

WEST CENTRAL RAILWAY

Pre-Qualifying examination for selection of ASTE (Group 'B'/30% LDCE quota)

Date: 19/12/2021

Time: 2 hours

Maximum marks:100

Instructions

- (1) Candidates should not write his name, roll number, signature or any mark etc. anywhere inside the answer sheet and extra-sheets, except for the sheet at the designated space provided for, failing which the candidature will be cancelled.
- (2) Candidates should only use ink/dot pen (blue/black). Use of Pencil, Eraser, Sign Pen, Highlighters or Multiple Colour Pen, Sketch pens etc. are also strictly prohibited. Marking of any special signs, symbols other than related to answer of the question is also strictly prohibited and such actions will be deemed an attempt for disclosing the identity and such answer sheet will be not evaluated.
- (3) Candidates should ensure signature of invigilator/officer-in-charge on the answer sheet and also on the extra sheets, if any.
- (4) Candidates must submit the answer sheet to the invigilator only after completion of examination. In case any unfair means are adopted, the candidature will be forfeited.
- (5) There are 110 questions comprising Section I (40 questions), Section II (40 questions) and Section III (30 questions) in the question paper. Candidates shall attempt 100 questions only. Every question carries one mark.
- (6) **Section I & Section III are compulsory.** In Section II, there are 10 questions (Question Nos.41 to 50) related with Rajbhasha which is optional. **Candidates may attempt only either Question Nos. 41 to 70 or 51 to 80.** If candidate attempt all questions in Section II, then answers to questions No. 41 to 70 only will be evaluated.
- (7) There shall be negative marking for incorrect answers. One third of the marks allotted for each question will be deducted for every wrong answer.
- (8) Every question shall have four options numbered as A, B, C, D (in capital letters) and answers to such questions should be given in capital letters only.
- (9) In case of difference in English and Hindi version of any question, English version shall be treated as correct by candidates.
- (10) No correction of any type (viz. cutting, overwriting, scoring off a ticked answer & ticking of another answer, erasing modifying another answer in any way) shall be permitted. Zero marks will be awarded in such cases of corrections.
- (11) Use of any kind of electronic gadgets viz. Mobile phone, Tablets, Digital Diaries, Laptop or Note book etc. is strictly prohibited and shall not be permitted.

SECTION-I

Q.No.	Question
1.	Meter is used for measuring the power in VHF communication (A) DB meter (B) Multimeter (C) Megger (D) RF Power meter
2.	Frequency allotted by WPC for VHF communication over Indian Railways are in the band (A) 136 -164 MHz. (B) 146 -174 MHz. (C) 156 -184 MHz. (D) 166 -194 MHz.
3.	A LAN switch controls the data traffic through use of : (A) MAC Address (B) IP Address (C) Port Address (D) None of these
4.	Identify the class of IP address 191.1.2.3. (A) Class A (B) Class B (C) Class C (D) None of these
5.	10 Gigabit Ethernet transmits- (A) 1 million bps (B) 10Thousand bps (C) 10 Million bps (D) 10 billion bps
6.	ADSL stands for Digital Subscriber Line. (A) Asynchronous (B) Asymmetric (C) Automatic (D) All of these
7.	Multiplexer is a..... (A) one output to many output (B) Many input to one output (C) Many input to many output (D) one input to one output
8.	Touch Screen systems are Information systems. (A) Interactive (B) Non Interactive (C) Uni-Directional (D) None of these
9.	Railway control circuits are of----- type circuits. (A) Omnibus (B) Switching (C) Point to Point (D) Party to Line
10.	In P.A system type of mic is mostly used. (A) Carbon (B) Condenser (C) Dynamic (D) Ribbon
11.	For Electronic Chart Display system installation---network connectivity is required. (A) PRS (B) Railnet (C) FOIS (D) None of the above
12.	Walkie-Talkie sets on IR works on--- mode. (A) Simplex (B) Half Duplex (C) Full Duplex (D) All of these
13.	The unbalance in capacitive couplings of quad cable causes____ (A) Attenuation (B) Distortion (C) Noise (D) Cross talk
14.	Electronic Exchange Works on the Principle of -- (A) SPC (B) GSM (C) VOLTE (D) CDMA
15.	Propagation method of waves in VHF range is (A) Line of sight (B) Sky wave (C) Groundwave (D) None of these
16.	No.of Programmable Channels in 25W VHF set is are ____ (A) 2 (B) 8 (C) 16 (D) 12

