



दक्षिण पूर्व मध्य रेलवे
South East Central Railway



मुख्यालय, कार्मिक विभाग, प्रथम तल, महाप्रबंधक कार्यालय, बिलासपुर (छ. ग.) 495004
HEADQUARTER, PERSONNEL DEPARTMENT, 1st FLOOR, GM's OFFICE, BILASPUR (C.G.) 495004
No. P-HQ/CON/452/1/E/197 Date 09.08.2021

To
All Concerned

Sub:-Selection for promotion to Group "B" post of ADEN/AXEN in scale ₹ 9300-34800/-+GP ₹ 4800/- (VI th PC)/ Pay Matrix Level-8 (VII th PC) against 30% LDCE quota of Civil Engineering department in SECR


Ref: (1) This Office Confidential letter No. P-HQ/CON/452/1/E/178 Dt 22.07.2021
(2) This Office letter No. P-HQ/RUL/105/2 Dated 24.05.2021.
(3) PCE/SECR's letter No. PCE/SECR/EO/PS/AEN/AXEN 30% selection/66 dated 07.08.2021

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In references to (2&3) above Question Paper and Answer Keys of written examination conducted on **07.08.2021** for formation a panel of selection to the Group-'B' post of AEN/AXEN against 30% LDCE quota is hereby published to all concerned. If any discrepancies may be traced out, in the above answer keys, it may please be intimated to this office within **10 days, positively w.e.f.** the date of issue of this letter.

The Question Paper and Answer Keys of the above selection are also available in S E C Railway web site. [http\\ www.secr.indian railways.gov.in.Recruitment-HQ](http://www.secr.indian railways.gov.in.Recruitment-HQ)

DA: As above.


(Neeraj Anand)
Dy. Chief Personnel Officer (GAZ)
for Principal Chief Personnel Officer

Copy to :

- 1.All PHODs/CHODs of SECR. 2. DRM/BSP, R & NGP
- 3.CAO/Con/Bilaspur, PCPO /SER & Eco Rly/BBS.


for Principal Chief Personnel Officer

Fey

LDCE

ADEN/ AKEN

30%

Poe Qual. Pater

Answer Key

1	A
2	A
3	B
4	C
5	A
6	A
7	D
8	C
9	B
10	A
11	B DSL
12	A
13	D
14	B
15	D
16	A
17	A
18	C
19	D
20	A
21	D
22	A
23	C
24	B
25	C
26	D
27	B
28	D
29	A
30	D
31	D
32	D
33	C
34	B
35	D
36	C
37	D

38	A
39	A
40	A
41	B
42	B
43	A
44	D
45	A
46	C
47	D
48	A
49	C
50	D
51	D
52	D
53	C
54	A
55	A
56	D
57	D
58	B
59	B
60	D
61	B
62	A
63	C
64	B
65	A
66	B
67	B
68	A
69	A
70	A
71	D
72	C
73	D
74	C

75	C
76	D
77	D
78	A
79	D
80	D
81	D
82	D
83	B
84	D
85	A
86	D
87	D
88	D
89	B
90	B
91	D
92	B
93	A
94	D
95	C
96	B
97	D
98	A
99	B
100	D
101	B
102	C
103	C
104	D
105	A
106	D
107	C
108	D
109	D
110	C

S.

Each question carries 1 mark

In Section A, all questions are compulsory.

In Section B, attempt any 30 questions

In Section C, all questions are compulsory

There shall be negative marking for incorrect answers. One-third of the marks allotted for each question will be deducted for every wrong answer.

No corrections of any type (cutting, overwriting, scoring off a ticked answer, ticking another answer, erasing, modifying the answer in any way) will be permitted.

Zero marks will be awarded in such cases of corrections.

Every question has four options numbered as A, B, C, D (in capital letters). Answers should invariably be given in Capital Letters.

