

South Eastern Railway, CKP Division
Selection for the post of Chief Loco Inspector in Pay Level L-07
of Pay Matrix [Grade Pay Rs.4600/- VI PC] in Electrical/Mechanical [Running] Department
MODEL QUESTION PAPER

दिनांक Date : अथवा **Duration : 2 Hours** अधिकतम अंक **Max. Marks : 100**

Instructions to Candidates:

- 1 Read the Question Paper carefully, before answering them.
- 2 Do not write your Name or Roll Number or any instructions anywhere in the Answer Book Except in Fly Leaf. If the name of the candidate or roll number is found in any other place other than the fly leaf, the answer book will not be evaluated.
- 3 No Corrections of any type [cutting, overwriting, erasing, scoring off a ticked answer and ticking another answer and modifying the answer in any way] are permitted. If made that answer shall not be evaluated.
- 4 Usage of cell phones, calculators and other electronic gadgets inside the examination hall not permitted.
Any discrepancies, if found in Hindi translation, English version will be final.
- 5 There shall be **negative marks** for incorrect answers. **One third marks** allotted for each question will be deducted for Incorrect answers

6 Total 110 Questions are divided into three sections.

Section-1 Rajbhasha -10 question (10 MARKS)

Section-2 GENERAL SETION-80 questions .out of 80 question ,70 question to be answered (70 MARKS).first 70 question attempted to be evaluated in the section only.

Section -3 having 20 question (20 MARKS) are divided into two parts .Part I or Part II ,only one part is to be answered as per candidates core department.

Note :-

- This model question paper is for guidance and illustrative only.
- The question paper is prepared as per the syllabus and for general guidance of applicants only.

Choose the Correct Answer

Section - "A" (Rajbhasha Hindi) 10 marks

1	संविधान के किस अनुच्छेद के अनुसार हिंदी देश की राजभाषा है ?	
a)	343 (1)	b) 346 (1)
c)	343 (4)	d) 343(6)
2	संसदीय राजभाषा समिति की कौन सी उप समिति रेल कार्यालयों का निरीक्षण करती है	
a)	तीसरी	b) दूसरी
c)	पहली	d) चौथी
3	संसदीय राजभाषा समिति में कुल कितने सदस्य होते हैं	
a)	10	b) 16
c)	30	d) 18
4	भारतीय संघ की राजभाषा के बारे में संविधान के किस अनुच्छेद में प्रावधान किया गया है	
a)	अनुच्छेद 351	b) अनुच्छेद 343
c)	अनुच्छेद 344	d) अनुच्छेद 345
5	भारतीय संविधान की अष्टम अनुसूची में कितनी भाषाएं शामिल हैं	
a)	32	b) 18
c)	22	d) 10
6	रेलवे बोर्ड द्वारा तकनीकी रेल विषयों पर हिंदी लेखन के लिए कौन सा पुरस्कार प्रदान किया जाता है	
a)	राजीव गांधी	b) मैथिलीशरण गुप्त
c)	प्रेमचंद	d) कोई नहीं
7	संसद के दोनो सदनों द्वारा राजभाषा संकल्प किस वर्ष में पारित किया गया	
a)	1950	b) 1968
c)	1956	d) 1960
8	रेल मंत्रालय द्वारा चलाई जा रही उस पुरस्कार योजना का नाम बताएं जो आम जनता और रेलकर्मियों दोनों के लिए उनके रेल यात्रा के दौरान हुए अनुभव को हिंदी में लिखने के लिए चलाई गई है	
a)	रेल हिंदी निबंध पुरस्कार योजना	b) रेल यात्रा वृत्तंत पुरस्कार योजना
c)	राजभाषा गौरव पुरस्कार	d) कोई नहीं

9	राजभाषा नियम 1976 के सदरम में भाषिक क्षेत्र के हिसाब से नागालैंड किस क्षेत्र के अंतर्गत आता है	
a)	क क्षेत्र	b) ख क्षेत्र
c)	ग क्षेत्र	d) घ क्षेत्र
10	राजभाषा नियम 1976 के किस नियम के तहत किसी कार्यालय को हिंदी में काम करने के लिए अधिसूचित किया जा सकता है	
a)	8(4)	b) 7(2)
c)	10(4)	d) 9