17.	Main difference between CNC Lathe and Conventional Lathe is ____ (A) Auto tool change can be programmed (B) Feed control (C) Speed control (D) None of the above
18.	The instrument used for checking colour coordinates of LED signal unit is- (A) Multimeter (B) Oscilloscope (C) OTDR (D) Spectrometer
19.	Bit rate of STM-I isMbps. (A) 2.048 (B) 34(C) 155.5 (D) 8
20.	Plug board for Q-series relay is made from- (A) Bakelite powder (B) Phenolic moulding powder (C) Plastic granules (D) None of the above
21.	If HHG fuses _____ aspect will glow in 4 aspect cascading circuit. (A) Green (B) Red (C) Yellow (D) Double Yellow
22.	Number of signalling sections required to be clear to get proceed aspect in Automatic Block Working with 3 Aspect signaling are____. (A) 1+Over lap (B) 2+Over lap (C) 3+Over lap (D) 4+Over lap
23.	The Calling On signal at ON position displays--- (A) White Light (B) No light (C) Green light (D) None of these
24.	Goods warning Board shall be located at not less than _____ km. in rear of the first stop signal in MACLS (A) 1.4 KM (B) 2.4 KM (C) 05 KM (D) 0.40 KM
25.	Maximum excitation of QBAT relay is----- (A) 200% (B) 235% (C) 300% (D) 250%
26.	Block overlap in a 3-aspect Signalling section is _____ mts (A) 180 (B) 580 (C) 200 (D) 120
27.	RDSO Specification for IPS is--- (A) RDSO/SPN/99 (B) RDSO/SPN165/ (C) RDSO/SPN/187 (D) RDSO/SPN/182
28.	Crank Handle is IN & locked, Indication on panel is _____ (A) Grey (B) Red (C) Green (D) Yellow
29.	The charger output voltage per cell for initial charging should be (A) 2.7 V (B) 2.25 V (C) 2.40 V (D) 2.2 V
30.	One signal one train movement is ensured by _____ (A) ASR (B) TSR (C) UYR (D) UCR
31.	The relay room or cabin basement where relays and interlocking gears are kept shall be locked having-- (A) two independent locks with two keys(B) Two independent lock with same key (C) Single lock works on single key(D) Single lock with multiple keys

32.	 <p>Symbol Indicates.....</p> <p>(A) Track Relay (B) Panel Key IN Contact (C) Point Contactor Relay (D) Interlocked Relay, Normally Picked up, Break Contact i.e Back Contact.</p>
33.	 <p>Symbol Indicates.....</p> <p>(A) Track Relay (B) Panel Key IN Contact (C) Interlocked Relay Reverse Coil (Top Relay) (D) Interlocked Relay, Normally Picked up, Break Contact i.e Back Contact.</p>
34.	<p>UDKR stands for...</p> <p>(A) Sub-Route Clear Indication Relay (B) Shunt Signal control Initiating Relay (C) Calling ON Signal Route Locking Relay (D) None of the above</p>
35.	<p>Adequate distance in Automatic Block System on Double line is _____</p> <p>(A) 180 mts (B) 400 mts (C) 300 mts (D) 120 mts</p>
36.	<p>The K-50 Interlocked relay has a -----</p> <p>(A) electromechanical latch (B) electrical latch (C) mechanical latch (D) none of the above</p>
37.	<p>OV1Z2U(R)R Operates and locks the Point in -----</p> <p>(A) Normal (B) Reverse (C) May be reverse (D) Both Normal and Reverse</p>
38.	<p>Which of the following material is used for manufacturing Ground Connections for 143m Stroke point machine?</p> <p>(A) Mild steel rod 34mm dia (B) Silicon rod 32mm dia (C) Silicon rod 28mm (D) None of the above</p>
39.	<p>Recommended gradient in station yard is--</p> <p>(A) 1 in 400 (B) 1 in 1200 (C) 1 in 800 (D) 1 in 260</p>
40.	<p>The Maximum length of track circuit when QBAT relay is used as track relay with a choke in RE are is---</p> <p>(A) 550M (B) 450M (C) 650M (D) 750M</p>

