
Name	:	_____	
अनुक्रमांक			प्राप्त अंक
Roll No	:	_____	Marks Awarded :
पाठ्यक्रम			
Course	:	_____	
दिनांक			अनुदेशक का अध्याक्षर
Date	:	_____	Instructor's Initial :

OBJECTIVE: At the end of the Lab session, you will learn about 6 QUAD cable constructions and the contents of RTSF KIT as per RDSO spec IRS: TC - 77/2012 Rev 3.

1) Construction of 6 quad cables.

6 quad cables are armored jelly filled type and have 6 numbers of quads. Each conductor of the quad is provided with coloured Polyethylene insulation. It has aluminum sheath which screens the induced voltages. So it is a 'Screened cable'. It is laid underground in RE & NON-RE areas.

I) Draw the cross section and constructions of 6 Quad cable and label it?

A) Cross section

B) Construction

II) Identify the quads in 6 quad cables & write the colour code in the given table.

Quad No.	Colour of 'A' Wire	Colour of 'B' Wire	Colour of 'C' Wire	Colour of 'D' Wire
1				
2				
3				
4				
5				
6				

Heat shrinkable cable jointing kits are being procured by Railways according to Specification No. **IRS: TC - 77/2012 Rev 3.**

For jointing of cables a pit of 1Mx1Mx1.5M shall be made. The pit surface is to be leveled by ramming the earth. Bend the two cable ends slowly to 'S' shape taking care that the cables are not strained excessively and minimum over lap of 505 mm (as per Western cablex manufacturer) is made and a length of 10 meter loop is kept on the either side of the cable .

III). Identify the following components parts of a Heat shrinkable jointing kit and write the use of each item given in the chart below:

S. No.	Description of item	Qty	Purpose of the item
1.	Heat-shrinkable sleeve (Reinforced) Size 75/15 mm, Length 850 mm.	1 No	
2.	S.S.Channels + under clip- 450 mm	1 No	
3.	Aluminium Canister (Finger coated) 75/507 mm	1 No	
4.	Adhesive PVC Tape - 25mm /10Mtrs.	2 No's	
5.	Adhesive Aluminium Foil 400 +100 mm	1 No	
6.	Cleaning Tissue - 6 ml.	3 No's	
7.	Emery Strip - 60 Mesh- 5/600mm	2 No's	
8.	Tinned Copper Braid 7/500 mm + Heat Shrink Tube (Uncoated) 12/4 - 450 mm	1 Set	
9.	Sealant Tape - 35/400 mm	2 No's	
10.	Aluminium Split ring - 22/20 mm.	2 No's	
11.	Steel Spring Roll - 21/16 mm.	2 No's	
12.	PVC Sleeves - 5/50 mm	30	

		No's	
14.	Cotton waste 50 grams.	2 Bags	
15	Armour Continuity Insulated Wire 0.9mm(dia),2000 mm length.	1 No	
16	Transparent PE Sheet 500/300 mm	1 No	
17	Jelly Filling Compound 300 grams	2 Packets	
18	Installation Instructions	1 No	
19	Kit Packing Box	1 No	
20	Packing slip	1 No	
21	Cleaning Liquid - 200 grams	1 Pack	
22	Sheath connector Assembly (1+1+1)	1 Set	
23	Branch Off Clip (For derivation and Transformer joint)	1 No	
24	Cable tie - 4.7/254 mm	1 No	

Date:

Signature of Trainee