Choose correct option:

SECTION A

1.	Faster wear of inner rail in a curved track may be due to:			
	A	Cant excess	B	Cant deficiency
	C	Equilibrium cant	D	None of the above
2.	LH & RH tongue rail can be interchanged in case of:			
	A	Straight switch	B	Curved switch
	C	None	D	A&B
3.	In a highly canted track, a wagon has overturned inside of the curve. What may be cause:			
	A	Wind pressure towards outside of the curve	B	Very low speed of the wagon
	C	High speed	D	A&B
4.	Asymmetrical rail is used in the manufacturing of:			
	A	Straight switch	B	Curved switch
	C	Thick web switch	C	B&C
5.	A turnout is taken from outside of a curve. CD is 75 mm, permissible negative cant on turnout is 42 mm. Then equilibrium cant on main line for maximum permissible speed:			
	A	117 mm	B	33 mm
	C	75 mm	D	150 mm
6.	In which type more warning signs will be displayed before failure:			
	A	Under reinforced	B	Balanced
	C	Over reinforced	C	Same signs in all the above
7.	In case of cracking of paint film, the possible remedy would be:			
	A	Extra putty	B	Thicker coat of paint
	C	A&B	D	None
8.	For concrete surface which paint is more suitable			
	A	Oil paint	B	Enamel paint
	C	Rubber based paint	D	Aluminium paint
9.	A bridge is of 2x5 m spans then it is:			
	A	Major	B	Minor
	C	Important	D	None
10.	If soil of good bearing capacity is available at shallow depth then what type of foundation to be provided :			
	A	Spread footing	B	Pile foundation
	C	Well foundation	D	Raft foundation

11.	In beam fixed at both ends SF will be minimum at: (With point load at the centre)			
	A	Both ends	B	1/4 of span
	C	A&B	D	None
12.	What is the common unit of measurement of plastering :			
	A	sq m	B	cube m
	C	m	D	All the above
13.	Laser beam is used by which survey instrument :			
	A	Compass	B	Dumpy level
	C	Theodolite	D	None
14.	Satellite unit in tamping machine is placed on :			
	A	Satellite	B	Independent underframe
	C	Ground	D	None
15.	Which track machine requires water sprinkling :			
	A	DTS	B	FRM
	C	RBMV	D	RGM
16.	In a route of 130 kmph, acceleration peaks exceeding which value will be considered in OMS recording:			
	A	0.15 g	B	0.2g
	C	0.25g	D	0.1g
17.	Overhauling of track means:			
	A	Screening of ballast	B	Greasing of rail and complete fittings
	C	complete track renewal	D	Reconditioning of tools
18.	Which is not connected with Level Crossing:			
	A	Signal	B	Height gauge
	C	Guard rail	D	Lifting barrier
19.	Which is not connected with Patrolling of track:			
	A	Vulnerable location	B	GPS tracker
	C	Patrol chart	D	None
20.	Which is not connected with Well foundation :			
	A	Loss of camber	B	Eccentric dredging
	C	pneumatic sinking	D	A&B
21.	Which is not a method of launching of girder ;			
	A	Rail cluster method	B	Dip lorry method
	C	Side slew method	D	None
22.	If reserve material is to be stacked for use in bridge; then it should be stacked close to bridge and :			
	A	Above the HFL	B	Above the DL
	C	Below the HFL	D	None
23.	If a bridge component requires major repair then CRN will be :			
	A	1	B	2
	C	3	D	4
24.	Which is generally not done in Preliminary Survey :			
	A	Soil survey	B	Fully staking of alignment
	C	Estimation of cost of project	D	A&C
25.	Which is not correct :			
	A	Level crossing should not fall within the breathing length of LWR	B	Improved SEJ should not be located on transition of curve.
	C	Improved SEJ should not be located on curves sharper than 0.5 degree.	D	B&C