Section – "B" (answer any 70 questions) 70 marks

11	When explosion sound is heard by SM and location is not known and light engine could not be sent for testing purpose, the whole train shall be allowed to go with a restricted speed of _____ KMPH	
a)	15	b) 10
c)	25	d) 40
12	Light engine which is going to open communication shall proceed on _____ authority.	
a)	T/C 609	b) T/B 602
c)	T/D 611	d) T/B 612
13	Rail fracture of more than 30 mm or multiple fractures, certification shall be given by _____ and above rank.	
a)	DEN	b) AEN
c)	PWI	d) None of the above
14	_____ Gradient is considered as dangerous for shunting roller bearing wagon and _____ gradient for non roller bearing wagons.	
a)	1 in 400-1 in 260	b) 1 in 300- 1 in 450
c)	1 in 100-1 in 150	d) 1 in 400 -1 in 500
15	The BPC of a material train with UIC Bogie. Airbrake stack is valid for _____ days subject to examination of the train by TXR once in _____ days	
a)	30,15	b) 25,10
c)	15,5	d) 20,15
16	Empty / Load handle shall be kept in load position when the gross load is above _____ tones	
a)	45.5	b) 44.5
c)	42.5	d) 50
17	When non-CC rake train is stabled for more than _____ hours fresh BPC is required.	
a)	52	b) 36
c)	24	d) 96
18	In emergency a goods train without brake van or without guard is ordered by _____	
a)	Sr DOM	b) CSO
c)	COM	d) Sr DSO
19	When leading compartment of electric engine is defective and the train is driven from trailing cab by Asst LP, the speed shall not exceed _____ kmph.	
a)	50	b) 25
c)	40	d) 60
20	When engine pushing a train and guard is traveling in brake van, which is leading, the speed shall not exceed _____ kmph, when guard is not traveling in leading vehicle, the speed shall not exceed _____ kmph.	
a)	15/10	b) 25/8
c)	40/25	d) 25/10
21	When LP passes starter at "ON" partly and stopped before Advanced starter subsequently line clear is taken. _____ will be given	
a)	PLCT & T/369 3(b)	b) Taking of Co acting signal
c)	taking off LSS	d) Non of the above
22	Pre-warning about defective reception signal is not required when there is _____ signal provision or when _____ is provided.	
a)	Repeating - clamping	b) Calling ON - telephone
c)	Co acting - VHF	d) Non of the above
23	"Danger zone" means the zone lying within _____ meters of any live equipment.	
a)	2.0	b) 1.5

c)	2.5	d)	3
24	If the night petrol man does not turn up even after _____ minutes beyond the schedule arrival time, SM shall stop all the trains and issue caution order restricting the speed to _____ kmph.		
a)	15,40	b)	20,15
c)	15,25	c)	40,15
25	Violently waving a white light horizontally across the body of a person indicates		
a)	Proceed	b)	Stop dead
c)	go slowly	d)	Move fast
26	Competency certificate issued to the tower wagon driver shall be valid from the date of the issue for a period of		
a)	one year	b)	three years
c)	two years	d)	Four years
27	Current collection test is carried out during		
a)	Night only	b)	During monsoon
c)	Before monsoon	d)	During summer
28	In 25 kV AC OHE, normal capacity of Lightning Arrester (heavy duty type)		
a)	66 kV	b)	42 kV
c)	25 kV	d)	32 kv
29	"F" jumpers are provided at		
a)	Insulated overlap	b)	Turnout
c)	Un-insulated overlap	d)	Non of the above
30	Which type of turnout is most suitable for high speed OHE		
a)	Knuckle type	b)	Cross type
c)	Over lap type	d)	Non of the above
31	In Indian Railways, what will be the maximum permissible % of unbalance voltage Continuously ?		
a)	1%	b)	3%
c)	2%	d)	5%
32	The distance of OHE section, for which "a traction transformer will feed power in emergent condition" is called		
a)	Feeding length	b)	Sector
c)	Feeding zone	d)	Elementary section
33	Where, insulated overlap is employed opposite TSS. Which relay is required to be provided TSS		
a)	Delta-I Relay	b)	Panto Flash over Relay 9
c)	PT indicator Relay	d)	Non of the above
34	Difference between two consecutive span length should not be more than		
a)	25 m.	b)	18 m.
c)	16 m.	d)	60m
35	At obligatory structure of turnout, It is general practice to give encumbrance		
a)	1.4 m. turnout OHE & 0.9 m main line OHE	b)	0.9 m. turnout OHE & 1.4 m main line OHE
c)	1.4 m. turnout OHE & 14 m main line OHE	d)	None of the above
36	Which type of turnout is direct anchoring in one span		
a)	Overlap type	b)	Overlap type & cross type
c)	Overiap type & Knuckle type	d)	None of the above
37	What will happen, if angle 120 degree at obligatory in turnout OHE structure in turnout contact wire		
a)	Stagger may be out	b)	Height cannot be maintained
c)	50 mm. gap between main line & turnout contact wires cannot be maintained	d)	None of the above
38	AC traction, height of contact wire from rail level in Car shed is		
a)	5.60 m	b)	5.75 m
c)	5.65 m	d)	7.5m
39	In AC traction, how many droppers in 54 m span length		
a)	8 Droppers	b)	7 Droppers
c)	6 Droppers	d)	9 droppers
40	Maximum stagger is allowed at mid span is		
a)	229 mm	b)	152 mm
c)	200 mm	d)	300 mm

