

**SYLLABUS FOR THE POST OF TECH.III (UNIFIED WING) IN TRD DEPARTEMNT OF SC
DIVISION FOR 25 % LDCE QUOTA**

I. OHE

1. Different system of OHE
2. Various OHE foundations.
3. Various masts/portals.
4. Lay out plan and its details.
5. SED and its details.
6. Cantilever assembly.
7. Regulating equipment and its functioning, adjustment and its X & Y values.
8. Staggers, heights and profile parameters of OHE.
9. Overlaps, types and drawings.
10. Neutral sections.
11. Section insulators.
12. Isolators.
13. Gantry and cross feeders.
14. Bonding and earthing.
15. Sectioning of OHE, Feeding Zone, sector, subsector, elementary section etc.
16. Longitudinal protection and Transverse protection.
17. Ladder trolley protection.
18. OHE maintenance schedules.
19. Action plan & SMI.
20. Tower car checking.
21. Points to be checked at Turnouts and Crossovers as per SMI.
22. Foot Patrolling (tools, spares required and points to be checked).
23. Various types of bonds and their usage.
24. Different types of Jumpers and their usage.
25. Various warning boards and their usage.
26. Clearances (working clearance, long time clearance, short time clearance, standard 25kV live to earth)
27. Abbreviations:

a) PTW	b) SSP	c) SP	d) BM	e) SM
f) RDSO	g) SED	h) LOP	i) SWR	j) ACC
k) ACA	l) BWA	m) FTA	n) SEJ	o) SRJ
p) TSS	q) SPI	r) SMI	s) RRA	t) OOR

28. Conductors, Characteristics, sizes and other usage in OHE.
29. PTW messages and protection involved.
30. Understanding of tools & plants and their usage.
31. Understanding OHE spares & their usage and requirement.
32. Types of typical breakdowns and their attention.
33. Safety precautions while working in OHE.


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II. PSI, TPC & RC

1. TRACTION SUB-STATIONS:

- i. Schematic Arrangement.
- ii. Equipment and importance with its rating.
- iii. Protection of power transformer, OHE & Capacitor bank.
- iv. Importance of Preventive Maintenance and various schedules adopted for PSI equipment.
- v. Battery and Battery charges.
- vi. Earthing & Bonding and its importance.
- vii. Need for capacitor bank and its importance.
- viii. Control & Relay panels, ac & dc Distribution boards.
- ix. Buried rail importance
- x. Fuses and its importance, HRC fuses.

2. Switching stations

- i. SP/SSP importance.
- ii. BMs - importance of usage as bridging, sectioning and paralleling.
- iii. Schematic arrangement.
- iv. Battery & Battery chargers.
- v. Earthing & Bonding switching stations.

3. Auxiliary transformers:

- i. Importance of ATs 10kVA, 25 kVA, 50 Hz traction.
- ii. Various capacities of AT's and its maintenance schedules.
- iii. Dropout fuses, capacities and replacement of DO fuse.
- iv. Earthing of AT, combined earth resistance and bonding

4. Schedules maintenance of different PSI equipment, pre-monsoon and special checks.
5. Failures of PSI equipment and preventive measures.
6. Various instruments used in PSI applications and their usage like Multi-meters, Meggers and earth Meggers, Thermovision Camera, cell tester, ac & dc measurements.
7. TPC working, log sheet maintenance, Remote control and RTUs.
8. 25 kV working clearance, safety importance of fire extinguishers and its usage.

III. Official language policy


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QUESTIONS BANK FOR TECH.III/TRD (25 % LDCE QUOTA)

I. OHE

ONE WORD ANSWER QUESTIONS (OHE)

1. What is the location of adjustable dropper?
Ans: section insulator
2. What is the purpose of rigid dropper?
Ans: to maintain encumbrance
3. What is the max allowed inclination of a dropper?
Ans: 4 degree
4. What is the allowed range of relative stagger?
Ans: 0-200 mm
5. What is the contact wire stagger at section insulator?
Ans: 0, +/- 100 mm
6. What is the mechanical clearance?
Ans: 100mm
7. What is the steady clearance (allowed range) of OHE?
Ans: 25-35mm
8. What is the standard (vertical & horizontal) long time (LTC) clearance in non coastal area?
Ans: 250mm
9. What is the minimum clearance between operating rod and fixed contact of an isolator in open condition?
Ans: 38-50 cm
10. What is the separation between two runners of a section insulator assembly?
Ans: 460mm
11. What is the size of stay tube?
Ans: 28.4/33.7mm
12. What is the standard size of bracket tube?
Ans: 30/38mm
13. What is the size of large bracket tube?
Ans: 40/49mm
14. What is the size of register arm tube?
Ans: 28.4/33.7mm
15. What is the size of normal BFB steady arm?
Ans: 31/32mm

16. What is the location of the C jumper from the centre line of the suspension point?
Ans: 5.60 m
17. What is the other name of G-jumper?
Ans: continuity jumper
18. How many strands are there in large span wire ?
Ans: 37 strands
19. How many strands are present in G- jumper?
Ans: 133 strands
20. What is the tension on the catenary wire of Regulated OHE?
Ans: 1000kg
21. What is the distance between two consecutive OHE structures, called?
Ans: span
22. What is the wind pressure at yellow/medium zone?
Ans: 112.5kg/sqm
23. What is the x value of 3-pulley type(250mm) regulating equipment at 50°C and half tension length of 750m?
Ans: 1109 mm
24. What is the span length are standard in multiple of 4.5?
Ans: to maintain dropper schedule
25. What is the difference in levels between the point at supports and the lowest point, called?
Ans: sag
26. What is the reason for the sag in contact wire?
Ans: weight of conductor, Span Length and Tension in conductors.
27. What is the displacement of conductor from its original position due to wind pressure, called?
Ans: Blow off
28. What is the maximum tensile strength of electrolyte copper?
Ans: 42kg/sqmm
29. What is the maximum tensile strength of cadmium copper?
Ans: 63kg/sqmm
30. What is the displacement of the contact wire from the centre line of track, called?
Ans: stagger
31. What is the maximum offset of the curve, called?
Ans: Versine

