

1. Syllabus for Intermediate Level Training to be followed before
conduct of examination for the post of Asstt. Pilot against 50%
Departmental Quota.

A) Basic Electricity: (Related to Diesel/Electric Loco:

1. Commonly used electrical symbols :-
like; polarity, earth, switch, resistor, capacitor, generator,
coil, fuse, transformer, cell, battery, fault, motor, diode,
surge arrester, contactor, NO1, NCI etc.
2. Electrical quantities and their units :-
Current, Voltage, Energy, Force, Frequency, Power, Resistance,
EMF, etc.
3. Basic Concepts and definition of :-
Electricity, Battery, Generator, Motor, EMF, Voltage, Current,
Resistance, Power, Energy, Relays, Contactors, Star/Delta
Connection, Different types of Ckt. (P., SP, S, O pen, Close,
Short, Earth).
4. Ohm's law with suitable calculations ($V=I \times R, P=V \times I$)
5. Kirchoff's Law
6. AC & DC current
7. 1 & 3 phase supply
8. Delta & Star connection
9. Transformer
10. Rectifier
11. Smoothing Reactor.

A-1 :-

1. Type of Engines ✓
2. Function of Engines
3. External Combustion Engine
4. Internal Combustion Engine.
5. Compression Ignition Engine.
6. Cycles of Engine & Valve Timings.
7. Fuel Oil & Lube Oil System ✓
8. Cooling Water System
9. Super Charging.
10. Air & Vacuum System.
11. Hydraulic Pumps.
12. Expressor
13. Governors
14. Undergear Equipments.

B) Mathematics :

- 1) Only addition, Subtraction, Multiplication, Division upto 4-5
digits.

C) English:- (Purpose is to check reading and writing skill)

1. Translation of simple sentences from English to Hindi & vice versa
2. Comprehences.

D) Current General Knowledge.

E) General Science.

F) Intelligence Test.