41	Riding Index of ICF Coach is ----- .		
a)	3.5	b)	5.8
c)	4.78	d)	6
42	Maximum Speed of LHB Coach is ----- KMPH		
a)	(a) 120	b)	160
c)	(c) 110	d)	200
43	----- roller bearing is used in BTPN.		
a)	Cylindrical	b)	Plan
c)	Cartage taper	d)	None of the above
44	POH of BOX N Wagon is done at the interval of ----- month.		
a)	12	b)	09
c)	18	d)	24
45	POH of ICF Coach is done at the interval of ----- month.		
a)	24	b)	12
c)	18	d)	None of the above
46	Axle Load of Non- AC coach is -----ton.		
a)	16.0	b)	13.0
c)	20.3	d)	22.5
47	Minimum buffer height of coach from Rail level is ----- mm.		
a)	1030	b)	1105
c)	900	d)	None of the above
48	Length of modified brake beam hanger in Indo-German project is ----- mm.		
a)	325	b)	235
c)	250	d)	None of the above
49	Maximum Flange thickness of worn wheel profile is mm.		
a)	22	b)	16
c)	25	d)	20
50	Roof sheet thickness in BCNA wagon is ----- mm.		
a)	2.4	b)	0.6
c)	1.6	d)	3.5
51	Wheel base of casnub bogie is ----- mm.		
a)	2000	b)	1200
c)	2400	d)	2400
52	Length of anchor link is ----- mm.		
a)	451	b)	580
c)	500	d)	None of the above
53	Testing of alarm chain is done at ----- Kg weight.		
a)	05	b)	25
c)	10	d)	7
54	Greasing of equalizing stay rod is done in----- schedule.		
a)	A	b)	C
c)	B	d)	None of the above
55	A dimension of high speed Coach is -----mm.		
a)	16±2	b)	22±2
c)	18±2	d)	20±2
56	At Standard-I (R) interlocking station the maximum speed permitted for the train on ML is not more than _____ kmph.		
a)	15	b)	75
c)	50	d)	60
57	The maximum speed permitted on loop line is _____ kmph.		
a)	15/25	b)	15/30
c)	10/15	d)	15/60
58	The minimum distance from outer signal to outermost facing points on SL shall be _____ meters.		
a)	(A)400	b)	580
c)	(B) 420	d)	600
59	The distance from Home signal to BSLB shall not be less than _____ meters.		
a)	180	b)	400
c)	120	d)	300
60	_____ is the best positive method of isolation.		
a)	Cut Point	b)	Slip Siding

c)	Catch Siding	d)	Sand hump
61	Station limits are available between _____ signals at a Block Station.		
a)	Inner Most	b)	Home
c)	Outer Most	d)	starter
62	At Class „D“ station, station limits are available between _____.		
a)	Platform Ends	b)	Fog Signal Posts
c)	BSLB	d)	None of the above
63	If train parting is observed by any Railway Servant _____ signal should not be exhibited.		
a)	Right	b)	No
c)	Danger	d)	Non of the above
64	Block forward and Block back is permitted only on _____.		
a)	Single Line	b)	Triple Line
c)	Double Line	d)	Both single and double line
65	The normal aspect of distant signal on double distant signal area is _____ aspect.		
a)	Caution	b)	Danger
c)	Attention	d)	proceed
66	Axle counters and track circuits are treated as authorized _____.		
a)	Means of Communication	b)	Means of transport
c)	Means of Knowledge	d)	None of the above
67	At non-interlocked station, speed of the trains on main line shall not (A) exceed _____ kmph		
a)	15	b)	35
c)	20	d)	40
68	Distant signal location is _____ meters before the stop signal.		
a)	Not less than 1000 meters	b)	not less than 500 meters
c)	Not less than 200 meters	d)	not less than 1200 meters
69	Starter signal protects _____.		
a)	Facing Points	b)	Block Section
c)	Trailing Points	d)	All the above
70	To start a train from a station having common starter, the LP shall be given _____ + _____.		
a)	T/ 512, ATP, PHS	b)	T/511, ATP, PHS
c)	T/409, ATP, PHS	d)	None of the above
71	Normal speed can be restored in case of MANUAL deep screening After..... days?		
a)	20	b)	21
c)	10	d)	30
72	Wherever 22T axle load rolling stock running, min. depth of clean ballast cushion should be mm		
a)	250	b)	350
c)	300	d)	400
73	In „C“ class ODC gross clearance from standard moving dimension is mm		
a)	>225	b)	>150
c)	<75	d)	>100
74	Guard rail is provided on bridges to?		
a)	support the running rail	b)	support the bridge
c)	prevent serious damages in case of derailment	d)	All the above
75	Patrolling in pairs can be introduced with the approval of _____		
a)	PWI	b)	AEN
c)	DEN	d)	DRM
76	The PWI-in charge should check patrolling at nights by train once in a _____		
a)	Week	b)	Fortnight
c)	Month	d)	Quarterly
77	Flat tyre causes maximum damage at a speed of..... Kmph		
a)	90-100	b)	25-30
c)	50-60	d)	60-100
78	Sleeper to sleeper gauge variation limit is mm		
a)	5	b)	2
c)	4	d)	None of the above

