5 questions)