

दक्षिण पूर्व मध्य रेल्वे
South East Central Railway
कार्मिक विभाग, मंडल रेल प्रबंधक कार्यालय, बिलासपुर
Personnel Department, Divisional Railway Manager Office, Bilaspur

अधिसूचना:- 137/2025 कनिष्ठ अभियंता(रेलपथ) पद पर पदोन्नति हेतु उपयुक्तता जाँच के लिए।
Notification No. 137/2025 :- Suitability test for Promotion to the post of JE(P.Way)

Sub: In order to filling the vacancy of JE(P.Way) Safety category of Engg. Deptt. the competent authority has decided to conduct the suitability test (Written examination). The details are as under:-

बिलासपुर मंडल के अभियांत्रिकी विभाग में कनिष्ठ अभियंता(रेलपथ), लेवल -06 पद हेतु योग्यता जांच (लिखित परीक्षा) आयोजित की जानी है, समुदाय अनुसार रिक्तियों का विवरण निम्नानुसार है :

पद / Post	कुल/Total	समुदाय / Category		
		अ.ना./UR	अ.जा./ SC	अ.ज.जा./ST
कनिष्ठ अभियंता (रेलपथ)/ JE(P.Way)	04	04	00	00

(1) कर्मचारियों की योग्यता और सेवा की शर्तें :

(क) कर्मचारियों की शैक्षणिक योग्यता 10 वीं पास अथवा ITI तथा ट्रेकमैंटेनर ग्रेड-I, लेवल-05 में 2 वर्ष की सेवा पूर्ण कर चुका हों, वे ही कर्मचारी वरियता के आधार (Seniority Cum Suitability) पर कनिष्ठ अभियंता (रेलपथ) लेवल-06 योग्यता जांच (लिखित परीक्षा) के लिए पात्र होंगे।

(Authority: PCPO/SECR/BSP's Estt.Srl.No. 273/2005, 204/2014, 359/2018 एवं प्र.मु.का.अधि. के पत्र संख्या-P-HQ/RUL/105/3/ E/6969 दिनांक 23-08-2017).

(ख) कनिष्ठ अभियंता (रेलपथ) पद संरक्षा श्रेणी के अंतर्गत आने के कारण अनुसूचित जाति/अनुसूचित जनजाति समुदाय के उम्मीदवारों के लिए कोई छूट की अनुमति नहीं है। उन्हें लिखित परीक्षा में 60% अंक प्राप्त करना अनिवार्य है।

(Authority: PCPO/SECR/BSP's Estt.Srl.No. 266/1999),

(ग) अनिवार्य पदोन्नति प्रशिक्षण में उत्तीर्ण सफल उम्मीदवारों को ही कनिष्ठ अभियंता (रेलपथ) के पद पर पदोन्नति प्रभावित होंगी। इसलिए प्रशिक्षण से पहले सेवानिवृत्त होने वाले कर्मचारियों को पदोन्नत नहीं किया जा सकता है।

(प्र.मु.का.अधि. के पत्र संख्या-P-HQ/RUL/105/3/ E/6944, दिनांक 03-01-2020)

(2) उपयुक्तता परीक्षा की प्रक्रिया :

(क) कनिष्ठ अभियंता (रेलपथ), लेवल-06 (जीपी 4200) के पद पर पदोन्नति के लिए वरिष्ठता सह उपयुक्तता जाँच (लिखित परीक्षा) हेतु पूर्व में विभागीय कोटा के लिए 1:1 कर्मचारियों को लिखित परीक्षा में आमंत्रित किया जाता था, परंतु उपयुक्तता (Suitability Test) लिखित परीक्षा में सफल कर्मचारी न मिल पाने के कारण कनिष्ठ अभियंता (रेलपथ) का पद रिक्त रह जाता था। स्थापना क्रमांक 266/99 के अनुसार उपयुक्त कर्मचारी नहीं मिलने पर निरंतरता उपयुक्तता परीक्षण (लिखित परीक्षा) 06 माह के अंदर करानी है। इस संबंध में सक्षम अधिकारी (वरिष्ठ मंडल कार्मिक अधिकारी) के निर्णयानुसार समय संचय हेतु 06 माह में दोबारा परीक्षा आयोजित न करके कर्मचारी को Suitability Test (लिखित परीक्षा) के लिए 1:3 वरियता के आधार पर आमंत्रित किया जाता है, तथा पैल सुयुक्तता परीक्षा (लिखित परीक्षा) में सफल उम्मीदवारों के वरियता के आधार पर तैयार किया जाएगा।

(ख) लिखित परीक्षा का पाठ्यक्रम (Syllabus) संलग्न है। लिखित परीक्षा के सभी प्रश्न बहुविकल्पीय एवं द्विभाषीय होंगे। लिखित परीक्षा कम्प्यूटर आधारित (CBT) होंगी। लिखित परीक्षा की तिथि बाद में निर्धारित कर सूचित किया जाएगा।