32. What is the rise of track to counteract centrifugal force called?
Ans: Super elevation
33. What is the difference of rail levels in horizontal plane, called?
Ans: Super elevation
34. What is the vertical lift in OHE due to the static force exerted by the pantograph, called?
Ans: Push Up
35. What is the wave motion in contact wire due to the force exerted by the pantograph under running condition?
Ans: Oscillations
36. What is the other name of implantation?
Ans: Setting Distance
37. What is the axial distance between catenary and contact wire on vertical plane?
Ans: Encumbrance
38. What is the encumbrance given to mainline OHE on turnout?
Ans: 900mm
39. What is the initial deflection adopted during grouting called?
Ans: Reverse Deflection
40. What is the maximum deflection of the mast at the top, under permanent load condition?
Ans: 100mm
41. What is the maximum deflection of the mast at the contact level due to wind load?
Ans: 90mm
42. What is the portion of mast grouted in foundation, called?
Ans: embedded length
43. What is the vertical distance between rail level and top of the foundation?
Ans: step distance
44. What is the step distance / cess level for structures on platforms?
Ans: zero
45. What are the step distance / cess level for regulated OHE?
Ans: 0.4m to 0.6m
46. What is the step distance / cess level for unregulated OHE?
Ans: 0.2 to 0.4m
47. What is the distance between two centre lines of adjacent tracks?
Ans: Track Centre
48. What is the minimum track centre required to erect a BFB mast?
Ans: $2.5 + 0.15 + 2.5 = 5.15\text{m}$

49. What is the distance on earth level from the outer edge of the mast to the embankment, called?
Ans: shoulder Width
50. What is the relative stagger of multi cantilever structure?
Ans: zero
51. What is the size of Ballast used for foundation?
Ans: 20-40mm
52. What is the name of the apparatus used to leave space for mast during foundation?
Ans: mandle (scroll)
53. What is the foundation used for BC (dry) soil?
Ans: RBC
54. What is the foundation for normal soil inadequate shoulder width?
Ans: side gravity type
55. What is the foundation for loose soil?
Ans: Pure gravity type
56. What is the foundation for normal soil sufficient shoulder width?
Ans: side bearing type
57. What is the purpose of stepped base in foundation for black cotton soil?
Ans: to overcome uplift and upward thrust.
58. What is the distance between centre lines of two tracks of a turnout, called?
Ans: track separation.
59. What is the track separation for obligatory mast?
Ans: 150-700mm
60. What is the size of BFB mast?
Ans: 6"x6" & 8"x8"
61. What is the size of RSJ mast?
Ans: 8"x6"
62. What is the type of mast used for Turnout?
Ans: k200/B200
63. What is the depth of fabricated mast?
Ans: 300mm
64. What is the mast used for anchor location?
Ans: 8"x8"BFB , 8"x6"RSJ
65. What is the mast used for overlap intermediate location?
Ans: 8"x6"RSJ/ k150/ B150

66. What is the type of mast used for double cantilever structure?
Ans: 8"x6"RSJ
67. Which type of mast suitable for withstanding bending moment and but not twisting moment?
Ans: BFB
68. What type of mast is used for withstanding bending moment, twisting and deflection moment?
Ans: Fabricated masts (K-series/B-series)
69. What is the boom length of TTC mast?
Ans: 5.5m, 8m
70. What is the inner distance between two uprights of a portal?
Ans: clear span
71. What is the name given to the angle used in portal for joining the end piece with centre piece?
Ans: splicing angle
72. What is the extra clearance obtained with special portals like BFB or G uprights?
Ans: 300mm
73. What is the height of muffing for OHE foundation?
Ans: 150mm
74. What is the location of cross contact bar in OHE?
Ans: cross type turnout
75. What is the CL assembly part used on RT tube for BFB steady arm in case of High speed?
Ans: Drop Bracket
76. What is the location of box type cantilever?
Ans: TTC mast and Cross over
77. What is the contact stagger for main line at crossing of wire in cross type turnout?
Ans: 150mm
78. What is the IR value of ceramic bead in dry condition after cleaning? (2.5KV megger)
Ans: 15 to 20 MΩ
79. What are the encumbrances provided for overlap type neutral section?
Ans: 1400mm, 750mm
80. What is the pre-sag of span carrying section insulator?
Ans: Zero
81. How many IR bonds are provided at LC gate? (double line)
Ans: 4no.

82. How many IT bonds are provided at LC gate? (double line)

Ans: 2 no.

83. Number of droppers in one span length?

Ans: $(\text{span length} / 9) + 1$

84. Caution boards provided before sidings/ sand hump or dead end (nonelectrified)

Ans: Electrical Engine Stop Board

OBJECTIVE TYPE (OHE)

1. What is the height of contact wire above Rail level for Regulated OHE (with pre sag of 10 cm)
(a) 5.50m (b) 5.60m (c) 5.80m (d) 5.80m
2. What is the height of contact wire above Rail level for unregulated OHE?
(a) 5.75m (b) 5.60m (c) 5.50m (d) 5.80m
3. What is the minimum height of contact wire at level crossing?
(a) 5.75m (b) 5.60m (c) 5.50m (d) 5.80m
4. What is the difference in height of turnout OHE above mainline OHE?
(a) 4cm (b) 10cm (c) 5cm (d) 6cm
5. What is the diameter of the contact wire?
(a) 12.54mm (b) 12.24mm (c) 10.54mm (d) 10.24mm
6. What is the diameter of catenary wire?
(a) 12.54mm (b) 12.24mm (c) 10.54mm (d) 10.24mm
7. What is the weight of contact wire per unit length?
(a) 0.602kg/m (b) 0.9512kg/m (c) 0.983kg/m (d) 0.600kg/m
8. What is the weight of catenary wire per unit length?
(a) 0.602kg/m (b) 0.9512kg/m (c) 0.953kg/m (d) 0.700kg/m
9. What is the permissible current density in contact wire?
(a) 4 A/sq.mm (b) 4.5A/sq.mm (c) 10A/sq.mm (d) 6A/sq.mm
10. What is the normal spacing between droppers?
(a) 6.75m (b) 2.25m (c) 9m (d) all of the above
11. What is the distance between the suspension point and first dropper?
(a) 6.75m (b) 2.25m (c) 9m (d) all of the above
12. What is the diameter of in span dropper?
(a) 5mm (b) 7mm (c) 12.24mm (d) none of the above
13. What is the diameter of register arm dropper?
(a) 5mm (b) 7mm (c) 12.24mm (d) none of the above
14. What is the diameter of Rigid dropper?
(a) 5mm (b) 7mm (c) 12.24mm (d) none of the above
15. What is the condemned diameter of contact wire on main line?
(a) 8.25mm (b) 8mm (c) 9mm (d) none of the above
16. What is the condemned diameter of contact wire on loop/yard line?
(a) 8.25mm (b) 8mm (c) 9mm (d) none of the above