26.	Which does not contribute to leakage in tunnel:			
	A	Underground stream	B	Construction joint
	C	A&B	D	none
27.	While giving general lift by machine, ramp out provided is:			
	A	1: 500	B	1: 1000
	C	1: 1500	D	1:2000
28.	Compressive Stress is:			
	A	Force/ Area	B	Strain \times modulus of rigidity
	C	Stress \times modulus of elasticity	D	A&C
29.	What will be the axial load carrying capacity of a RCC column in N if allowable compressive stress in concrete is 6 N/ mm sq and in steel 130 N/ mm sq. The area of steel is 20 sq mm while area of concrete is 1000 sq mm :			
	A	8600	B	130120
	C	20780	D	136
30.	Which is not a method of development of Tubewell:			
	A	Pumping	B	Compressed air
	C	Jetting	D	None
31.	In water purification, which is not connected with sedimentation :			
	A	Coagulants	B	Baffle wall
	C	Detention period	D	None
32.	Which is not connected with treatment of water :			
	A	Disinfection	B	Activated carbon
	C	Aeration	D	None
33.	The dead zone of a reservoir is for:			
	A	Water for power	B	Water for irrigation
	C	Sand and silt	D	None
34.	In water supply distribution system, summits are the points of :			
	A	High pressure	B	Low pressure
	C	Equal pressure	D	None
35.	Which is not connected with ventilation of sewers :			
	A	Manhole with grating	B	Designing sewer to run half
	C	Unobstructed outlet	D	None
36.	Manholes in sewer are provided for :			
	A	Inspection	B	Joining sewer
	C	A&B	D	None
37.	Which is not correct for inverted siphon :			
	A	Under pressure less than atmospheric pressure	B	Flow line above the hydraulic gradient
	C	Depressed sewer	D	A&B
38.	For removal of oily substance from sewage which is used :			
	A	Skimming tank	B	Grit chambers
	C	Detritus tanks	D	None
39.	Which process is similar to activated sludge process of treatment of sewage:			
	A	Oxidation pond	B	Trickling filter
	C	A&B	D	None
40.	In septic tank what takes place :			
	A	Sedimentation	B	Aerobic digestion
	C	A&B	D	None

Section -B

41.	Which is defined in Rule 10 of the Official Language Act 1976 :			
	A	proficiency	B	working knowledge
	C	A& B	D	none
42.	As per official language act which is not in region "A"			
	A	Himanchal	B	Punjab
	C	Andman Nikobar	D	all
43.	As per official language act which is not in region "B"			
	A	Andman Nikobar	B	Daman & Diu
	C	Chandigarh	D	all
44.	Which documents are not compulsorily produced and issued simultaneously in both Hindi and English as per Official Language Act Section-3(3):			
	A	tender form	B	agreement
	C	Tender Notice	D	none
45.	When is Hindi Day celebrated :			
	A	14 September	B	24 July
	C	24 September	D	24 March
46.	As per official language act which is not in region "B"			
	A	Gujrat	B	Punjab
	C	Rajsthan	D	None
47.	As per official language act which is not in region "A"			
	A	Bihar	B	Jharkhand
	C	Uttarakhand	D	none
48.	Which Ministry takes important decision regarding official language :			
	A	Home Affairs	B	Railway
	C	Human Resource	D	None
49.	Who was the first chairman of the committee which was formed on the recommendation of the official language commission :			
	A	SRI Bal Kher	B	Sri L N Mishra
	C	Sri Govind Ballabh Pant	D	none
50.	As per official language act which is not in region "C"			
	A	Tamil Nadu	B	Odisha
	C	Kerla	D	None
51.	COVAXIN has been developed by			
	A	Oxford university	B	SERUM Institute Of India
	C	Russian institute	D	none
52.	Deepika kumari is associated with which event:			
	A	Boxing	B	Hockey
	C	Shooting	D	Archery
53.	Allahabad bank is merged with which anchor bank:			
	A.	SBI	B.	Union bank of India
	C.	Indian bank	D.	none
54.	Which is known as Prayag of Chhattisgarh :			
	A.	Rajim	B.	Mainpat
	C.	Amarkantak	D.	none
55.	Which IPS officer of CG received Kirti Chakra:			
	A.	Vinod kumar Chaubey	B.	Kishore Sahu
	C.	Surendra Dubey	D.	none

