



इ रि से ट
बाहरी दूरसंचार प्रयोगशाला
प्रयोग नं: एल पी - 1

IRISET
OUTDOOR TELECOMMUNICATION
LABORATORY
EXPERIMENT NO.: LP - 1

नाम

Name : _____

अनुक्रमांक

Roll No : _____

पाठ्यक्रम

Course : _____

दिनांक

Date : _____

प्राप्त अंक

Marks Awarded : _____

अनुदेशक का अधाक्षक

Instructor Initial : _____

PURPOSE: Identification of Line Wire Materials and fixing them in the appropriate place.

I. Identify the following materials from the post in the laboratory and mention their uses:-

1. Lighting Conductor – (TCA – 557)

2. PIN type porcelain insulators: (IS: 283 – 1958)

a) DS Large:

b) DS Small:

c) Pot head insulators:

3. Channel Iron Brackets: (IRS Drawings TC 501 to 508)
(TC 512 to 513)

(Indicate the differences in these type of brackets with spacings)

a) Main Line:

b) Main Line (Special):

c) Local Line:

4. U. Back (or) (U Bolts) (Draw rough sketch)

a) U – Back for fitting the cross –
arm on the flange side
(TCA – 501 & 502)

b) U – Back for fitting the cross
arm on the Web side
(TCA – 700 – 09)

c) U – Back for fitting the cross
arm into tubular post.

5. Distant piece.

6. Stalk (IS – 1441) (Mention their uses)

- 1) PIN type stalk.
- 2) PIN type threaded stalk to screw a nut at the bottom.
- 3) J – stalk.
- 4) Swan neck stalk (Short)
- 5) Swan neck stalk (Large)

7. Bat – (Bracket Attachment Terminal) (Draw a rough sketch)
(Mention the use).

8. Tie – (TC – 624) (Mention its use)

9. Strut (TC – 625) (Mention its use)

10. Transposition brackets:

11. Saddle:

12. Line Wire Materials used for:-

- a) G.I. Wire –
- b) ACSR Wire –

13. Stay Assembly: (Draw a stay as provided to a post indicate the components on it and mention their purposes)

- a) Straining Screw (TCA – 571) Diagram
- b) Stay Wire (IS – 2146)
- c) Stay Rod (TC – 551)
- d) Thimble
- e) Anchor (TC – 555)
- f) Stay Clamp (TC – 638, TC – 637)

14. Strut Support

15. Base Plate (TCA – 605)/Soil Plate

II. Indicate the precautions to be taken while erection of a post.

III. Mention the types of post and where they are used:-

1. Rail Posts:	Used for	(Draw Sketches)
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1. Rail Post (Single):

2. Coupled Post:

3. Tripod: (L-Pad)

4. 'Q' Pod:

2. Hamilton Tubular Post:

IV. Mention the various types of stays and where they are provided:
(Draw Sketches)

1. Angle Stay:

2. Cross Stay:

3. Longitudinal Stay:

4. Terminal Stay:

5. Overhead Stay:

6. Strutting:

7. Trussings:

V. Calculating the line wire materials required for construction of over Head Alignment for a section of 100 Kms having stations with the following circuits:-

1. Block Circuit – (Double Line)

2. Section Control Circuit – 1

3. Dy. Control Circuit – 1

4. Administrative Trunk Circuit – 1

5. Telegraph Circuit – 1

6. Gate Magneto Circuit – 1

VI. Indicate the position of the circuit in a typical posts:- (L-14 Diagram)

VIII.

S.No.	Description of material	Required per Km	Required per 100 Kms	Remarks

Date:

Signature of Trainee