Section- II

41.	भारत के संविधान के अनुसार संघ की राजभाषा की लिपि क्या है ?			
	(क)	रोमन	(ख)	खरोष्ठी
	(ग)	देवनागरी	(घ)	ब्राम्ही
42.	राजभाषा अधिनियम की किस धारा के अधीन चौदह दस्तावेजों को हिंदी और अंग्रेजी दोनों भाषाओं में अनिवार्य रूप से तैयार, जारी या निष्पादित किया जाना है ?			
	(क)	धारा-3 (1)	(ख)	धारा-3 (2)
	(ग)	धारा-3 (3)	(घ)	धारा-4

43.	राजभाषा प्रचार-प्रसार की दृष्टि से देश को कितने क्षेत्रों में वर्गीकृत किया गया है ?			
	(क)	2	(ख)	3
	(ग)	4	(घ)	5
44	'Hindi Day' हर वर्ष किस दिन मनाया जाता है?			
	(क)	१५ अगस्त	(ख)	१४ सितम्बर
	(ग)	२ अक्टूबर	(घ)	२६ जनवरी
45	केन्द्रीय हिंदी समिति के अध्यक्ष कौन होते हैं ?			
	(क)	गृहमंत्री	(ख)	राष्ट्रपति
	(ग)	प्रधानमंत्री	(घ)	लोकसभा अध्यक्ष
46	रेलवे बोर्ड राजभाषा कार्यान्वयन समिति के अध्यक्ष कौन होते हैं?			
	(क)	अध्यक्ष, रेलवे बोर्ड	(ख)	निदेशक (राजभाषा)
	(ग)	रेलमंत्री	(घ)	सदस्य कार्मिक
47	राजभाषा नियम के अनुसारराज्य को 'ख' क्षेत्र में वर्गीकृत किया गया है ।			
	(क)	तमिलनाडु	(ख)	गुजरात
	(ग)	उत्तर प्रदेश	(घ)	नागालैंड
48	हिंदी में प्राप्त शत प्रतिशत पत्रों के उत्तर किस भाषा में दिये जाने चाहिए ?			
	(क)	हिंदी	(ख)	अंग्रेजी
	(ग)	हिंदी या अंग्रेजी	(घ)	हिंदी-अंग्रेजी द्विभाषी
49	कथा/कहानी संग्रह एवं उपन्यास लेखन हेतु चलायी गयी पुरस्कार योजना कौन-सी है ?			
	(क)	प्रेमचंद पुरस्कार योजना	(ख)	मैथिलीशरण गुप्त पुरस्कार योजना
	(ग)	हजारी प्रसाद द्विवेदी पुरस्कार योजना	(घ)	महादेवी वर्मा पुरस्कार योजना
50	विभागीय परीक्षाओं में कितने प्रतिशत अंकों के प्रश्न हिंदीसे संबंधित पूछे जाते हैं ?			
	(क)	कुल अंक के 15 प्रतिशत	(ख)	कुल अंक के 20 प्रतिशत
	(ग)	कुल अंक के 5 प्रतिशत	(घ)	कुल अंक के 10 प्रतिशत
51	Out put of solar cell is ----- (A) AC (B) DC (C) Both AC & DC (D) None of above			
52	COVID-19 meaning is ----- (A) Coronavirus disease 2019 (B) Chinese disease 2019 (C) Both (D) None of above			
53	Covishield is manufactured by ----- (A) Pfizer (B) Moderna (C) Bharat Biotech (D) Serum institute			
54	Which of the following country is not a member of SAARC ? (A) Maldives (B) Bhutan (C) Malaysia (D) Nepal			
55	Ferro Silicon is used for _____ (A) To achieve good casting (B) To remove hardness (C) To remove impurities (D) To make the metal soft.			
56	What is the name of the portal launched by Ministry of Civil Aviation for seamless air travel during Covid? (A) Air Suvidha (B) Bharat Travel (C) Pradhan Mantri Aviation (D) Welcome India			
57	On which river Sardar Sarovar project is based- (A)Tapti (B) Godavari (C) Narmada (D) Ganga			