ग) अनुसूचित जाति/अनुसूचित जनजाति के पद रिक्त नहीं होने के कारण वरिष्ठता के अनुसार अनुसूचित जाति/अनुसूचित जनजाति के उम्मीदवारों को पदोन्नति-पूर्व प्रशिक्षण देना अनिवार्य नहीं है।

(प्र.मु.का.अधि. के पत्र संख्या-P-HQ/RUL/105/2, दिनांक 13-07-2023)

ड) कनिष्ठ अभियंता (रेलपथ) पद संरक्षा श्रेणी का होने के कारण लिखित परीक्षा में सफल उम्मीदवारों को चिकित्सा श्रेणी (Medical classification) A-3 पास होना अनिवार्य है तथा पैनल में सफल उम्मीदवारों को उच्चतम ग्रेड में पदोन्नति/पदस्थापित करने के पहले प्रमोशनल कोर्स ट्रेनिंग सफलता पूर्वक पूर्ण करना है।

(3) आरक्षण का प्रावधान:

माननीय सर्वोच्च न्यायालय द्वारा निर्धारित शर्तों का अनुपालन निम्नानुसार किया गया है:

The Suitability is provisional subject to final outcome of the contempt Petitioner (Civil) No. 30621/2011 dt.26-09-2018 in the matter of Jarnail Singh & others Vs Lachhmi Narain Gupta & Others at Hon'ble Supreme Court.

(PCPO/BSP's Estt. Rule No.123/22 & 165/22 and 94/2024)

स्थापना नियम संख्या 54/2019 एवं 168/2022 अनुसार कनिष्ठ अभियंता(रेलपथ) पद PWBDs श्रेणी हेतु आरक्षित नहीं है।

(4) योग्य उम्मीदवारों की सूची:

क) अनुलग्नक -A (Main list) में 04 पदों के लिए कुल 12 पात्र कर्मचारियों का नाम है।

ख) अनुलग्नक -B (Stand by) में कुल 28 पात्र कर्मचारियों का नाम है।

ग) अनुलग्नक -C में अपात्र कर्मचारियों का नाम है।

संलग्न पात्र सूची एवं प्रतीक्षा सूची में दर्ज योग्य उम्मीदवार दिये गए प्रारूप (Annexure-D) में अपनी इच्छा/अनिच्छा सहित पूर्ण रूप से भरकर उचित माध्यम द्वारा वरि.मंडल अभियंता/समन्वय कार्यालय में प्रस्तुत करें। तदनुसार कर्मचारियों को वरीयता के आधार पर लिखित परीक्षा के लिए बुलाया जाएगा।

(5) कर्मचारियों के संबंध में सूचना:

वरि.मंडल अभियंता(समन्वय)/बिलासपुर से निवेदन है अपने अधीनस्थ इकाई पर्वक्षेत्रों को निर्देशित करें की उक्त अधिसूचना को योग्य उम्मीदवारों के मध्य व्यापक प्रचार प्रसार किया जाए तथा संबंधित इकाई के नोटिस बोर्ड में चस्पा किया जाए जो पूर्णतः वरिष्ठ अनुभाग अभियंता (रेलपथ) के जिम्मेदारी में रहेगा।

(6) अभ्यावेदन/आपत्ति प्रस्तुत करने की अंतिम तिथि (यदि कोई हो):

क) वरि.मंडल अभियंता(समन्वय)/बिलासपुर कृपया उम्मीदवारों द्वारा प्राप्त इच्छा/अनिच्छा एवं अभ्यावेदन/आपत्ति को एक समूह में प्रावरण पत्र के साथ दिनांक 17-02-2025 तक या उससे पूर्व इस कार्यालय को प्रेषित करें। प्रतीक्षा सूची में दर्ज उम्मीदवारों के नाम पर विचार पात्र उम्मीदवारों द्वारा अनिच्छा प्रस्तुत करने पर वरीयता/समुदाय अनुसार किया जाएगा।

ख) उक्त तिथि के पश्चात किसी भी अभ्यावेदन/आपत्ति पर कोई विचार नहीं किया जाएगा।

ग) उक्त अधिसूचना दक्षिण पूर्व मध्य रेलवे के वेबसाइट <http://www.secr.indianrailways.gov.in> में देखी जा सकती है।

Link of the Home page./ Div of SECR → Divisions → Bilaspur → Personnel → Notifications

आर.शंकरन 3/2/25
(आर.शंकरन)

सहायक कार्मिक अधिकारी-III
कृते, वरिष्ठ मंडल कार्मिक अधिकारी

प्रतिलिपि:मुख्य कार्यालय अधीक्षक/बिल्स-III एवं एपीएआर को सलाह दी जाती है की सर्व संबंधित पात्र कर्मचारियों की वार्षिक गोपनीय रिपोर्ट सेवा अभिलेख पुरस्कार संबंधी विवरण एवं एस.पी.ई./विजिलेंस/डी./ए. क्लियरेंस निश्चित रूप से तैयार रखे।