79	Renewal consideration of service life in terms of total GMT for 52 kg rail is.....		
a)	600	b)	800
c)	625	d)	1000
80	The Maximum gradient in station yards should be unless special safety devices are adopted and/or special rules enforced		
a)	1 in 400	b)	1 in 260
c)	1 in 1200	d)	None of the above
81	10 hours use of 500 watt lamp will consume the energy		
a)	10 units	b)	5 units
c)	20 units	d)	15 units
82	A kilowatt-hour is a unit of		
a)	Energy	b)	Electrical potential
c)	Electric current	d)	Resistance
83	An electric lamp is marked 100 watt. It is working on 200 Volts. The current through the lamp is given as		
a)	0.5 Amp.	b)	0.2 Amp..
c)	5.0 Amp.	d)	1.0 Amp
84	Which of the following is used for rectification of AC supply		
a)	Diodes	b)	Capacitor
c)	Transistors	d)	Resistors
85	Commutated leave is admissible on		
a)	Medical Certificate	b)	Request of an employee
c)	Discretion of competent authority	d)	None
86	When resistances are connected in parallel, the equivalent resistance		
a)	Decreases	b)	No change
c)	Increases	d)	1 st increases then decreases
87	Which of the following is most effective method of artificial respiration		
a)	Mouth to mouth air pumping method	b)	To use bicycle air pump
c)	Both a & b	d)	None of the above
88	A 40 W box type fitting glows for 10 hrs in a day, electric charges for the month of June @ Rs. 3/- per unit will be Rs.		
a)	18	b)	360
c)	90	d)	60
89	Instrument connected in the circuit with the ammeter (in panel) to facilitate the measurement of current is		
a)	Current transformer	b)	Potential transformer
c)	Excitation transformer	d)	None of the above
90	Capacitor opposes		
a)	Instantaneous change of voltage	b)	Instantaneous change of current
c)	Instantaneous change in resistance	d)	Instantaneous change of power

Section – "C" (PART I) TECHNICAL (Electric LOCO) 20 marks

91A	During loco brake testing of WAG-9 or WAP-7, loco should not to move up to KN.		
a)	100	b)	125
c)	300	d)	200
92A	In 3 \emptyset loco, continuous pressing of PSA for more than 60 seconds is called asmode.		
a)	VCD isolation	b)	VCD acknowledgement
c)	Dead man	d)	Failure mode
93A	In 3 \emptyset loco, SS-10 belongs to sub system		
a)	Battery	b)	Brake system
c)	Auxillaries HB1	d)	Auxillaries HB2
94A	When ZTEL is switched ON Tractive Effort(TE) is limited to KN in WAG-9.		
a)	0.8 to 1.5	b)	300
c)	150	d)	500
95A	In 3 \emptyset loco, SS-18 belongs to sub system		
a)	Fire detection	b)	Memotel
c)	Processor FLG-1	d)	MU operation
96A	Parking brake is provided towheels in WAG-9 loco.		
a)	1, 4, 5 & 8	b)	2 & 11
c)	2, 6, 7 & 11	d)	1,2 & 11,12

