

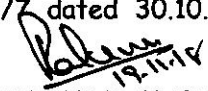
**SOUTH CENTRAL RAILWAY**

Headquarters Office  
Personnel Branch/SC  
Date: 19.11.2018

No. P[R]673/VII  
ALL CONCERNED

**PERSONNEL BRANCH SERIAL CIRCULAR No. 195 /2018**

Copy of Board's letter No.E[MPP]/2018/3/7 dated 30.10.2018 is forwarded for information, guidance and necessary action.

  
[K.RAVI KUMAR]  
Secy. to PCPO

For Principal Chief Personnel Officer

Copy of Board's letter E[MPP]/2018/3/7 dated 30.10.2018 [RBE No.168/2018]

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

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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).

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{Mahendra Kumar Gupta}/Director[MPP]

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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>

**ANNEXURE -B**

**NAME OF COURSE: FOUNDATION COURSE FOR PROMOTEES SIGNATL MAINTAINERS**

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	BP AC	3
15	Data Logger	5
16	Point Machine	9
	<b>TOTAL</b>	<b>83</b>

INDEX No. 1077 TRAINING FACILITIES	S.C.No.
Board have decided to introduce 02 weeks Refresher Course for Helper/Signal after a gap of 5 years, apart from 4 weeks of Induction/Initial course duly enclosing the course content for training. [2] The Foundation course for promotee Signal Maintainers has been reduced from 12 weeks to 8 weeks duly enclosing the course content for training.	195/2018