**APPLICATION FOR SUITABILITY (WRITTEN TEST EXAM) FOR THE POST OF JE(P.Way) IN PAY MATRIX
LEVEL-6 AGAINST 20% DPQ OF ENGINEERING DEPARTMENT.**

1. Name of the Employees :
2. PF NO. :
3. Designation/Station :
4. Date of Birth :
5. Community (UR/SC/ST/OBC) :
6. Date of Appointment :
7. Date of Promotion in TM-I :
8. Educational Qualification :
(Copy enclosed) :
9. Technical Qualification with Trade :
(Copy enclosed):
10. Willingness/Unwillingness :

Declaration : I hereby declare that the particulars furnished are true, complete and correct to the best of my knowledge and belief. I understand that, if at any stage it is found that the information furnished is false or incorrect or I do not satisfy/fulfill the eligibility criteria, my candidature/appointment on promotion is liable to be cancelled besides disciplinary action as per rules. I have read the content of the notification and agree to abide by the Rules, regulation and procedure prescribed for promotion to the post of JE(P.Way).

Date:

Signature of the Employee:

Name:

Design./Stn

Mob :

It is certificate that the particulars furnished by the employee are verified with the records available in this office and found to be correct. He/She fulfils the eligibility criteria as stipulated in the notification.

Date:

Signature of the Unit Supervisor

Station:

Name

Design:

Office Seal


Eligible Staff (Main List)

Sl. No.	PFNo./NPS No.	HRMS ID	Name(Sri/Smt)	Desig	Comm.	STN	DOB	DOA	Seniority No	Education/Tech. qualification	Remarks
1	39207968152	HTDKOD	CHETRAM KHUTE	TM-I	SC	BSP	05-03-1970	09-12-1997	5	12th	All details as per Service Record
2	39207966600	WPMEPT	CHANDRA KUMAR	TM-I	ST	PND	20-11-1968	14-05-1997	6	10th	
3	39207970328	OQPFGU	PYARELAL	TM-I	UR	BRH	08-11-1968	23-05-1997	8	10th	
4	39207520724	SODGGO	PRADEEP CHANDRA BHOI	TM-I	ST	BRJN	15-03-1971	09-02-1990	11	10th	
5	39207968395	WRXGTQ	VIDYA CHARAN URAON	TM-I	ST	RIG	23-05-1977	08-01-1998	12	10th	
6	39207970274	ICTDOR	SHANKAR PRASAD SAHU	TM-I	UR	BRH	12-08-1973	13-05-1997	13	10th	
7	39207970171	PFKFES	VIJAY KUMAR SAHU	TM-I	UR	BRH	12-05-1973	11-05-1997	17	10th	
8	39207970377	HNHGBU	SURENDRA KU. VISHWAKARMA	TM-I	UR	BRH	12-04-1974	09-12-1997	18	10th	
9	39204AB0152	PDUXJP	ARUN PRASAD RAJWADE	TM-I	OBC	BRH	05-01-1980	10-01-2004	23	10th	
10	39204AB0521	NUDAWF	PRAMOD KUMAR	TM-I	OBC	BRH	22-03-1978	12-01-2004	24	M.A./ITI	
11	39204AB0578	OPERMG	RAMNATH PATLE	TM-I	SC	MDGR	13-09-1971	06-02-2004	25	M.A.	
12	39204AB0580	WMRBZT	DASHRATH LAL KAMAL	TM-I	SC	BJRI	09-05-1973	06-02-2004	26	10th	

8/3/24

Eligible Staff (Stand By List)

