GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAILWAY BOARD

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

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

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.

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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).

DA: As above.

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

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

New Delhi, Dated: 30.10.2018

Copy to:

1) The General Secretary, NFIR, 3 Chelmsford Road, New Delhi for information with 35 spares
2) The General Secretary, AIRF, 4 State Entry Road, New Delhi for information with 35 spares.
3) The Secretary General, FROA, R.No.256-A, Rail Bhavan, New Delhi for information with 5 spares.
4) The Secretary General, IRPOF, R.No.268, Rail Bhavan, New Delhi for information with 5 spares.
5) All Members, Department Council & Secretary Staff side National Council 13-C, Ferozeshah Road, New Delhi with 90 spares.
6) The Secretary General, AIRPF Association, Room No.256-D, Rail Bhavan, New Delhi with 5 spares.
7) General Secretary, All India SC & ST Railway Employees Association, 171/B-3, Basant Lane Railway Colony, New Delhi (15 copies).

For Secretary/Railways

Copy to:

i) PS & ED(PG) to MR, MSR(A) & MSR(K)

ii) PSO/Sr.PPS to CRB, FC, ML, ME, MM, MS, MT, DG(RHS) & DG(RPF)

iii) Sr.PPS/PPS/PS to AM(Budget), AM(CE), AM(C&IS), AM(Comml.), AM(Elect), AM(Fin), AM(Mech.), AM(Plg.), AM(Project), AM(PU), AM(Sig.), AM(Staff), AM(RS), AM(T&C), AM(Tele), AM(Traffic), AM(Works), Adv.L(RS), Adv(Vig.), Adv.Fin(Exp), Adv(IR), Adv(Safety), LA, OSD(MIS).

iv) ED(Plg.), ED(Accts.), EDF(BC), EDCE(B&S), EDCE(G), EDCE(Plg.), ED(CHG), ED(CC), ED(C&IS), ED(E&R), EDEE(Dev), EDEE(G), EDE, ED(RRB), EDE(N), EDE(Res), EDF, EDF€, EDF(S), EDF(B), EDF(RM), EDF(X)I, EDF(X)II, ED(H), EDLM, ED(MIS), EDE(GC), ED(T&MPP), EDME(Chg.), EDME(Fr.), EDME(Tr.), EDME(TOT), EDME(Dev.), EDME(W). ED(PC)I, ED(PC)II, ED(PP), ED(Project), ED(Project)/DMRC, EDRE, ED(Safety), JS, JS(C), JS€, JS(P), IG./RPF(Hqs), IG/RS, ED(S9g.), ED(Stat&Econ.), EDRS(C), EDRS(G), EDRS(P), EDRS(S), EDRS(W), ED(TD), EDTT(M), EDT(MC), EDT(P), ED(T&C), EDCE(P), ED(PM), ED(PG), EDTC-I, EDTC(FM), EDTT(F), EDTT(FM), EDTT(S), EDV(A), EDVE, EDV(T), ED(W).

v) Chief Commissioner of Railway Safety, Lucknow.

vi) E(Trg.), E(NG)I, E(NG)II, E(G), F(E)I, F(E)II, F(E)III, E(SCT)I, E(SCT)II branches of 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
	TOTAL	**66 (Two Weeks)**

THEORY

S. NO.	Subject	Allotted Hours
1	Symbol and Meaning of Letters	1
2	Cleanliness, Personal safely, 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
	TOTAL	**35**

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
	TOTAL	**18**

AUDIO VISUAL

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

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

COURSE MODULE NO.	SNT-10	PRACTICAL HOURS	83
DURATION	08 WEEKS	THEORY HOURS	158
TOTAL HOURS	264	JOINING,EXAM,VIVA,LOCAL VISIT etc	23

S.NO.	CONTENTS(THEORY)	ST CODE NO.	THEORY HOURS	
			Existing	Revised
1	Measuring Instruments	3		2
2	Power Eqiupment 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
	TOTAL		228	158

*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
	TOTAL		**83**