<u>SELECTION FOR THE POST OF JE/AC WING in level 6 pay matrix under VII CPC</u> against 25% LDCE in Electrical Department of Chennai Division

Date : 26.09.19

Time : 2 hrs Marks : 100

- 1. Read the question paper carefully, before answering them.
- 2. Candidates should write their name, designation, office, roll number etc ONLY in the space provided in the flyleaf and not in any of the page of the answer books or additional sheets.
- 3. Any name/roll number if found in the answer sheets or additional sheets, such papers will be disqualified.
- 4. In the answers to the objective type questions, no correction of any type is permitted. In case any correction is made, that answer shall not be evaluated at all for e.g corrections made in the objective questions like a)cutting b)overwriting c)erasing d) scoring of a ticked answer in multiple choice and ticking another answer and e)modifying the answer in any way will not be evaluated at all.
- 5. The questions on official language is not compulsory and the evaluation will be made only in respect of questions for 100 marks.
- 6. The candidates are not allowed to keep mobile phones or any other document/papers with them in the examination hall.
- 7. All are objective type questions. The suitable correct answers only to be written in the answer booklet.
- 8. Answer any 100 questions. Each question carry 1 mark each for the right answer and 1/3 marks will be deducted for every wrong answer.

1. What is AVM?

a) Anti vibration mounting b)Auto voltage monitor c)Ac voltage meter d) All vibration monitor

2. Capacity of alternator provided in LHB power car is....

a) 400kVA b) 600kVA c)500kVA d) 250kVA

3. LHB power car Alternator output Voltage is....

a) 415V, 3ph b) 750V, 3ph c) 400V, 1Ph d) 750V, 1Ph

4. Rating of Air-Circuit breaker used in Alternator output of LHB Power Car is ---.
a) 410A b) 520A c) 600A d)800A

5. The capacity of each Diesel tank provided in LHB Power Car is.... a) 3000L b)1500L c)2000L d)1200L

6. The rating and the type of battery used in LHB AC coach is a) 70Ah, VRLA b) 120Ah VRLA c) 120Ah LMLA d)1100Ah VRLA

7. The minimum insulation resistance of 750 Volts wiring and equipments is....
 a) 1Mohm b)2Mohm c) 3Mohm d)5Mohm

8. In LHB, the setting of feeder earth leakage relay isa) lampsb)3ampsc)5ampsd)2amps

9. In LHB, the setting of feeder overload relay is... a) 250amps b)200amps c)400amps d) 500amps

10. In LHB, RBC means

a) Rectifier battery chargerd) Regulated boost charger

b) Regulated battery charger

c) Regenerated battery charger

11. The refrigerant presently used in under-slung type AC coaches isa) R-12b)R-22c) R-401ad) R-134a

12. The capacity of battery used in SG Roof mountedAC coaches is....a) 1100Ahb)800Ahc) 500Ahd) 120Ah

13. The capacity of alternator used in SG AC coaches is....a) 4.5kWb)3kWc)25kWd) 10kW

14. No.of alternators in a SG AC coaches is...a) 4b) 3c)2d) 1

15. The rating of fuse in power panel of SG AC coaches isa) 200Ab) 160Ac) 250Ad) 315A

 16. The V belt used in SG AC coaches is

 a) C-118
 b) C-122
 c)B-118
 d) B-122

17. The time delay given for start of Comp I after the start of condenser motor is....a) 120 Secb)60Secc) 180Secd) 30 Sec

18. The rating of main battery fuse in a SG RM type AC coach is ...a)315Ab)400Ac)250Ad)160A

19. The gap permitted between two halves of the Axle pulley of a SG AC coaches is....a)1.5mmb)5mmc)2mmd) 3mm

20. The PCD of Axle pulley used in SG AC coaches is ...a)572.6mmb)200mmc)350mmd)150mm

21. The type of compressor used in RMPU is ...a) sealedb) semi-sealedc) opend) hermetically sealed

22. The capacity of each compressor in RMPU AC unit provided in SG AC coaches is... a) 3.5Ton b)7Ton c) 5Ton d) 7.5Ton

23. This is used to identify positive or negative earth in a SG coaches a) Meggar b) double test lamp c) multimeter d) tester

 24. While preparing Electrolyte for new cells, always ______ is added to ______

 a) distilled water, acid
 b)acid,acid
 c) distilled water, distilled water
 d) acid, distilled water

25. The negative plate of the fully charged lead acid battery isa) spongy lead b) lead peroxide c) lead sulphate d) lead dioxide