58	One horsepower is equal to ----- (A) 790 W (B) 700 W (C) 720 W (D) 746 W
59	Which of the following metal is used for nuclear energy? (A) Uranium (B) Thorium (C) Niobium (D) All
60	Which space agency launched its 'Laser Communications Relay Demonstration (LCRD)'? (A) ISRO (B) NASA (C) Blue Origin (D) Space X
61	Scientific principle of Electric Motor was discovered by- (A) Michael Faraday (B) B Franklin (C) T.A. Edison (D) None of these
62	Which of the following materials has the least resistivity? (A) Zinc (B) Lead (C) Mercury (D) Copper
63	The filament of an electric bulb is made of ----- (A) Carbon (B) Aluminum (C) Tungsten (D) Nickel
64	The resistance of a conductor varies inversely as ----- (A) Length (B) Area of cross-section (C) Temperature (D) Resistivity
65	Presently Who is the Director General of World Health Organization ? (A) Antonio Guterres (B) Dr Harshvardhan (C) Tedros Adhanom (D) None of these
66	Indian Railways has introduced a special train 'Gati Shakti Superfast Special train' between which cities? (A) Delhi-Patna (B) Delhi-Varanasi (C) Varanasi-Kevadia (D) Delhi-Nainital
67	Read the Following Railway Headquarters and Identify which is False? (A) SC Railway – Secunderabad (B) Central railway – Nagpur (C) South Railway – Chennai (D) North Railway - New Delhi
68	Which of the following is the capital of Arunachal Pradesh? (A) Itanagar (B) Dispur (C) Imphal (D) Panaji
69	Martyrs' Day is celebrated every year on----- (A) 30 th January (B) 23 rd March (C) 21 st May (D) None
70	Which of the following is associated with Blue Revolution? (A) Wheat Production (B) Milk Production (C) Fish Production (D) None of these
71	"Monalisa" one of the greatest painting was a great work done by ----- (A) Pablo Picasso (B) Michael Angelo (C) Leonardo Da Vinci (D) M.F. Hussain
72	Who said "Swaraj is my birthright and I shall have it" ? (A) Mahatma Gandhi (B) Moh. Ali Jinnah (C) Sardar Patel (D) Bal Gangadhar Tilak
73	Capital of Laddakh is - (A) Srinagar (B) Leh (C) Jammu (D) Anantnag

74	The father of Space Research Programme in India is ----- (A) Dr. Vikram Sarabhai (B) Prof. Satish Dhawan (C) Prof. U.R. Rao (D) Dr APJ Abdul Kalam
75	Aligarh Muslim University was founded by ----- (A) Sir Syed Ahmed Khan (B) Moulana Abdul Kalam Azad (C) Mohammad Ali Jinnah (D) Khan Abdul Gaffar Khan.
76	The vertical axis of bar graph is also known as ----- (A) y-axis (B) h-axis (C) v-axis (D) x-axis
77	Which of the following is a prime number ? (A) 9 (B) 2 (C) 4 (D) 8
78	Saikhom Mirabai Chanu is associated with- (A) Weightlifting (B) Boxing (C) Badminton (D) Shooting
79	In which of the following state, the main language is Khasi? (A) Mizoram (B) Nagaland (C) Meghalaya (D) Tripura
80	Nagarjuna Sagar project is located on _____ River. (A) Ganga (B) Godavari (C) Narmada (D) Krishna