17. What is the length of Bridle wire in tramway OHE?
(a) 8.5m (b) 8m (c) 10.5m (d) none of the above
18. What is the permissible gradient of contact wire on main line?
(a) 5mm/m (b) 3mm/m (c) 10mm/m (d) 1.5mm/m
19. What is the permissible gradient of contact wire on yard line?
(a) 5mm/m (b) 3mm/m (c) 10mm/m (d) 1.5mm/m
20. What is the max stagger allowed for contact wire in tangent track?
(a) +/-200mm (b) +/-300mm (c) +/-100mm (d) zero
21. What is the stagger value of catenary wire on tangent track?
(a) +/-200mm (b) +/-300mm (c) +/-100mm (d) zero
22. What is the max allowed stagger for catenary wire on curved track?
(a) +/-200mm (b) +/-300mm (c) +/-100mm (d) zero
23. What is the max stagger of the contact wire at support on curved track?
(a) +/-200mm (b) +/-300mm (c) +/-100mm (d) zero
24. What is the clearance between live wire to earth?
(a) 500mm (b) 400mm (c) 150mm (d) 2m
25. What is the clearance between RC wire to earth?
(a) 500mm (b) 400mm (c) 150mm (d) 2m
26. What is the clearance between RC wires to OHE?
(a) 500mm (b) 400mm (c) 150mm (d) 2m
27. What is the clearance between feeder wires to earth?
(a) 4.5m (b) 3m (c) 6m (d) 2m
28. What is the minimum clearance between OHE near FOB to earth?
(a) 270mm (b) 320mm (c) 250mm (d) 220mm
29. What is the clearance of danger zone?
(a) 4.5m (b) 3m (c) 6m (d) 2m
30. What is the width of faively AM-18 type pantograph?
(a) 1800mm (b) 2032mm (c) 2000mm (d) 1200mm
31. What is the standard (vertical & horizontal) long time (LTC) clearance in coastal area?
(a) 270mm (b) 320mm (c) 250mm (d) 220mm
32. What is the mid span stagger for tangent track?
(a) +/-200mm (b) +/-300mm (c) +/-100mm (d) zero
33. What is the lateral short time clearance for coastal area?
(a) 270mm (b) 320mm (c) 250mm (d) 200mm

34. What is the vertical short time clearance for coastal area?
(a) 270mm (b) 320mm (c) 250mm (d) 200mm
35. What is the clearance between two OHE in an insulated overlap?
(a) 200mm (b) 500mm (c) 250mm (d) 220mm
36. What is the clearance between two OHE in a UN insulated overlap?
(a) 200mm (b) 500mm (c) 250mm (d) 220mm
37. What is the clearance between runner and contact wire at section insulator?
(a) 230mm (b) 460mm (c) 350mm (d) 220mm
38. What is the min clearance between 25kv feeder and guard wire?
(a) 2m (b) 1.2m (c) 1.8m (d) 2.5m
39. What is the min clearance between top live OHE to bottom power line crossing
(a) 6m (b) 14.6m (c) 4.5m (d) none of the above
40. What is the length of stay insulator?
(a) 500mm (b) 520mm (c) 420mm (d) 540mm
41. What is the length of bracket insulator?
(a) 500mm (b) 520mm (c) 420mm (d) 540mm
42. What is the length of Pedestal insulator?
(a) 500mm (b) 520mm (c) 420mm (d) 540mm
43. What is the length of core insulator?
(a) 500mm (b) 520mm (c) 420mm (d) 540m
44. What is the length of Rod insulator?
(a) 500mm (b) 520mm (c) 420mm (d) 540m
45. What is the length of long creepage path bracket insulator?
(a) 1050mm (b) 1300mm (c) 1400mm (d) 1500mm
46. What is the diameter of anti creep wire?
(a) 15.2mm (b) 12.5mm (c) 14.7mm (d) 9.54mm
47. What is the diameter of larger span wire?
(a) 15.2mm (b) 12.5mm (c) 14.7mm (d) 9.54mm
48. What is the length of C-jumper?
(a) 2m (b) 1.6m (c) 3.8m (d) 2.5m
49. What is the length of F-jumper?
(a) 2m (b) 1.6m (c) 3.8m (d) 2.5m
50. What is the cross sectional area of C or F jumpers?
(a) 105sq. mm (b) 50sq mm (c) 107sqmm (d) 63sqmm