Sl. No.	PFNo./NPS No.	HRMS ID	Name(Sri/Smt)	Desig	Comm.	STN	DOB	DOA	Seniority No	Education/Tech. qualification	Remarks
1	39207555155	QTJYQR	RAJA RAM VASTRAKAR	TM-I	SC	KGS	17-05-1967	16-05-1992	28	11th	All details as per Service Record
2	39207969302	WMMJUN	CHANDRAMA PRASAD MEERE	TM-I	SC	KGS	12-07-1971	09-05-1997	31	12th	
3	39207972830	HEIBQO	BHARAT SINGH PAIKRA	TM-I	ST	KGS	01-07-1970	10-12-1998	33	B.A.	
4	39207974942	GRDUCH	LAVKUSH	TM-I	OBC	BUA	01-07-1970	24-12-1998	34	12th	
5	39207974115	KBYXDE	RAMESH KUMAR SIDAR	TM-I	ST	BUA	01-07-1976	08-01-1999	35	12th	
6	39207975387	AYIDAJ	DAMODAR PRASAD KANWAR	TM-I	ST	KRBA	03-05-1968	15-01-1999	36	12 th / ITI	
7	39207975946	UZFQIC	PUSPENDRA KUMAR YADAW	TM-I	OBC	BUA	14-06-1979	16-01-1999	37	12th	
8	39207976768	YAMRSY	SITARAM MARAVI	TM-I	ST	CPH	01-04-1973	25-02-1999	42	12th	
9	39207973214	PQITXY	VIJAY KUMAR MIRI	TM-I	SC	KRBA	02-07-1978	12-11-1998	44	B.A.	
10	39207975405	HBIZGT	SANTOSH KUMAR KAUSHIK	TM-I	OBC	KRBA	05-07-1965	22-01-1999	45	ITI	
11	39207968401	SEBDTL	HORILAL SIDAR	TM-I	ST	JMG	01-07-1975	25-01-1998	46	10th	
12	39207968620	OIOZGQ	PAWAN KUMAR	TM-I	ST	KRBA	09-06-1973	26-12-1997	47	12th	
13	39207973792	NLWZFG	SHIV PRASAD MIRI	TM-I	SC	KRBA	01-05-1969	10-12-1998	50	12th	
14	39207976422	HOFMTJ	SHOBHIT RAM LAHRE	TM-I	SC	BUA	10-11-1968	07-01-1999	51	12th	
15	39207980875	PCBQAM	DASHRATH PRASAD	TM-I	OBC	BUA	25-06-1967	27-03-2002	52	12th	
16	39207970961	JJOYBB	UMEND RAM KEWAT	TM-I	OBC	KGS	05-06-1974	11-05-1997	53	10th	
17	39207973858	ODSOGG	SANTOSH KUMAR SHRIVAS	TM-I	OBC	KGS	12-03-1971	29-12-1998	54	B.A.	
18	39207970134	SPRMFR	RAJ KUMAR MAHDEVA	TM-I	SC	MDGR	06-02-1970	13-05-1997	56	B.A.	
19	39204AB0416	CJHTYU	FAGURAM SONWANI	TM-I	SC	UMR	07-12-1974	25-02-2004	57	10th	
20	39207968115	NSXUCQ	KAILASH CHHADIYAA	TM-I	SC	APR	22-12-1972	07-12-1997	58	10th	
21	39207974139	OBGHXC	BRIDHI CHANDER MINJ	TM-I	ST	RIG	10-01-1974	08-01-1999	62	M.A.	
22	39204AB0186	PWNWHF	PRAPHUL TETE	TM-I	ST	BRJN	15-03-1974	16-01-2004	65	B.A.	
23	39204AB0233	XHTJXN	DINDAYAL MAITRY	TM-I	OBC	RIG	23-03-1968	20-01-2004	66	M.A.	
24	39207AB1046	XOTAKN	ITENDRA KUMAR	TM-I	OBC	RIG	24-06-1970	05-10-2007	67	B.Sc./ Diploma	
25	39207AB1107	ANLRIR	ARUN KUMAR	TM-I	SC	BRS	05-04-1987	26-10-2007	68	12th	
26	39207966015	BPEBCC	GIRVARDHAN MARBAL	TM-I	SC	CPH	30-06-1975	08-05-1997	69	12th	
27	39207972933	LYQNDP	RAJENDRA KUMAR KARSH	TM-I	OBC	CPH	12-06-1970	25-11-1998	70	12th	
28	39209781729	NQAXDE	RAVI KUMAR KAUSHIK	TM-I	OBC	BSP	14-06-1978	17-12-2003	72	12th	

Ineligible Staff

Annexure - C

Sl. No.	PFNo./NPS No.	HRMS ID	Name(Sri/Smt)	Desig.	Comm.	STN	DOB	DOA	Seniority No	Education/Tech. qualification	Remarks
1	39207970640	CYNDEZ	SUNEEL KUMAR	TM-I	SC	CPH	08-04-1965	07-01-1998	21	B.A.	Would not be able to join the post in view of Retirement & Mandatory training.
2	39207973767	BFXWRE	RAM KUMAR TELI	TM-I	OBC	RIG	10-06-1965	08-12-1998	22	11th	
3	39207971515	CDFJOK	MANAKOO RAM DIWAKER	TM-I	SC	KRBA	17-05-1966	08-05-1997	29	12 th / ITI	