97A	Over current relay in 3 ϕ loco is		
a)	OCR-86	b)	MVR-86
c)	OCR-78	d)	None of the above
98A	In gradient area and terminal goods yards Constant speed control (CSC) of 3 ϕ loco should not be used.		
a)	Up	b)	Undulating
c)	Down	d)	None of the above
99A	In WAG-7 or WAP-4, output is given to all TMs fields during RB.		
a)	RSI-1	b)	Both RSI-1 & RSI-2
c)	RSI-2	d)	None of the above
100A	While working 3 ϕ loco as banker, close coacs in pneumatic panel.		
a)	70& 136	b)	70&74
c)	74&136	d)	47 & 74
101A	Location of Harmonic filter resistances in 3 ϕ loco is		
a)	Loco roof	b)	Inside FB
c)	By the side of pneumatic panel	d)	By the side of HB 1 PANEL
102A	Location of Harmonic filter contactors in 3 ϕ loco is		
a)	Loco roof	b)	Inside FB
c)	By the side of pneumatic panel	d)	Under frame
103A	WAG-9 loco is havingtype of bogie.		
a)	Bo-Bo flexi coil	b)	Co-Co Tri mount
c)	Co-Co tetra mount high adhesion	d)	BO-BO high adhesion
104A	To apply parking brakes in 3 ϕ dead loco, press. side plunger of solenoid valve.		
a)	Left	b)	Any plunger
c)	Right	d)	None of the above
105A	Total oil /coolant points in WAG 9 or WAP 7 locos are		
a)	7	b)	6
c)	8	d)	13
106A	Hotel load facility is available in loco(s).		
a)	WAP-5	b)	WAP-7
c)	All WAP-5 and modified WAP-7	d)	WAG12
107A	Maximum permissible speed of WAG-9 loco is Kmph.		
a)	100	b)	140
c)	130	d)	200
108A	When ZTEL is switched ON Tractive Effort(TE) is limited to KN in WAG-9.		
a)	0.8 to 1.5	b)	300
c)	150	d)	200
109A	11 In 3 ϕ loco, if battery voltage drops below volts, loco will shut down		
a)	82	b)	90
c)	87	d)	100
110A	In 3 ϕ loco, for charging of BP pressure coc to be kept open		
a)	A-8	b)	74
c)	70	d)	47
Section-C (PART II) (Diesel loco section) 20 marks			
91B	Each Traction Motor provided with		
a	One speed sensor.	b	One speed sensor & one temp sensor
c	One temp sensor	d	One speed sensor or One temp sensor
92B	No. of Brake blocks in HHP Locos		
a	24	b	12
c	08	d	18
93B	When Computer controlled Breaker is recycled the disabled speed sensor.		
a	Remain Disabled	b	Gets enabled but not to be disabled again
c	Remain disabled but to be enabled	d	None of the above
94B	Brake warning Indication		
a	Excessive Main Alternator	b	Excessive Breaking current in DB
c	Excessive Air Breaking	d	Non of the above
95 B	B.P continuity not getting to train from a working WDG4 Loco due to		
a	Additional BP COC closed in train end	b	BP angle cock defective
c	In train end no BP pressure in loco	d	FP angle coc defective
96B	On run GR Trip then the engine		
a	Will shut - down	b	Comes to idle

c	No effect on engine	d	None of the above
97B	WDP4/WDG4 Hand break applies on wheels		
a	R4	b	R5
c	L4	d	R3
98B	Break cylinder pressure in WDP4/WDG4		
a	5.2 kg /sq.cm	b	4.8 kg /sq.cm
c	3.8 kg /sq.cm	d	6 kg/sq.cm
99B	ER/BP not creating.		
a	LT switch defective	b	Air brake failure
c	Penalty not reset	d	None of the above
100B	Load demand of the traction motor is met by		
a	EM2000	b	TCC
c	EM2000	d	None of the above
101B	Total No. of After coolers inWDP4/WDG4		
a	4	b	3
c	2	d	5
102B	Total no. of Water expansion tanks inWDP4/WDG4		
a	1	b	2
b	3	d	5
103B	Head light rating in WDP4/WDG4 loco is		
a	100W 32V	b	200W 30V
c	250W 32V	d	100 w 30v
104B	Flasher light working voltage		
a	72V	b	12V
c	24V	d	60 V
105B	No of Main bearings available in WDP4 Locomotives		
a	12	b	14
c	10	d	8
106B	OSTA in WDP4/WDG4 trip at minimum		
a	960RPM	b	1000RPM
c	1020	d	None of the above
107B	In WDP4/WDG4 BA consists of two zones		
a	Green zone & red zone	b	Green zone & yellow zone
c	yellow zone & red zone	d	None of the above
108B	No. of Radiator fan in WDP4 & WDG4 Locos		
a	02	b	01
c	03	d	04
109B	No. of Grid Blower Motors in WDP4 & WDG4 Locos		
a	04	b	02
c	03	d	01
110B	No. of Brake blocks in HHP Locos		
a	24	b	12
c	08	d	16