26. The instrument used for measuring specific gravity is.....a) Anemometer b)hygrometer c)hydrometer d)multimeter

27. The codal life of alternator and RRUs of SG coaches is....a) 10 yrsb)12yrsc) 15yrsd) 8 yrs

28. The total number of compressors used in a RMPU type SG AC coaches are...a) fourb)threec)twod)one

29. The sweep of fans used in passenger area of SG AC coaches is...a) 200mmb)225mmc)300mmd)400mm

	30. Total number a)one	r of 25kVA invert b) two	er available in a S c) three	G AC coaches d)four
	31. The output ve a) same	oltage of a step-up b)less	c transformer is c)higher	than input voltage d)none
	32.Buchholz rela a) protection	y is used in a tran b)starting	sformer for c) controlling	d) none
	33. The oil useda) edible oil	in a transformer is b) mineral oil	c)vegetable oil	d) oil extracted from animals
	34. A normal pov a) three	wer transformer ha b) one	aswindings c)two	d) four
*	35. The purpose a) air	of silicagel in a tra b)water	ansformer breather c) oil	r is to prevent entry of d) moisture
	36. In a 3phase 4 wire system, the fourth wire is called asa) phase wireb) earth wirec) neutral wired) delta wire			
	37. Silicagel in a a)blue		her is to be change c)red	ed or reactivated if it turns to d)green
	38. Differential relay protects transformer fromfaultsa) external b)internal c)either of a or b d) neither of a or b			
	39. Transformera) resistive	load is aload b)capacitive	c) neutral	d) inductive
	40. Transformer a)kW	capacity is always b)MW	mentioned in c)kVA	d) kVAR
	41. Current in a c a) Ammeter	circuit is measured b)Voltmeter	l with c) meggar	d) ohmmeter
	42. Insulation res a) Ammeter	istance (IR) is me b)Voltmeter	asured by c) meggar	d) ohmmeter
	43. The minimun a)0.8	n power factor to b b)0.9	be maintained in a c)unity	power system without penalty is d)0.7
	44. Lagging powerfactor of an inductive load is improved by providinga) capacitorb) chokec) resistord) lamp			
	45. Earth electroc a) Ammeter	de resistance is me b)Voltmeter	easured by c) testlamp	d) earth meggar
	46. The unit of vo a)amps	oltage is b) volts	c) watts	d) ohms
	47. The unit of po a)amps	ower is b) volts	c) watts	d) ohms

48. The unit of resistance is a)amps b) volts c) watts d) ohms 49. Power = voltage x----a) resistance b) reactance c)voltage d) current 50. Underground cable sizes are mentioned in a) sq.ft b) inch c) metre d)Sq.mm 51. The capacity of alternator used in conventional TL coaches is b)22.75kW c)4.5kW d)3kW a) 25kW 52. The number of TL alternator in a coach is a) One b)two c)three d)four 53. The number of belts used in a TL coach is a) One b)two c)three d)four 54. The PCD of alternator pulley is b)180mm d)250mm a)572.6mm c)200mm 55. The capacity of battery used in a TL coach is a)210Ah b)120Ah c)800Ah d)1100Ah 56. The specific gravity of a fully charged cell is in the range of a)1180-1190 b)1190-1200 c)1160-1170 d)1210-1240 57. The number of monoblock battery required in a TL coach is a)12 b)15 c)18 d)21 58. The rating of battery fuse in a TL coach is a)10A b)16A c) 32A d) 40 A 59. Magnetic amplifier is used in b)alternator a)RRU c)battery d) fan 60. In a brushless alternator both AC&DC winding are in b)rotor c) either a or b d) neither a or b a)stator 61. Maximum leave on average pay (LAP) leave that can be accumulated at any time is a)200days b)150days c)300days d)320days 62. No.of half average pay (LHAP) eligible for a Railway employee for each completed year of service is a) 10 days b)15days c)20 days d)30days 63. No. of days Female employees are eligible for child care leave is a)600days b)730days c)500days d)365days 64. As per D&AR 1968, Minor penalty charge sheet is issued in standard form a)SF11 b)SF5 c)SF9 d)SF1 65. As per D&AR 1968, One of the major penalty is a)removed from service b) withholding of increment c) Withholding of pass 66.As per HOER, the employees are classified into--- categories based on their hours of employment