51. What is the name of the jumper used at overlap type neutral section?
(a) F jumper (b) C jumper (c) G jumper (d) none of above
52. What is the allowed separation between two c-jumpers in Regulated OHE?
(a) 350m (b) 400m (c) 100m (d) none
53. What is the allowed separation between two c-jumpers in unregulated OHE?
(a) 350m (b) 400m (c) 100m (d) none
54. What is the name of the jumper provided at anti creep centre?
(a) C jumper (b) F jumper (c) G jumper (d) none
55. What is the length of G- jumper?
(a) 2m (b) 1.6m (c) 3.8m (d) 2.5m
56. What is the area of cross feeder jumper?
(a) 160sq. mm (b) 105sq mm (c) 107sqmm (d) 63sqmm
57. What is the area of anti theft jumper?
(a) 105sq. mm (b) 50sq mm (c) 107sqmm (d) 63sqmm
58. What is the name of jumper to avoid theft of OHE?
(a) F jumper (b) C jumper (c) G jumper (d) anti theft jumper
59. What is the diameter of RC wire?
(a) 15.2mm (b) 12.5mm (c) 14.7mm (d) 9.54mm
60. What is the diameter of SS rope used for ATD?
(a) 15.2mm (b) 12.5mm (c) 8.5mm (d) 9.54mm
61. How many strands are present in G- jumper?
(a) 19 (b) 133 (c) 7 (d) 238
62. How many strands are there in C- jumper?
(a) 19 (b) 133 (c) 7 (d) 238
63. How many strands are there in catenary wire?
(a) 19 (b) 133 (c) 7 (d) 238
64. How many strands are there in Anti creep wire?
(a) 19 (b) 133 (c) 7 (d) 238
65. What is length of SS rope used for winch type regulating equipment?
(a) 2m (b) 10.5m (c) 7.02 m (d) 2.5m
66. What is length of SS rope used for 3 pulley type regulating equipment?
(a) 2m (b) 10.5m (c) 7.02 m (d) 2.5m
67. What is the maximum tension length for regulated OHE?
(a) 1500m (b) 750m (c) 2000m (d) 1250m

68. What is the maximum tension length for unregulated OHE?
(a) 1600m (b) 750m (c) 2000m (d) 1250m
69. What is the tension given to the catenary of conventional type unregulated OHE?
(a) 1700KG (b) 1300KG (c) 2000 KG (d) 1250KG
70. What is the tension given to the contact wire of conventional type unregulated OHE?
(a) 1700KG (b) 1300KG (c) 2000 KG (d) 1250KG
71. What is the tension on the contact wire of Regulated OHE?
(a) 1700KG (b) 1300KG (c) 2000 KG (d) 1000KG
72. What is the total tension on tramway type OHE?
(a) 1700KG (b) 1300KG (c) 1250 KG (d) 1000KG
73. What is the total tension on Regulated OHE?
(a) 1700KG (b) 2000 KG (c) 1250 KG (d) 1000KG
74. What is the maximum tension of unregulated OHE?
(a) 3000KG (b) 2000 KG (c) 1250 KG (d) 1000KG
75. What is the tension provided in Anti creep wire?
(a) 1300KG (b) 2000 KG (c) 1000 KG (d) 1250KG
76. What is the tension provided in cross feeder wire?
(a) 1000KG (b) 2000 KG (c) 400 KG (d) 1250KG
77. What is the cross section of RC wire?
(a) 147 sq mm (b) 93.3 sq mm (c) 63sqmm (d) 105sqmm
78. What is the cross section of Anti creep wire?
(a) 147 sq mm (b) 93.3 sq mm (c) 63sqmm (d) 105sqmm
79. What is the cross section of large span wire?
(a) 147 sq mm (b) 125.6 sq mm (c) 63sqmm (d) 105sqmm
80. What is the maximum allowed span range of Regulated OHE?
(a) 67.5m (b) 54m (c) 63m (d) 72m
81. What is the maximum allowed span range of unregulated OHE?
(a) 67.5m (b) 54m (c) 63m (d) 72m
82. What is the maximum span for a high wind pressure zone?
(a) 67.5m (b) 54m (c) 63m (d) 72m
83. What is the maximum span allowed in medium zone?
(a) 67.5m (b) 54m (c) 63m (d) 72m
84. What is the maximum allowed span for light zone?
(a) 67.5m (b) 54m (c) 63m (d) 72m

85. What is the wind pressure at red/heavy zone?
(a) 112.5kg/sq.m (b) 150kg/sq.m (c) 75kg/sq.mm (d) none
86. What is the wind pressure at yellow/medium zone?
(a) 112.5kg/sq.m (b) 150kg/sq.m (c) 75kg/sq.mm (d) none
87. What is the wind pressure at green/ light zone?
(a) 112.5kg/sq.m (b) 150kg/sq.m (c) 75kg/sq.mm (d) none
88. What is the x value of 3-pulley type regulating equipment at 35 ?
(a) 1300mm (b) 1250mm (c) 1500mm (d) 1200mm
89. What is the max relative gradient of contact wire in two adjacent span on mainlines?
(a) 1.5mm/m (b) 5mm/m (c) 10mm/m (d) 3mm/m
90. What is the max relative gradient of contact wire in two adjacent span on loop line/yard?
(a) 1.5mm/m (b) 5mm/m (c) 10mm/m (d) 3mm/m
91. what is the latest standard implantation value for a tangent track?
(a) 2.50m (b) 3m (c) 4.75m (d) 2.80m
92. What is the minimum implantation on platforms?
(a) 2.5m (b) 3m (c) 4.75m (d) 2.75m
93. What is the latest critical implantation allowed for a tangent track in IR?
(a) 2.5m (b) 3m (c) 4.75m (d) 2.36m
94. What is the implantation given for portal?
(a) 2.5m (b) 3m (c) 4.75m (d) 2.36m
95. What is the implantation on inside curve?
(a) 2.5m (b) 2.75/3.1m (c) 4.75m (d) 2.36m
96. What is the implantation on outside curve?
(a) 2.65m (b) 2.75/3.1m (c) 4.75m (d) 2.36m
97. What is the critical implantation allowed in yards?
(a) 2.65m (b) 2.21m (c) 4.75m (d) 2.36m
98. What is the implantation adopted for multi cantilever arrangement?
(a) 2.5m (b) 3m (c) 4.75m (d) 2.36m
99. What is the standard value of encumbrance at single cantilever?
(a) 1.4m (b) 0.9m (c) 0.75m (d) 1.6m
100. what is the maximum leaning at a height of 1/3rd of the contact height 1.85m?
(a) 33mm (b) 50mm (c) 60mm (d) 100mm
101. what is the height of height gauge bar at LC gate?
(a) 4.92m (b) 4.8m (c) 4.67m (d) 5.5m

