



दक्षिण रेलवे/ **SOUTHERN RAILWAY**

No.P(R)673/Training/Vol.IV

प्रधान कार्यालय/ Headquarters Office  
कार्मिक शाखा/ Personnel Branch  
चेन्नै/Chennai - 600 003  
दि./ Dated:23-11-2018

आर बी ई सं/RBE No. 168 / 2018

पी बी सी सं/ PBC No: 238 / 2018

All PHODs / DRMs / CWMs / CEWE / CAO / CPM / Dy.CPOs / Sr.DPOs /  
DPOs / SPOs / WPOs / APOs of HQ / Divisions / Workshops / other Units,  
etc.,

(As per mailing list -'A' )

विषय/Sub: Introduction of refresher course for Helper / Signal and  
revision of the Foundation course for promotee Signal  
Maintainers..

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A copy of Railway Board's letter No.E(MPP)2018/3/7 dated  
30-10-2018 (RBE No. 168 / 2018) alongwith its enclosures (Annexure 'A' & 'B')  
on the above subject is enclosed for information, guidance and necessary  
action.

(V.SRINIVASAN)

वरिष्ठ कार्मिक अधिकारी/नियम

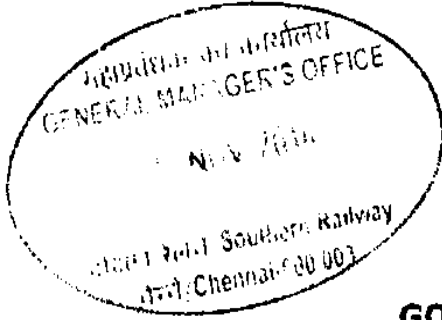
Senior Personnel Officer/Rules

For Principal Chief Personnel Officer

संलग्न/Encl: as above

प्रतिलिपि/Copy to : The Genl Secy / SRMU  
The Genl Secy / AISCSTREA  
The Genl Secy / AIOBCREA

The Genl Secy / NFIR



**GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS  
RAILWAY BOARD**

**No.E(MPP)/2018/3/7**

**RBE No. 168/2018  
New Delhi, Dated: 30.10.2018**

**The General Managers,  
All Indian Railways and Production Units ,**

**The Director  
Indian Railway Institute of Signal Engineering &  
Telecommunication  
Secunderabad**

**Sub: Introduction of refresher course for Helper/Signal and revision  
of the Foundation course for promotee Signal Maintainers.**

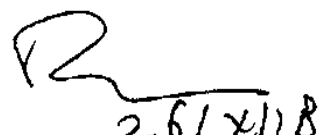
In view of fast technological development in signaling field in Railways, a refresher course for Helper/Signal has been proposed.

2. As per existing provision, Helper/Signal are imparted 4 weeks (24 days) of initial/induction training only and no pre-promotional and refresher training.

3. Ministry of Railway in consultation with the Signal Directorate, has decided to introduce 2 (two) weeks Refresher Course for Helper/Signal after a gap of 5 years, apart from 4 weeks of Induction/Initial course. The course content for training is enclosed herewith (Annexure - A).

4. Further, the Foundation course for promotee Signal Maintainers has been reduced from 12 weeks to 8 weeks. The course content for training is enclosed herewith (Annexure - B).

DA: As above.

  
26/10/18  
**(Mahendra Kumar Gupta)  
Director (MPP)  
Railway Board**

**Refresher Course for Helper/Signal****(Annexure-A)**

Item	Details	Allotted Hours
1	Registration	2
2	Theory	35
3	Practical	18
4	Audio Visual	4
5	Study Tour/Local Visit	4
6	Theory Examination	1
7	Practical Examination	2
	<b>TOTAL</b>	<b>66 (Two Weeks)</b>