Sl. No.	PFNo./NPS No.	HRMS ID	Name(Sri/Smt)	Desig.	Comm.	STN	DOB	DOA	Seniority No	Education/Tech. qualification	Remarks
1	39207555325	DPPPOI	BAHADUR SINGH	TM-I	UR	BSP	01-01-1967	24-02-1995	1	5th	Due to not possessing requisite qualification
2	39207551769	UOKCYJ	DAYARAM	TM-I	UR	BRH	12-08-1967	02-08-1990	2	8th	
3	39207551915	KJBCFS	LAXMAN LAL	TM-I	UR	BRH	28-05-1965	13-05-1991	3	8th	
4	39207554679	BNLFMW	ANAND RAM	TM-I	OBC	BRJN	13-10-1965	24-02-1994	4	7th	
5	39207518912	ZAMRLT	RAM CHARAN	TM-I	ST	APR	01-07-1967	06-03-1981	7	ILLITERATE	
6	39207553808	JPYGNB	HEMRAJ RATHOUR	TM-I	OBC	PND	12-02-1966	14-07-1990	9	2nd	
7	39207556690	OIRMEQ	RAMJIT	TM-I	UR	BRH	06-02-1974	22-12-1995	10	ILLITERATE	
8	39207970330	ZGRSXS	YADAVRAM	TM-I	UR	BRH	05-11-1970	22-05-1997	14	8th	
9	39207970353	ZPWEIW	MANMOHAN SINGH	TM-I	ST	BRH	02-05-1975	11-12-1997	15	5th	
10	39207970195	BLWKMS	KOSHISH LAL	TM-I	UR	BRH	10-03-1969	11-05-1997	16	6th	
11	39207551514	DQFRPN	GOPAL	TM-I	OBC	PND	01-05-1969	30-08-1992	19	4th	
12	39207970183	RIXDSO	BRIJENDRA LAL	TM-I	UR	MDGR	15-02-1970	13-05-1997	20	5th	
13	39204AB0402	MQINZO	KAMLESH PRASAD DAHAYAT	TM-I	SC	BRB	23-10-1974	11-02-2004	27	8th	
14	39207969156	XYKDU	RAMBHAKT	TM-I	OBC	KGS	14-08-1967	09-05-1997	30	8th	
15	39207973410	ESFRLU	DEWARI LAL YADAW	TM-I	OBC	BRJN	17-07-1968	27-11-1998	32	8th	
16	39207976896	KJNUCP	DINESH KUMAR	TM-I	OBC	BRJN	06-11-1973	31-05-1999	38	8th	
17	39207554000	DXOTRM	JAWAHAR LAL	TM-I	ST	PND	10-01-1972	20-10-1993	39	7th	
18	39207970663	YSPJUD	KRISHNA DHAN	TM-I	ST	CPH	22-10-1969	07-01-1998	40	8th	
19	39207973380	YUHPLZ	DASARATH BAG	TM-I	ST	BRJN	21-06-1968	02-11-1998	41	6th	
20	39207548965	NZHWUZ	SUKHI RAM YADAV	TM-I	OBC	SDL	15-07-1967	26-06-1990	43	8th	
21	39207976252	WKZXYW	SHIV PRASAD	TM-I	SC	KRBA	10-01-1975	04-03-1999	48	8th	
22	39207555258	CGOSMG	BHUWANLAL	TM-I	OBC	BUA	07-01-1968	25-01-1991	49	ILLITERATE	
23	39207979083	DGEOKR	RAM KRISHANA	TM-I	ST	KGS	15-08-1981	22-09-2000	55	9th	
24	39207976471	KMZQGT	HARIDAS	TM-I	SC	APR	27-07-1969	25-01-1999	59	8th	
25	39204AB0388	SBREFA	KESHAV PRASAD BELDAR	TM-I	SC	SDL	08-03-1979	31-01-2004	60	8th	
26	39207965874	YOGBJU	ABHAYRAM RATHIA	TM-I	ST	RIG	12-03-1975	10-05-1997	61	8th	
27	39207976288	LUFRQF	KUBER SA	TM-I	ST	BRJN	04-05-1968	20-04-1999	63	7th	
28	39207979745	WQZCIJ	NAROTTAM GANDHA	TM-I	SC	BRJN	16-02-1981	25-06-2001	64	8th	
29	39207976434	HZUTHS	SALIKRAM	TM-I	OBC	CPH	09-09-1973	02-02-1999	71	8th	

Syllabus for Promotional Examination of JE/P-Way against 20% DPQ.

ORGANIZATION OF RAILWAYS, DUTIES OF P-WAY STAFF -

- 1 Overview of organization of Railways.
- 2 Brief introduction to track and its components particularly related with inspection.
- 3 Duties of JE/P-Way and inspection schedule of JE/P Way.

RAILS & JOINTS

- 1 Rail, Evaluation of Weight and its relation to axle loads.
- 2 Standard section, grade, UTS & service life, classification, Rolling marks.
- 3 Careful loading, unloading, stacking & handling of rails, special precautions for high UTS/HH rails.
- 4 Corrosion, Anticorrosion treatment.
- 5 Wear & its causes. Wear limits of different rail section.
- 6 Joints. Types, fish-plate, fish-bolts, anti-sabotage, fish-bolts, Combination fish-plates, Skimmed fish-plates, Chamfering of bolt holes, expansion/contraction of rails, requirement and provision of gap at joints, gapless/machined joints, Relation to rail temperature.
- 7 Fracture, codification, Restoration of traffic, how to report.
- 8 Preservation and testing of fractured rails.
- 9 USFD: Ultrasonic flaw detection, fundamentals of ultrasonic waves, defect detection, need based concept of USFD, components tested, frequency of testing, marking of defects, type of defects & action to be taken, brief description of various types of USFD machines and probes used, calibration and sensitivity types of USFD machines and probes used, calibration and sensitivity checking, defect codification, limitations of USFD, SPURT Car.