102. what is the minimum steady clearance on loop line?
(a) 180mm (b) 250mm (c) 160mm (d) 100mm
103. what is the length of the mast used for OHE?
(a) 9.75m (b) 9.5m (c) 9.2m (d) 12.21m
104. what is the embedded length of the mast?
(a) 1.5m (b) 1.45m (c) 1.85m (d) 1.35m
105. what is the embedded length of the portal?
(a) 1.5m (b) 1.45m (c) 1.85m (d) 1.35m
106. what is the value of concrete cushion / bed?
(a) 15cm (b) 30cm (c) 50cm (d) 25cm
107. what is the distance between top and bottom attachment for stay and bracket tube?
(a) 1.5m (b) 2m (c) 1.9mm (d) 1.8m
108. what is the reverse deflection adopted for a tangent track?
(a) 3cm (b) 6cm (c) 9cm (d) 0
109. what is the reverse deflection given for structure on inside track?
(a) +3cm (b) +6cm (c) +9cm (d) except (c)
110. what is the reverse deflection given for structure on outside track?
(a) -3cm (b) -6cm (c) 0 (d) both b & c
111. what is the minimum shoulder width required to erect the mast?
(a) 30cm (b) 60cm (c) 90cm (d) 50cm
112. what is the minimum shoulder width required to erect mast at anti creep centre and inside curve?
(a) 30cm (b) 60cm (c) 90cm (d) 50cm
113. what is the size of Ballast used for grouting on OHE mast?
(a) 20mm (b) 40mm (c) 60mm (d) 50mm
114. what is the stagger value at Neutral section (PTFE)?
(a) +/-200mm (b) zero (c) +/-100mm (d) +/-300mm
115. what is the soil bearing capacity of the loose soil?
(a) 21500kg/sq.m (b) 11500kg/sq.m (c) 5500kg/sq.m (d) 16500kg/sq.m
116. what is the soil bearing capacity of the normal soil?
(a) 21500kg/sq.m (b) 11500kg/sq.m (c) 5500kg/sq.m (d) 16500kg/sq.m
117. what is the soil bearing capacity of the rocky soil?
(a) 21500kg/sq.m (b) 11500kg/sq.m (c) 5500kg/sq.m (d) 16500kg/sq.m
118. what is the soil bearing capacity of the Black Cotton(DRY) soil?
(a) 21500kg/sq.m (b) 11500kg/sq.m (c) 5500kg/sq.m (d) 16500kg/sq.m

119. what is the soil bearing capacity of the Black Cotton(WET) soil?
(a) 21500kg/sq.m (b) 11500kg/sq.m (c) 8250kg/sq.m (d) 16500kg/sq.m
120. what is the length of TTC mast?
(a) 10.135m (b) 10.61m (c) 10.55m (d) 9.50m
121. what is the size of the section used for N-type portal?
(a) 550X550mm (b) 450X450mm (c) 600X600m (d) 250X400mm
122. what is the size of section used in G type portal?
(a) 550X550mm (b) 450X450mm (c) 600X600m (d) 250X400mm
123. what is the maximum gap that can be adjusted at centre of the boom of a portal?
(a) 25cm (b) 60cm (c) 30cm (d) 50cm
124. what is the section used for TTC mast?
(a) 550X550mm (b) 450X450mm (c) 600X600m (d) 225X300mm
125. what is the size of cross section used for N/BFBU portal?
(a) 550X550mm (b) 450X450mm (c) 150X300m (d) 225X300mm
126. what is the allowed variation of rail level from the existing rail level?
(a) 25cm (b) 60cm (c) 30cm (d) 20cm
127. what is the maximum suspension distance used in the design of cantilever assembly?
(a) 2.5m (b) 6m (c) 3m (d) 3.5m
128. what is the minimum adjustment value which is obtained with a stay adjuster?
(a) 2cm (b) 6cm (c) 3cm (d) 5cm
129. what is the contact stagger for turnout line for cross type turnout?
(a) 200mm (b) 400mm (c) 300mm (d) 500mm
130. what is the maximum overall earth resistance of PTFE N/S?
(a) 0.5 ohms (b) 1 ohms (c) 10 ohms (d) 5 ohms
131. what is the minimum encumbrance at section insulator assembly of double line wire?
(a) 900mm (b) 450mm (c) 300mm (d) 600mm
132. what is the name of the bond provided at fish plate joint of track?
(a) Z bond (b) IR bond (c) L bond (d) IT bond
133. what is the size of MS flat used for L bond?
(a) 40X6mm (b) 50X6mm (c) 75X8mm (d) none
134. How many splices allowed in one tension length?
(a) 4 (b) 5 (c) 3 (d) 2
135. what is the minimum track centre at the location of SI assembly erected with free ends of runners towards the centre of the turnout?
(a) 1.45m (b) 1.65m (c) 1.726m (d) 2m

136. what is the minimum track centre at the location of SI erected with free ends of runners away from the centre of turnout?
(a) 1.45m (b) 1.65m (c) 1.726m (d) 2m
137. Maximum speed restriction of 8 wheel Tower car
(a) 110kmph (b) 80kmph (c) 60kmph (d) 40kmph
138. Maximum speed restriction of 4 wheel Tower car – type II
(a) 110kmph (b) 80kmph (c) 60kmph (d) 40kmph
139. Maximum speed restriction of 4 wheel Tower car – type III
(a) 110kmph (b) 80kmph (c) 60kmph (d) 40kmph
140. what Type of bond used in Track circuit area?
(a) Z bond (b) IR bond (c) L bond (d) IT bond
141. What is the Location of Catenary Double suspension clamp?
(a) BWA (b) ACA (c) ACC (d) all of the above
142. Gross clearances of class A ODC
(a) >9" (b) between 3" to 6" (c) between 6" to 9" (d) none
143. Gross clearances of class B ODC
(a) >9" (b) between 3" to 6" (c) between 6" to 9" (d) none
144. Gross clearances of class C ODC
(a) >9" (b) between 3" to 6" (c) between 6" to 9" (d) none
145. Speed restriction for class A ODC
(a) 40kmph (b) 30kmph (c) 25kmph (d) 15kmph
146. Speed restriction for class B ODC
(a) 40kmph (b) 30kmph (c) 25kmph (d) 15kmph
147. Speed restriction for class C ODC
(a) 40kmph (b) 30kmph (c) 25kmph (d) 15kmph
148. Length of discharge rod wire
(a) 10m (b) 8m (c) 7.5m (d) none
149. Diameter of discharge rod wire
(a) 40 mm (b) 50mm (c) 30mm (d) none
150. Minimum height of contact wire at over line structure
(a) 4.92m (b) 5.5m (c) 4.67m (d) none
151. "C" jumper and "F" jumper PG clamps ID NO.
(a) 1030 (b) 1040 (c) 1070 (d) 1080
152. "G" jumper PG clamp ID.NO.
(a) 1030 (b) 1040 (c) 1070 (d) 1080