56.	Which is not a PSU of IR :			
	A.	RLDA	B.	CONCOR
	C.	Konkan Railway	D.	none
57.	Which is associated with Chhattisgarh			
	A.	Raut Nacha	B.	Pandwani
	C.	Ghumar	D.	A&B
58.	"Exam Warriors" is written by:			
	A.	Dr. Kalam	B.	Narendra Modi
	C.	Meenakshi Lekhi	D.	None
59.	10 m Bridging System, in army, has been developed by DRDO in association with:			
	A.	Bridge & Roof	B.	L & T
	C.	Bridge Track & Tower	D.	none
60.	Who is not the recipient of Bharat Ratna :			
	A.	Rajiv Gandhi	B.	Morarji Desai
	C.	A P J Abdul kalam	D.	none
61.	Ajanta caves are in :			
	A.	Bombay	B.	Aurangabad
	C.	Kashmir	D.	none
62.	Which is the border name of India-Pakistan :			
	A.	Radcliffe Line	B.	Macmahon line
	C.	Hindenburg line	D.	none
63.	In India if both offices of President and Vice President are vacant, then who will discharge duties of the President			
	A.	PM	B.	Speaker
	C.	Chief justice of India	D.	none
64.	Which satellite has not been launched by India			
	A.	GSAT 30	B.	Delta 3920
	C.	Chandrayan 2	D.	none
65.	Which one is known as Lower House			
	A.	Lok sabha	B.	Rajya sabha
	C.	Secretariat	D.	none
66.	2 DG has been developed by whom :			
	A.	RDSO	B.	DRDO
	C.	ISRO	D.	CIPLA
67.	Which is known as Shimla of Chhattisgarh :			
	A.	Amarkantak	B.	Mainpat
	C.	Achanakmar	D.	None
68.	Mira Bai Chanu is connected with which sports event :			
	A.	Weight Lifting	B.	Boxing
	C.	Shooting	D.	None
69.	What is the normal term of Lok Sabha			
	A.	5 years	B.	4 years
	C.	6 years	D.	None
70.	Which is known as Orange City :			
	A.	Nagpur	B.	Jaipur
	C.	Raipur	D.	None
71.	Olympic games are being held this year at :			
	A.	Rio	B.	Beijing
	C.	South Korea	D.	None

72.	Which will have higher download speed :			
	A.	3G	B.	4G
	C.	5G	D.	All same
73.	"Lavni " is famous form of :			
	A.	Singing	B.	Painting
	C.	Instrumental	D.	None
74.	Which is connected with train reservation :			
	A.	PIN	B.	POR
	C.	PNR	D.	None
75.	Which is not a source of clean energy :			
	A.	Solar panel	B.	Wind mill
	C.	Thermal power plant	D.	None
76.	Which is the Head Quarter of EC Railway :			
	A.	Mumbai	B.	Gorakhpur
	C.	Jaipur	D.	None
77.	Which is not a tax in India :			
	A.	Gift tax	B.	Income tax
	C.	Capital gain tax	D.	None
78.	The maximum earning of SEC Railway comes from :			
	A.	Freight / Goods transportation	B.	Passanger
	C.	Parcel	D.	Lease
79.	Who is not associated with Indian Railway any time:			
	A.	P T Usha	B.	Dutee Chand
	C.	Sakshi Malik	D.	None
80.	Who has not been the Railway Minister			
	A.	Lal Bahadur Shastri	B.	Jagjivan Ram
	C.	Nitish Kumar	D.	None

Section -C

81.	In financial appraisal of a project which method takes in to account time value of money			
	A.	Accounting rate of return method	B.	DCF method
	C.	NPV method	D.	B&C
82.	Which is not ordinary working expenses			
	A.	General superintendence	B.	Repairs to way and works
	C.	Retirement benefits	D.	None
83.	Which PH deals with bridge works			
	A.	31	B.	32
	C.	33	D.	36
84.	Which is not a part of coaching earning			
	A.	Earning from II AC coach	B.	Parcel earning
	C.	Earning from IAC coach	D.	none
85.	If penalty of "reduction in pay " has been imposed, then the employee will :			
	A.	Not loose seniority	B.	loose seniority
	C.	Loose seniority but after some time will regain it.	D.	None
86.	Which is not a penalty as per DA rules			
	A.	Suspension	B.	Censure
	C.	Withholding of increment on failure in departmental examination.	D.	A&C