SLEEPERS & FASTENINGS

- 1 Concrete sleepers. Mono-block/Wide base PSC sleeper General aspects, Instructions for usability of different sleepers on different routes, main lines and long welded rails, Spl Sleepers for L-Xings, turnout, SEJ, bridges approach and sharp curves.
- 2 Precaution for handling of PSC sleepers.
- 3 Fastenings for PSC sleepers: Malleable cast iron inserts. Elastic Rail Clips, various types, toe load and its measurement, criteria for fastening renewal. Rubber pads, Liners, Anti sabotage arrangements for various sleepers. Creep anchors, method for fixing. Box anchoring. Greasing and anti-corrosive measures.
- 4 Sleepers at joints & their spacing for concrete sleeper track.

FORMATION & BALLAST

- 1 Typical sections of track on banks and cuttings for single/double lines on all gauges.
- 2 Drainage, Slope on top of formation, side and catch water drains.
- 3 Ballast sections of different routes for straights and curves on single/double lines. On different gauges for fish plated track. SWR and LWR. Sections for branch lines, Loop and sidings. Requirement Ballast Cushion required for various routes.
- 4 Quantities for different sections.
- 5 Specification for track ballast.

Railway Track & Track Structure-I

- 1 Different Gauge
- 2 Classification of Routes

TRACK STRUCTURE IN YARDS

- 1 Track Structure(Yards), Simple layouts, loops, gathering lines, overrun line, shunting neck, hot axle/fuel stabling siding.
- 2 Isolation derailing switch, Scotch block, Sand hump, dead ends, Catch & slip siding, Fouling marks, Restriction in use of 1 in 8.5 turnouts on passenger lines.
- 3 Restrictions regarding change of grade on approaches of turnouts.

TURNOUTS - INTRODUCTION

- 1 Standard types, ordinary built-up and Cast manganese crossings, Straight switches, Curved switches, Thick web Switches, Derailing switches, Spring points, Other crossing types. Permissible wear limits of crossing and tongue rail, Turn in/ Turnout curve.
- 2 Permissible speeds, Restrictions on use of 1 in 8.5 Turnout on Passenger Running Lines, Symmetrical split.

TURNOUTS- ASSEMBLY & LAYING

- 1 Method of Assembling all Turn Outs, Main dimensions and off sets of lead curve for setting out.
- 2 Contrary and similar flexure turnouts: Definition.
- 3 Methods of Assembly.
- 4 Main dimensions for setting out, laying and maintenance of fan shaped turnouts, maintenance of Turn Outs with reference to CMS Crossing.

DIVERSIONS

- 1 Definition, Types of diversions.
- 2 Standard for laying diversions
- 3 Calculating length of diversions.

TRACK STRUCTURE -II

LEVEL CROSSINGS

- 1 Features of track at and in approaches of level crossings, Annual overhauling, maintenance of road surface and approach track, Check Rails-types, correct clearance, . Visibility, Classification of LC
- 2 Requirement Checking of equipments and knowledge of rules of Gatemen.
- 3 Inspection of L-Xing, Duties of Gate Keeper, Hot axle train parting.
- 4 Speed breakers, Road sign Boards, Provision of new LCs, Manning, De-Manning, Interlocking & replacement with ROB, closure, shifting and replacement with limited height subway/RUBs, Elimination Specification.

BRIDGES AND TRACK STRUCTURE ON BRIDGES

- 1 Bridges: Track Structure on Girder Bridges, ballasted decks, arch bridges, tunnels, provision of guard rails.
- 2 Importance of maintaining correct gauge, Alignment & tight fastenings, preparation.
- 3 Attention to approach track and strengthening, Cleaning of water way, Checking guard rails

BALLAST DEPOT, TRAINING OUT BALLAST, DMT OPERATION**WELDED RAILS****SHORT WELDED RAILS(SWR)**

- 1 Conditions of laying, Maintenance of SWR.
- 2 Gap Survey & adjustment of gap.

LONG WELDED RAILS(LWR)

- 1 Permitted locations for laying, Track Structure, Laying of LWR.
- 2 De-stressing-with and without rail tensors.
- 3 Repairs of rail fractures.
- 4 Repairs of buckling.
- 5 Maintenance precautions, Overhauling, Deep screening, Renewal.
- 6 Determination of stress-free temperature.
- 7 Inspection of LWR and remedial actions for correction of gaps at SEJ, Hysteresis loop.
- 8 Competency level to carry out various works in LWR Track, Dos & Don'ts.

WELDING OF RAILS

- 1 SPW, Wider gap, Welding, compressed air pre heating, 3 piece mould AT welding technique.
- 2 Precautions to be observed during AT welding for good quality.
- 3 Tolerance for finished AT welds and FB welds.

MAINTENANCE

- 1 Approved systems, Systematic Maintenance conventional through packing, directed track maintenance and 3-tier system of maintenance.
- 2 Record of Gang work, Gang chart/Diary, Keyman's Diary, Mate's Diary, Record of work of Artisans and other workmen.