153. Bridle wire PG clamp ID NO.
(a) 1030 (b) 1040 (c) 1070 (d) 6170
154. Section Insulator runner PG clamp ID.NO.
(a) 1030 (b) 1040 (c) 1070 (d) 6170
155. Feeder wire to OHE connecting PG clamps
(a) 1050 (b) 1040 (c) 1070 (d) 6170
156. Contact wire splice ID NO.
(a) 1090 (b) 1080 (c) 1100 (d) 1280
157. Catenary splice ID NO.
(a) 1090 (b) 1080 (c) 1100 (d) 1280
158. Feeder wire splice ID.NO.
(a) 1090 (b) 1080 (c) 1100 (d) 1280
159. Splice for double contact wire ID.NO
(a) 1090 (b) 1080 (c) 1100 (d) 1280
160. Contact wire ending cone ID.NO.
(a) 1121 (b) 1118 (c) 1130 (d) 1280
161. Catenary wire ending cone ID.NO.
(a) 1121 (b) 1118 (c) 1130 (d) 1280
162. Anti creep wire ending cone ID.NO.
(a) 1121 (b) 1118 (c) 1130 (d) 1280
163. Large span wire ending cone ID.NO.
(a) 1121 (b) 1118 (c) 1130 (d) 1280
164. Maximum number of tracks for N-type portal
(a) 2 (b) 6 (c) 4 (d) 8
165. Maximum number of tracks for O-type portal
(a) 2 (b) 6 (c) 4 (d) 8
166. Maximum number of tracks for R-type portal
(a) 2 (b) 6 (c) 4 (d) 8
167. Length of N-type portal upright
(a) 10.51 (b) 10.61 (c) 10.66 (d) none
168. Length of O-type portal upright
(a) 10.51 (b) 10.61 (c) 10.66 (d) 12.21
169. Length of R-type portal upright
(a) 10.51 (b) 10.61 (c) 10.66 (d) 12.21

170. Clear span of N-type portal
 (a) 30-40m (b) 20-30m (c) 30-36m (d) 10-20m
171. Clear span of O-type portal
 (a) 30-40m (b) 20-30m (c) 30-36m (d) 10-20m
172. Clear span of R-type portal
 (a) 30-40m (b) 20-30m (c) 30-36m (d) 10-20m
173. Length of End pieces for N-type portal
 (a) 5.38m,5.88m (b) 11.55m,12.05m (c) 10.55m,11.05m (d) none
174. Length of End pieces for O-type portal
 (a) 5.38m,5.88m (b) 11.55m,12.05m (c) 10.55m,11.05m (d) none
175. Length of End pieces for R-type portal
 (a) 5.38m,5.88m (b) 11.55m,12.05m (c) 10.55m,11.05m (d) none
176. Maximum span length of section insulator
 (a) 67m (b) 58.5m (c) 54m (d) 72m
177. what is the distance between two IR bonds
 (a) 200m (b) 450m (c) 350m (d) 500mm
178. How many 9-ton insulators are there in insulated overlap
 (a) 2 (b) 6 (c) 4 (d) 8
179. what is the length of sweeping zone
 (a) 2 -4m (b) 6-8m (c) 4-6m (d) 8-10m
180. what is the clearance pantograph to platform shed
 (a) 1.42m (b) 1.62m (c) 1.37m (d) 2.46m
181. No. of elementary sections allowed on umbrella mast
 (a) 2 (b) 6 (c) 4 (d) 1
182. "F" jumper is provided at
 (a) UIOL (b) TURNOUTS (c) CROSS OVERS (d) IOL
183. "G" jumper is provided at
 (a) UIOL (b) TURNOUTS (c) CROSS OVERS (d) ALL OF THE ABOVE
184. what is the value of linear expansion co-efficient of copper conductor?
 (a) $17 \times 10^{-6} \text{m/oc}$ (b) $17 \times 10^{-10} \text{m/oc}$ (c) $17 \times 10^{-3} \text{m/oc}$ (d) $17 \times 10^{-8} \text{m/oc}$
185. Extra Height achieved with Long Super mast
 (a) 2.75m (b) 1.835m (c) 0.905 (d) none
186. Extra Height achieved with Medium Super mast
 (a) 2.75m (b) 1.835m (c) 0.905 (d) none

187. Extra Height achieved with short Super mast
(a) 2.75m (b) 1.835m (c) 0.905m (d) none
188. Number of knee bracings for a portal
(a) 2 (b) 4 (c) 6 (d) 8
189. Length of long super mast
(a) 3.25m (b) 2.35m (c) 1.35 (d) none
190. Length of medium super mast
(a) 3.25m (b) 2.35m (c) 1.35 (d) none
191. Length of short super mast
(a) 3.25m (b) 2.35m (c) 1.35 (d) none
192. Height of contact wire at raised level
(a) 5.6m (b) 5.75m (c) 5.8m (d) 6.1m
193. In span dropper fixed length
(a) 150mm (b) 105mm (c) 146mm (d) none
194. PTFE N/S dead wire length
(a) 4.8m (b) 5.6m (c) 2.968m (d) 41m
195. 3-pulley type ATD SS wire rope length
(a) 7.5m (b) 8m (c) 7.02m (d) 10.5m
196. How many types of anti wind clamps are there?
(a) 2 (b) 4 (c) 6 (d) 8
197. For how many parties the TPC can issue permit to Work on the same elementary section at one time?
(a) 2 (b) 4 (c) 1 (d) none
198. Max. Number of cantilever on a drop arm
(a) 2 (b) 4 (c) 3 (d) 1
199. what is the tension for contact wire in unregulated OHE?
(a) 1000kg (b) 1300kg (c) 2000kg (d) 1700kg
200. What tool is commonly used to measure the sag and tension in OHE wires?
(a) Vernier caliper (b) Dynamometer (c) Multimeter (d) Clamp meter
201. The most common cause of a snapped contact wire is:
(a) Pantograph entanglement (b) Lightning (c) Wind disturbance (d) Bird nesting
202. What is the first step to take on arriving at a site of OHE wire break?
(a) Re-connect the wire (b) Check for power isolation (c) Start repair immediately (d) Inform control