87.	If punishment imposed by DA is to be enhanced suo moto then which is correct:			
	A.	It can be done by reviewing authority	B.	It can be done by appellate authority
	C.	Reasonable opportunity to the employee is given.	D.	A&C
88.	DA is not admissible :			
	A.	During study leave	B.	During joining time
	C.	A&B	D.	None
89.	As per the new GCC which is not relevant in case of termination of contract :			
	A.	7 days notice	B.	Risk and cost tender
	C.	48 hrs notice	D.	None
90.	Which is not correct in connection with PNM :			
	A.	At Railway Board level, it is dealt by federation.	B.	The object is to maintain good relation between Administration and all classes of non - gazetted and gazetted officials.
	C.	Individual transfer case is generally not discussed	D.	none
91.	Earning from which is not Sundry other earning :			
	A.	Rest house	B.	Quarter
	C.	Registration fee for construction of private siding	D.	none
92.	Which is not correct :			
	A.	If superior quarter is provided by administration then rent to be paid will be rent for the quarter for which the employee is entitled	B.	It is mandatory for Railway Administration to provide accommodation to all employees.
	C.	Standard rent is periodically revised	D.	none
93.	Which is incorrect for physically de categorised staff			
	A.	They are reduced in rank and shifted to some other post	B.	It is tried by Railway administration to offer alternative employment in the same unit
	C.	After absorption in alternative post , their past service is treated as continuous with that in the alternative post	D.	none
94.	Which is incorrect :			
	A.	Increment next above the efficiency bar shall ordinarily be drawn unless withheld.	B.	30% of vacancies for Group B posts in civil engineering department are filled through competitive exam limited to departmental candidates.
	C.	Casual leave normally cannot be combined with LAP	D.	None
95.	In case of contradictions in Letter of award, Special conditions of contract & GCC, which will prevail			
	A.	GCC over Special conditions of contract	B.	Special conditions of contract over Letter of Award
	C.	Letter of award over GCC	D.	none
96.	If Operating Ratio is 100 then, to earn 1000 Rs, how much will be spent :			
	A.	100	B.	1000
	C.	10	D.	None ●
97.	Which is not material modification :			
	A.	Introduction of any station	B.	Omission of any station

	C.	A&B	D.	none
98.	What is the Plan Head for Gauge Conversion :			
	A.	14	B.	13
	C.	12	D.	15
99.	What is the Plan Head for New Line :			
	A.	10	B.	11
	C.	12	D.	None
100.	What is the Plan Head for Traffic Facility works :			
	A.	30	B.	31
	C.	32	D.	None
101.	What is the Plan Head for Passanger Amenity works :			
	A.	51	B.	53
	C.	55	D.	57
102.	Which is connected with Pension :			
	A.	Qualifying service	B.	Commutation
	C.	A&B	D.	None
103.	Which is connected with Transfer travelling allowance :			
	A.	CTG	B.	Free admissible pass
	C.	A&B	D.	None
104.	In which condition special pass is not issued :			
	A.	Medical ground	B.	Sports ground
	C.	A&B	D.	None
105.	Which leave can be encashed :			
	A.	LAP	B.	CL
	C.	A&B	D.	None
106.	Which is not connected with Minimum Wage Act :			
	A.	Minimum wages	B.	Normal working hours
	C.	Weekly rest	D.	None
107.	Which is connected with Wokmen's Compensation Act :			
	A.	Ocuupational disease	B.	Loss of earning
	C.	A&B	D.	None
108.	Repairs and Maintenance of Permanent Way and Works are classified in which Absract head :			
	A.	G	B.	H
	C.	J	D.	None
109.	Which is not connected with PME :			
	A.	A1	B.	A2
	C.	A3	D.	None
110.	Transfer of fund from one work to another is done through :			
	A.	Revised estimate	B.	Completion estimate
	C.	Reappropriation	D.	None