REGULAR MAINTENANCE OPERATIONS

- 1 Maintenance of concrete sleeper track.
- 2 Deep Screening.
- 3 Lubrication of joints & Lubrication of rails in straight and on curves, maintenance of rail joints.
- 4 Incidental works: Creep, Importance of joint gaps, Gap surveys.
- 5 Buckling.
- 6 Lifting & lowering of track: Undesirability of lowering, maximum lifting/lowering at one time, Provision of ramps at ends, Adequate ballast cushion and drainage after lowering.
- 7 Overhauling, Maximum wear of xing making up wear by welding, Welding of joints on turnouts, gapless joints of xing joints.
- 8 Maintenance in electrified territories, maintenance of track circulated sections, use of insulated trolleys, Gauges and other tools maintenance of insulated joints, glued joints, Felling/Cutting/Pruning of trees obstructing view or very close to OHE.

PROTECTION, RESTRICTIONS & ENGINEERING INDICATORS

- 1 Hand signals in day and night, Hand flags, Hand lamps, Banner flags, Detonators & Fuse, Life of detonators, testing, fog signals/fuse.
- 2 Engineering, Indicators, Fixing of Engineering Indicator for various works. Temporary and Permanent Speed restrictions. Speed restrictions for various works.
- 3 Works of short and long duration, Protection during emergency Caution order.

BALLAST DEPOT, TRAINING OUT BALLAST, DMT OPERATION	
WELDED RAILS	
SHORT WELDED RAILS(SWR)	
1	Conditions of laying, Maintenance of SWR.
2	Gap Survey & adjustment of gap.
LONG WELDED RAILS(LWR)	
1	Permitted locations for laying, Track Structure, Laying of LWR.
2	De-stressing-with and without rail tensors.
3	Repairs of rail fractures.
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3	Lubrication of joints & Lubrication of rails in straight and on curves, maintenance of rail joints.
4	Incidental works: Creep, Importance of joint gaps, Gap surveys.
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6	Lifting & lowering of track: Undesirability of lowering, maximum lifting/lowering at one time, Provision of ramps at ends, Adequate ballast cushion and drainage after lowering.
7	Overhauling, Maximum wear of xing making up wear by welding, Welding of joints on turnouts, gapless joints of xing joints.
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PROTECTION, RESTRICTIONS & ENGINEERING INDICATORS	
1	Hand signals in day and night, Hand flags, Hand lamps, Banner flags, Detonators & Fuse, Life of detonators, testing, fog signals/fuse.
2	Engineering, Indicators, Fixing of Engineering Indicator for various works. Temporary and Permanent Speed restrictions. Speed restrictions for various works.
3	Works of short and long duration, Protection during emergency Caution order.

PATROLLING

- 1 Necessity of Patrolling.
- 2 Kinds of patrolling i.e. Key man's daily patrol, Gang patrol, Monsoon security, Hot & Cold weather patrolling, Watch at vulnerable points, Weather warnings, Single and double frequency patrolling.
- 3 Patrol charts, Patrol books and equipment's, Selection and duties of patrolmen.
- 4 Night checks & Inspections.
- 5 Felling/Cutting pruning of tress obstructing view & very close to OHE.

MECHANIZED MAINTENANCE

- 1 3-Tiers system of track maintenance, Working of MMUs.
- 2 Small track machines: types, use in maintenance, spot attention with off track tampers, Troubleshooting and system of repairs & maintenance.
- 3 Pre-requisites to tamping of plain track & turnout tamping and other machine working like BCM, PQRS, TRT, T-28, etc. Pre & Post and during attentions for tamping and other machine working.
- 4 Design mode tamping : Survey and procedure of tamping.

TOOLS & EQUIPMENTS

- 1 Measuring tools.
- 2 Regular Maintenance Tools.

TROLLEY/LORRY/DOLLY WORKING

- 1 Distinction between Trolley, Lorry & motor Trolley.
- 2 Protection, Working of rail dolly and its protection.

RECONDITIONING OF MATERIALS AND TOOLS

- 1 Reconditioning of worn-out crossings and switches, type of electrodes used.

SAFETY

CURVES

HORIZONTAL CURVES

- 1 Degree of curve, Types of curves, Relation between degree, Radius, Chord and versine, Standard chords to be used for stringing.
- 2 Record in SE/P-Way's curve register checking of alignment after derailments and for turn in and turnout curves.
- 3 Super elevation/equilibrium cant, Maximum cant for normal and high speed trains, Cant deficiency and cant excess, Formula for safe speed on curves, Equilibrium speed, Calculation of cant to be provided and permissible speed, Transition length, Maximum cant gradient, Rates of running out of cant and cant deficiency.
- 4 Types of curves, Setting out of curves, Cubic parabola off sets for setting out transition curve, Shift calculations for setting out complete curve with theodolite.
- 5 Miscellaneous – Running out cant on transitioned curves, Gradient rail, Laying of rails on curves, Mid stagger joints on sharp curves, Curve markers and cant boards. Lubrication on curves.
- 6 Widening of gauge on curves, Extra clearance on curves, Minimum length of straight between reverse curves.
- 7 Curves with similar and contrary flexure. Calculation of cant to be provided and permissible speed, Curve with X-over und diamonds.