203. A 'hot spot' noticed during thermal scanning of OHE connections suggests:
(a) Wire deformation (b) Likely flashover or loose joint (c) Overhead sag (d) Mechanical damage
204. What instrument is used to measure the contact wire thickness in OHE?
(a) Vernier caliper (b) Dynamometer (c) Clamp meter (d) Measuring tape
205. Which tool is essential for checking the verticality of masts during OHE erection?
(a) Plumb bob (b) Clamp meter (c) Megger (d) Wire cutter
206. Portable earths are connected to OHE for:
(a) Measuring current (b) Discharging residual voltage (c) Changing tension (d) Cutting wires
207. The chief preventive measure against flashover in insulators is:
(a) Routine cleaning (b) Sag correction (c) Pantograph replacement (d) Wire cutting
208. An OHE breakdown call must be attended within:
(a) 5 hours (b) 2 hours (c) As soon as possible (d) Next day
209. What is an essential document before working on live OHE equipment?
(a) First Information Report (b) Permit To Work (PTW) (c) Daily Log (d) Memo Pad

KEY FOR OHE OBJECTIVE QUESTIONS

1. (b) 5.60m
2. (a) 5.75m
3. (c) 5.50m
4. (c) 5cm
5. (b) 12.24mm
6. (c) 10.54mm
7. (b) 0.9512kg/m
8. (a) 0.602kg/m
9. (a) 4 A/sq.mm
10. (c) 9m
11. (b) 2.25m
12. (a) 5mm
13. (b) 7mm
14. (c) 12.24mm
15. (a) 8.25mm
16. (b) 8mm
17. (a) 8.5m
18. (b) 3mm/m
19. (c) 10mm/m
20. (a) +/-200mm
21. (d) zero
22. (a) +/-200mm
23. (b) +/-300mm
24. (a) 500mm
25. (c) 150mm
26. (b) 400mm
27. (d) 2m

- 28. (c) 250mm
- 29. (d) 2m
- 30. (b) 2032mm
- 31. (c) 250mm
- 32. (d) zero
- 33. (d) 200mm
- 34. (d) 200mm
- 35. (b) 500mm
- 36. (a) 200mm
- 37. (a) 230mm
- 38. (b) 1.2m
- 39. (a) 6m
- 40. (b) 520mm
- 41. (a) 500mm
- 42. (c) 420mm
- 43. (a) 500mm
- 44. (c) 420mm
- 45. (a) 1050mm
- 46. (b) 12.5mm
- 47. (c) 14.7mm
- 48. (b) 1.6m
- 49. (b) 1.6m
- 50. (b) 50sq mm
- 51. (a) F jumper
- 52. (a) 350m
- 53. (b) 400m
- 54. (a) C jumper
- 55. (c) 3.8m

56. (a) 160sq. mm
57. (b) 50sq mm
58. (d) anti theft jumper
59. (b) 12.5mm
60. (c) 8.5mm
61. (b) 133
62. (a) 19
63. (a) 19
64. (a) 19
65. (b) 10.5m
66. (c) 7.02 m
67. (a) 1500m
68. (c) 2000m
69. (b) 1300KG
70. (a) 1700KG
71. (d) 1000KG
72. (c) 1250 KG
73. (b) 2000 KG
74. (a) 3000KG
75. (c) 1000KG
76. (c) 400 KG
77. (a) 147 sq mm
78. (b) 93.3 sq mm
79. (b) 125.6 sq mm
80. (d) 72m
81. (a) 67.5m
82. (c) 63m
83. (a) 67.5m

84. (d) 72m
85. (b) 150kg/sq.m
86. (a) 112.5kg/sq.m
87. (c) 75kg/sq.mm
88. (a) 1300mm
89. (a) 1.5mm/m
90. (b) 5mm/m
91. (d) 2.80m
92. (c) 4.75m
93. (a) 2.50m
94. (b) 3m
95. (b) 2.75/3.1m
96. (a) 2.65m
97. (b) 2.21m
98. (b) 3m
99. (a) 1.4m
100. (a) 33mm
101. (c) 4.67m
102. (a) 180mm
103. (b) 9.5m
104. (d) 1.35m
105. (b) 1.45m
106. (a) 15cm
107. (b) 2m
108. (b) 6cm 110
109. (d) +6cm+3cm
110. (d) -6cm, 0
111. (a) 30cm

- 112. (d) 50cm]
- 113. (a) 20mm
- 114. (b) zero
- 115. (c) 5500kg/sq.m
- 116. (b) 11500kg/sq.m
- 117. (a) 21500kg/sq.m
- 118. (d) 16500kg/sq.m
- 119. (c) 8250kg/sq.m
- 120. (a) 10.135m
- 121. (b) 450X450mm
- 122. (d) 250X400mm
- 123. (a) 25cm
- 124. (d) 225X300mm
- 125. (c) 150X300m
- 126. (c) 30cm
- 127. (d) 3.5m
- 128. (c) 3cm
- 129. (c) 300mm
- 130. (c) 10 ohms
- 131. (d) 600mm
- 132. (c) L bond
- 133. (b) 50X6mm
- 134. (c) 3
- 135. (b) 1.65m
- 136. (a) 1.45m
- 137. (a) 110kmph
- 138. (d) 40kmph
- 139. (c) 60kmph