SECTION – III

Q.No	Question
81	It has been decided to merge all Railway cadres except RPF and Medical. Name of the unified cadre is- (A) Indian Railway Technical Service (B) Indian Railway Civil Service (C) Indian Railway Ministry Service (D) Indian Railway Management Service
82	In case of illegal strikes, the absence of the employees concerned is tantamount to a break in service and cannot be condoned without the sanction of the ____ (A) GM (B) DRM (C) AGM (D) President
83	Compulsory retirement is a -----penalty. (A) Minor (B) Major (C) No penalty (D) A & B both
84	For direct recruitment, percentage of Economically weaker sections is- (A) 5 (B) 10 (C) 15 (D) 7.5
85	Distance between the old headquarters and the new headquarters is more than 1000 kms. and less than 2000 kms. For which joining time of ____ days is admissible. (A) 7 (B) 12 (C) 10 (D) 15
86	Primary unit -32 is for what type of expenditure? (A) Stock purchase (B) Contractual payments (C) Non Stock purchase (D) None of the above
87	Maximum study leave to railway servant during his entire service granted is ____ in all. (A) 12 months (B) 24 months (C) 36 months (D) 20 months
88	In GeM, M stands for - (A) Market place (B) Market (C) Marketing (D) All of the above

89	Who of the following is not a member of PREM in WCR ? (A) WCREU (B) WCRMS (C) FROA (D) SC/ST Association
90	The Material Modification of work exceeding Rs. 2.5 crores will require sanction of - (A) Railway Board, (B) PHOD, (C) CAO(C), (D) GMs
91	As per HOER, Signal Maintainer belongs to----- category. (A) Intensive (B) Continuous (C) essentially Intermittent (D) Excluded
92	What should be the minimum difference between the two trade tests ? (A) 12 months (B) 6 months (C) 18 months (D) 15 months
93	What is the standard form used for Deemed suspension ? (A) SF-1 (B) SF-3 (C) SF-4 (D) SF-2
94	What is minimum Qualifying service required for superannuation pension? (A) 20 years (B) 10 years (C) 15 years (D) 25 years
95	Arrange the following budgeting activities in the order in which they occur. (1) Budget Estimate (2) Final Estimate (3) Budget Grant (4) Revised Estimate. (A) (1), (2), (3), (4) (B) (4), (3), (2), (1) (C) (1), (3), (2), (4) (D) (1), (3), (4), (2)
96	The budget received for 2 to 4 months of the year is known as ----- (A) Charged Budget Grant (B) Spending Limit (C) Vote on Account (D) Voted Budget Grant
97	All works related to complete renewal of tracks are charged to ---- (A) Plan Head 31 (B) Plan Head 16 (C) Plan Head 33 (D) Plan Head 36
98	The variation in the overall agreement value of a contract if exceeding more than 150% will require sanction of ----- (A) PHOD, (B) AGM, (C) GM, (D) Railway Board
99	The maximum amount of pension that can be commuted is ----- (A) 10% (B) 50% (C) 40% (D) 35%
100	Preparation and vetting of Detailed estimate is compulsory if the cost of the works is or more than Rs. _____ (A) 2 lakhs (B) 2.5 lakhs (C) 3 lakhs (D) 5 lakhs
101.	The work of provision of CCTVs for security at stations should be charged to ---- (A) Plan Head 33 (B) Plan Head 36 (C) Plan Head 51 (D) Plan Head 64
102.	Liquidated Damages (LD) shall not exceed ____ of Contract value. (A) 10% (B) 5% (C) 25% (D) 2%
103.	What is IPAS? (A) Integrated Passenger Information System (B) Integrated Payment and Accounting system (C) Internal Personal accounting system (D) None of the above
104	The tools and plants will be defined as M&P if the cost of each is and more than----- (A) Rs.3 lakhs (B) Rs.8 lakhs (C) Rs.10 lakhs (D) None of the above