VERTICAL CURVES

- 1 Calculations and setting out a vertical curve, Level pegs for accurate maintenance.
- 2 Vertical curves on LWR.

REALIGNMENT OF CURVES

- 1 Re-alignment of curves, String lining of curves, Need for curve, Adjustment.
- 2 Calculations of slews by double summation method.
- 3 Slewing to revised versine Local adjustment.
- 4 Optimization method of curve realignment.

SAFETY EQUIPMENTS & TRAINING

1. Detonator and its life.
2. Training of Mate, Keyman & Trackman.
3. Category of Medical Examination.
4. Authorized level of supervision for various track works.

SCHEDULE OF DIMENSION-2022

1. Standard Dimension for new/existing work(Chapter-I)
2. Standard Dimension related to Station Yards(Chapter-II)
3. Standard clearance for various structures pertaining to track.

TRACK RENEWALS

- 1 Casual renewals, Complete track renewals, Through rail renewals, Through Sleeper renewals, Through fitting renewal and through ballast renewal.
- 2 Criteria for unserviceability for casual renewals.
- 3 Criteria for various track renewal works.
- 4 Methods of renewals, Preparation, Labour Organisation, Tools, Ballast.
- 5 Careful handling of materials, Speed restrictions and post relaying attention
- 6 Picking of released materials, Classification & disposal, Relaying with PQRS equipment, Record of relaying, Track relaying train, Relaying of turnout with T-28, New track laying standards, handing over, Taking over of new track.

INSPECTIONS, TRACK RECORDING & MONITORING

- 1 Riding quality, TGI, Track geometry, Condition of track structure, Correct methods of work, Testing knowledge of rules.
- 2 Inspection of Points & Crossings, Curves & other special Structure and their frequency of inspection.
- 3 2 Method of Inspection: Push trolley, Motor trolley, Foot inspection, Engine & Rear van Inspection, Amsler car, TRC, Oscillography car, OMS.
- 4 Inspection of track geometry, inspection of Gang's work: quality, methods, progress, tools and equipments, knowledge of rules, attendance, Gang chart and diary, inspection of finished work, Inspection of bad riding spots, spots identified by TRC for urgent maintenance, Frequency of TRC/OMS, Systematic measurement and investigation of defect.

ACCIDENTS & DISASTER MANAGEMENT

- 1 Duties of JE/P-Way in disaster management.
- 2 Sounding of hooters & classification of accidents.
- 3 Action to be taken on reaching site, First aid, preservation of clues, Assessment of men and materials for restoration, Recording site and track particulars, Preparation of a sketch, Expeditious restoration.
- 4 Drivers report on bad riding, Breaches & its types, Prevention & action during breach, Vigilance on Railway Affecting tanks.

CE-MIS (TMS)**TMS**

- 1 Track Management System: Introduction to TMS, purpose, advantages, main feature.

CONTRACT MANAGEMENT

- 1 Various registers to be maintained for progress, Quality, safety of contractors persons, Safety measures at work site.
- 2 Preparation of Contractor's On-Account/Running & Final Bills. Material Statements, Maintenance Period.
- 3 Hiring of tools and plants to Contractors.
- 4 Duties towards payment to contractor's labour and maintenance of records as per labour laws.

LAND MANAGEMENT

- 1 Demarcation of land boundaries.
- 2 Type of encroachments and PPE Act.

OFFICE & STORES

- 1 Procuring of office stationery and stores. Procuring of P.Way stores for maintenance and for special works. Classification of stores. Accountal of stores. Stock verification reports. Disposal of scrap & surplus stores. Overhauling of stores. Numerical ledgers & inventory control. Section register of SE/P.Way.
- 2 Classification of stores. Stock verification. Stock Sheet. Submission of returns. Inventory control. Maintenance of DMTR and ledgers. Submission of store returns in time. Materials at site register. Imprest Store. T&P Store.
- 3 Functioning of divisional Stores Depots and Track Depot. Requirement of materials for casual renewal and sanctioned renewals. Working out list for track materials. Proper care & upkeep of store.

PERSONNEL

- 1 Wage period. Bill preparation. Filling up of TA & OT Journals. Witnessing of payment, unpaid wages.
- 2 Passes and leave.
- 3 Establishment Records in SSE/JE P.Way office.
- 4 Settlement:- PF. Pension. Gratuity. Leave Encashment. Filling up of Pension Booklet.
- 5 Railway Services (Conduct) Rules. D&A Rules.
- 6 Categories of staff under Hours of Employment Regulations.
- 7 Labour Laws – overview: Display of Statutory Notices. Inspection by Labour Enforcement Officer.
- 8 Payment of Wages Act. Minimum Wages Act. Contract Labour Act.
- 9 Workmen's Compensation Act. Action in case of injury on duty. Ex-Gratia Payment.

RAJBHASHA

- 1 Directives in use of Raj Bhasha in day-to-day working.
2. Rajbhasha Act 1963 & Rajbhasha Rules-1976