a)two b)four c)six d)eight

d)censure

67. As per HOER supervisors are classified as excluded category c)partially true d)partially false a) True b)False 68. A group C railway employee after five years of service is eligible for ---sets of privilege pass c)five a)Three b)four d)six 69. A return journey privilege pass issued within the eligible year is valid for b)five months c)two months a)four months d)six months 70. A railway employee met with accident and incapacitated is compensated under b)PF act a)WCA c)ESI Act d)Factories Act 71. A non-stock indent is prepared in form a)S-1302 b)S-1313 c)S-1830 d)S-1539 72. Material transaction from one depot to another depot is through---challan b)ST-47 d)S-1313 a)LM171 c)LM6 73. Imprest items are procured through form a)S-1302 b)S-1313 c)S-1830 d)S-1539 74. The form used to returning unused material/scrap materials to 'General Stores Department' is a)S-1302 b)S-1313 c)S-1830 d)S-1539 75. Now a days materials are procured through GEM portal. GEM stands for a) Govt E marketing b)Govt. effective material c)Geo E message d)General efficiency material 76. In works contract, payments are made for the work which are recorded in the a)Field book b) Accounts book c)Measurement book d)rule book 77. In works contract the term EMD stands for a)Earnest money deposit b) Early message delivery c)Efficiency money duty d)Each man days 78. In procuring stock items, the term EAR stands for a) Estimated annual requirement b) Estimated average return c) Exact annual requirement d)Every annual required 79. PAC is issued for procuring items from a) select firms b)approved firms c)open market d)OEM 80. In a depot, the materials received through non-stock and stock are first made entry in a)DBI b)DBR c)ST-47 d)LM171 81. One ton of refrigeration is equal to -----btu/hr a) 12000 b)15000 c)18000 d)10000 82. In refrigeration cycle the heat rejection takes place at a)compressor b)condenser c)evaporator d)capillary tube 83. The actual temperature of air measured by an ordinary thermometer is called b)dry bulb temperature c) wet bulb temperature d)relative humidity a)dew point 84. The meter used for measuring relative humidity is called a) Hydrometer b)anemometer c)hygrometer d)spectrometer

85. For which type of AC plant, cooling tower is exclusively required a)Window AC plant b)split AC plant c) cassette type ACplant

d) Centralised AC plant

86.Which type of refrigeration has less moving parts, higher efficiency and less power consumption a)centrifugal type b)reciprocating type c)Scroll type d) piston type

87. Joining of two copper pipe lines using Oxy – Acetylene flame method is called a) piercing b)cutting c)welding d)brazing

88. The tool used for joining two copper pipes for R&AC application is a) Flare toolkit b)crimping tool c)tube cutter d)Allen keys

89. The refrigerant which is having highest global warming potential is a)R-134a b)R-12 c)R-22 d)R-407a

90.The gas used for flushing a refrigerating system is a)Oxygen b)hydrogen c)CO₂ d)nitrogen

91.Electrical inspector to the Government (EIG) for Southern Railway is a)CESE b)CEDE c)PCEE d)CETE

92. RDSO is located at a)Newdelhi b)Lucknow c)Vadodara d)Nasik

93. POH of AC coaches are done ata)GSN Yardb) Perambur worshopsc)ICFd) BBQ yard

94. The coach code for westibuled self generation second AC two tier coach is a)WGACCW b)WGACCN c)WGFAC d)WGFACCW

95. WLRRM stands fora) pantry carb) power carc)brakevand)chaircar

96. Headquarters of Southern railway is at a)Chennai b)Salem c)Trichy

97. MPCB stands for -----circuit breaker a)miniature pump b)Motor protection c) main pump d) mains protection

98.As per IE rules 750V is classified as

d)Madurai

a)low voltage b)medium voltage c)high voltage d)extra high voltage

99. As per IE rules permissible variation in frequency is a) $\pm 3\%$ b) $\pm 5\%$ c) $\pm 6\%$ d) $\pm 10\%$

100. In HOG power requirements of coaches are fed froma)Generatorb)AC lococ)Self generating alternatord)Battery

101. Which is the official language of the union of indiaa) Hindib) Englishc)Tamild) Sanskrit

102. Which part of the constitution contains provision regarding official language a)Part X b)Part XII c)Part XV d) Part XVII

103. When is Hindi day celebrateda) 14th Novemberb) 14th September

c)14th August d)14th

d)14th December

104. How many languages are enlisted in the eighth schedule of Indian constitution a) 22 b)18 c)12 d)24

105. What is the foreign language included in the Eighth Schedulea) Arabicb)singhalic) nepalid) Bhutanese

106. The state of Tamilnadu is coming under which region as per official language rules a) Region A b) Region B c) Region C d) Region D

107. One of the Hindi examinations conducted by Dept.of official language under MHA isa)Prathmicb)Praveenc)Madhyamad)Praveshika

108. The lumpsum award given for passing Prabodh exam through private efforts isa)Rs.500b)Rs.1600c)Rs.1800d)Rs.2400

109. What is the word in Hindi for English verb "To cancel" a) pradhikruth karna b)Radddh karna c) pushti karna d)prathiniyukthakarna

110. What is the English word for the hindi word 'Karmachari' A)worker b)memorandum c)correspondence d)course