**THEORY**

S. NO.	Subject	Allotted Hours
1	Symbol and Meaning of Letters	1
2	Cleanliness, Personal safety, Fire Prevention & First Aid	2
3	Measuring Instrument & Portable Tools	3
4	Basic Electricity and Magnetism, Power Equipments, IPS, Cells & Battery, D.G. Set	4
5	Safety in Train Operation, Schedule of Dimensions & Disaster Management	3
6	Signalling Relays and Cables	3
7	D.C. Track Circuit	3
8	Color Light Signalling, LED aspects, Axle Counter, Electrical operated lifting Barrier	5
9	Signalling in RE area	2
10	Point Machine	3
11	Introduction to Block Instrument (Single line, Double line)	3
12	Introduction to Relay Interlocking, Electronic Interlocking	3
	<b>TOTAL</b>	<b>35</b>

**Practical**

S.NO	Subject	Allotted Hours
1	Cells, Battery, Chargers, IPS, D.G. Set	3
2	Measuring Instruments & Portable Tools	2
3	Signalling Relays	2
4	D.C. Track Circuit	2
5	Color Light Signalling, LED aspects, Axle Counter	3
6	Point Machine	2
7	Single & Double line Block Instrument	2
8	Level crossing gates	2
	<b>TOTAL</b>	<b>18</b>

**AUDIO VISUAL**

S. NO.	Subject	Allotted Hours
1	Point M/C, LED Signal	2
2	Track Circuit	2
	<b>TOTAL</b>	<b>4</b>

**NAME OF COURSE:- FOUNDATION COURSE FOR PROMOTEE's SIGNAL MAINTAINER**

**(ANNEXURE-B)**

COURSE MODULE NO.		SNT-10	PRACTICAL HOURS		83
DURATION		08 WEEKS	THEORY HOURS		158
TOTAL HOURS		264	JOINING, EXAM, VIVA, LOCAL VISIT etc		23
				THEORY HOURS	
S.NO.	CONTENTS(THEORY)	ST CODE NO.	Existing	Revised	
1	Measuring Instruments	3		2	
2	Power Equipment Cells & Battery, IPS,	4	18	12	
3	Basic Electricity & Magnetism	5	18	6	
4	Safety in train operation & Disaster Management, Schedule of dimension, Personal Safety, Prevention of Fire	6	18	10	
5	Signalling Cables	8		3	
6	Basic concept of signalling	15	24	18	
7	Orthodox Mechanical Sig.	16	10	2	
8	Reverser, Lever Lock, CKT controller Arm and light repeater	18	18	2	
9	Inter slotting EKT, EPD	19	18	2	
10	Relays	20	20	6	
11	Track Circuit	21	20	12	
12	Solar Panel	22		2	
13	Color Light Signalling, LED aspects, D.G. Set	23	18	18	
14	Point Machine	24	12	10	
15	Axle Counter & IBS	26		8	
16	Single line block instrument	28		6	
17	Double line block instrument	29	34	6	
18	Signalling in RE area & Installation practices	30		8	
19	Automatic Signalling System	31		6	
20	Introduction to Relay Interlocking	34		3	
21	BPAC	36		3	
22	Introduction to Electronic Interlocking & Data Logger	37		3	
23	UFSBI *			3	
24	Documentation Signal failure Register, History Book, Disconnection*			2	
25	Electric Lifting Barrier*			2	
26	Earth Leakage Detector(ELD)*			2	
27	Domino Panel*			1	
		<b>TOTAL</b>	<b>228</b>	<b>158</b>	

\*This is in addition to the standard syllabus

	Practical	Allotted Hours
1	Study of AVO Meter, Multimeter, Megger	2
2	Power Equipment Cells & Battery, IPS, D.G.Set, Solar Panel	9
3	D.C. Track Circuit	6
4	D.C. cut section track circuit	6
5	Single & Double line Block instrument (Study, working,	9
6	Signalling Cable	3
7	Study of colour light signal, LED aspects,	4
8	ELD, Maintenance of earth	3
9	Axle Counter	4
10	Relay Interlocking & Panel Interlocking	4
11	Electronic Interlocking	4
12	Study & Adjustment of Lifting Barrier Gate ( Electrical & Mechanical )	9
13	UFSBI	3
14	BPAC	3
15	Data Logger	5
16	Point Machine	9
	<b>TOTAL</b>	<b>83</b>