



इरिसेट

IRISET

ब्लॉक सिगनलिंग प्रयोगशाला

BLOCK SIGNALLING LABORATORY

प्रयोग सं. बी एस एल - 05

EXPERIMENT NO.: BSL - 05

नाम

Name : _____

अनुक्रमांक

Roll No : _____

पाठ्यक्रम

Course : _____

दिनांक

Date : _____

प्राप्तांक

Marks Awarded : _____

अनुदेशक के आद्यक्षर

Instructor's Initial : _____

STUDY OF DLBI FOR ONE LINE CLEAR –ONE TRAIN FEATURE

I. Study of One Line Clear – One Train principle and the essentials of Absolute Block System.

- Don't take Line Clear, but try to take OFF LSS. Is it possible to take OFF LSS? **Yes/No**
- Now take Line Clear and take OFF LSS. Possible **Yes/No**
- Observe the aspect of LSS as the train enters the Block section and record
- Normalise the LSS knob and try to take OFF LSS again.
Is it possible to take OFF LSS now? **Yes/No**
- The SM turns the Block handle to _____ position at Receiving End.
- Now _____ relay is energised at the sending end and the Block handle is locked in _____ position at receiving end. Hence LSS cannot be taken OFF at sending end.
To take OFF LSS, not only SR relay but also Line Clear contact of _____ relay is required.
- When the train is in the Block section, the LSS of dispatching end cannot be taken OFF so long as the Block handle is locked in _____ position at receiving end.
- With the train still in the Block section, try to bring the Block handle from TOL to Line Closed at receiving end. Is it possible to normalise? **Possible/Not possible**
- Receive the train and normalise the Home Signal knob and try to bring the Block Handle from TOL position to Line Closed position. **Possible/Not possible**

Inference: LSS cannot be taken OFF again, because _____ relay is de-energised as the train entered into the Block section, the stick feed to _____ relay is cut off. Even though the top indicator is indicating Line Clear, it is not possible to take OFF LSS once again since _____ relay is de-energised.

Inference: The lock on the Block Handle is released only after the arrival of the train at receiving station. Now, the Line Clear for the next train can be granted. With these features, the principle of 'One Line Clear-One train' is achieved in the design of the Double line block instrument.

II. Trouble shooting on Double Line Block Instruments:

- a) Disconnect the +ve bell supply X+ wire at Bell spring assembly at Stn.A

Press bell plunger at Stn.A. Whether bell beat is received at Stn.B? **Yes/No**

Restore the wire connection at Stn.A

- b) Disconnect the wire X of bell relay at bell spring assembly at Stn.B

Press bell plunger at Stn.A. Whether bell beat is received at Stn.B? **Yes/No**

Restore the wire connection at Stn.A

- c) Disconnect the +ve supply wire of indication battery at Stn.A

Turn the Commutator handle at Stn.A to Line Clear and observe whether the bottom indicator at Stn.A and Top indicator at Stn.B display Line Clear **Yes/No**

Restore the wire connection at Stn. A

- d) Disconnect the wire of Polarised relay R2 terminal at Stn.B

Turn the Commutator handle at Stn.A to Line Clear and observe whether the bottom indicator at Stn.A and Top indicator at Stn. B display Line Clear **Yes/No**

Restore the wire connection at Stn.B

- e) Disconnect the wire at terminal BL2 at Stn.A

Turn the Commutator handle at Stn.A to Line Clear and observe whether the bottom indicator at Stn.A and Top indicator at Stn.B display Line Clear **Yes/No**

Restore the wire connection at Stn.A

- f) Disconnect the wire at terminal BL1 at Stn.B

Turn the Commutator handle at Station A to Line Clear, whether the bottom indicator at Stn.A and Top indicator at Stn.B display Line Clear **Yes/No**

Restore the wire connection at Stn.B

Signature of Trainee