- 140. (a) Z bond
- 141. (c) ACC
- 142. (a) >9"
- 143. (c) between 6" to 9"
- 144. (b) between 3" to 6"
- 145. (a) 40kmph
- 146. (b) 30kmph
- 147. (c) 25kmph
- 148. (c) 7.5m
- 149. (a) 40mm
- 150. (d) 4.80m
- 151. (b) 1040
- 152. (a) 1030
- 153. (c) 1070
- 154. (d) 6170
- 155. (a) 1050
- 156. (b) 1080
- 157. (a) 1090
- 158. (c) 1100
- 159. (d) 1280
- 160. (b) 1118
- 161. (a) 1121
- 162. (c) 1130
- 163. (c) 1130
- 164. (c) 4
- 165. (b) 6
- 166. (d) 8
- 167. (a) 10.51

- 168. (b) 10.61
- 169. (c) 10.66
- 170. (d) 10-20m
- 171. (b) 20-30m
- 172. (c) 30-36m
- 173. (a) 5.38m,5.88m
- 174. (c) 10.55m,11.05m
- 175. (b) 11.55m,12.05m
- 176. (c) 54m
- 177. (c) 350m
- 178. (c) 4
- 179. (c) 4-6m
- 180. (c) 1.37m
- 181. (d) 1
- 182. (d) IOL
- 183. (d) all of the above
- 184. (a) 17x10-6m/OC
- 185. (a) 2.75m
- 186. (b) 1.835m
- 187. (c) 0.905m
- 188. (a) 2
- 189. (a) 3.25m
- 190. (b) 2.35m
- 191. (c) 1.35m
- 192. (c) 5.8m
- 193. (b) 105mm
- 194. (c) 2.968m
- 195. (c) 7.02m

- 196. (a) 2
- 197. (c) 1
- 198. (c) 3
- 199. (d) 1700kg
- 200. (b) Dynamometer
- 201. (a) Pantograph entanglement
- 202. (b) Check for power isolation
- 203. (b) Likely flashover or loose joint
- 204. (a) Vernier caliper
- 205. (a) Plumb bob
- 206. (b) Discharging residual voltage
- 207. (a) Routine cleaning
- 208. (c) As soon as possible
- 209. (b) Permit To Work (PTW)

II. PSI, TPC & RC

OBJECTIVE TYPE PSI QUESTIONS

1. How many BM's are there in a SSP for a double line section?
(a) 1 (b) 2 (c) 4 (d) 3
2. What is the rating of drop out fuse of ATs provided at Station?
(a) 1A (b) 2 A (c) 4A (d) 3.5A
3. How many BM's are there in a SSP for a single line section?
(a) 1 (b) 2 (c) 4 (d) 3
4. What is the maximum distance between two discharge rods?
(a) 2km (b) 1km (c) 4km (d) 3km
5. What is the maximum value of combined earth resistance of AT, BT?
(a) 10 ohm (b) 20 ohm (c) 0.5 ohm (d) 2 ohm
6. What is the maximum value of combined earth resistance of SP, SSP?
(a) 10 ohm (b) 20 ohm (c) 0.5 ohm (d) 2 ohm
7. What is the maximum value of combined earth resistance of TSS?
(a) 10 ohm (b) 20 ohm (c) 0.5 ohm (d) 2 ohm
8. What is the maximum value of combined earth resistance of LC Gates?
(a) 10 ohm (b) 20 ohm (c) 0.5 ohm (d) 2 ohm
9. How many circuit breakers in a TSS including capacitor bank CB?
(a) 6 (b) 5 (c) 7 (d) 8
10. What is the size of bus bar arrangement used in TSS for a 21.6MVA transformer?
(a) 40mm (b) 50mm (c) 36mm (d) 39mm
11. What is the gap of spheres to test BDV of transformer oil?
(a) 3.5mm (b) 12.5mm (c) 2.5mm (d) 4mm
12. How many Bridging Mains are there in a SP?
(a) 1 (b) 2 (c) 4 (d) 3
13. What is the gap of arcing horns of power transformers on HV side?
(a) 800mm (b) 270mm (c) 760mm (d) 100mm
14. What is the gap of arcing horns of power transformers on LV side?
(a) 800mm (b) 270mm (c) 760mm (d) 100mm
15. What is the Rating of lightening arrester on 132 KV side?
(a) 42kv (b) 132kv (c) 120kv (d) 145kv
16. What is the Rating of lightening arrester on 25 KV side?
(a) 42kv (b) 132kv (c) 120kv (d) 145kv

17. What is the arcing horn gap of AT?
(a) 800mm (b) 270mm (c) 760mm (d) 100mm
18. What is the cross section of MS flat used for earthing of secondary terminal of traction transformer?
(a) 40X6mm (b) 50X6mm (c) 75X6mm (d) 75X8mm
19. What is the dia 25KV bus bar of 12.5 MVA transformer TSS?
(a) 40mm (b) 50mm (c) 36mm (d) 39mm
20. What is the time given for Re-closing of CB of shunt capacitor bank?
(a) 4min (b) 5min (c) 6min (d) 10min
21. CT Ratio of 21.6MVA Transformer on 25KV side?
(a) 1000/500/5A (b) 400/200/5A (c) 1500/750/5A (d) none
22. Clearance between 25KV bus bar to ground?
(a) 4.5m (b) 3.8m (c) 1.2m (d) none of above
23. Clearance between male and female contacts of 25KV isolator?
(a) 45cm (b) 30cm (c) 56cm (d) none of above
24. What is the BDV of 132/25KV transformer oil?
(a) 45kv (b) 30kv (c) 15kv (d) none of above
25. What is the Fuse rating of 110 volt battery charger?
(a) 1Amps (b) 2Amps (c) 4Amps (d) 3Amps
26. What is the Ampere Hour rating of 110v battery in TSS?
(a) 200 Ah (b) 40 Ah (c) 100Ah (d) 72 Ah
27. What is the Rating of drop out fuse for 10KVA AT?
(a) 2 Amps (b) 42Amps (c) 1 Amps (d) none of these
28. How many BMs are there in TSS including BX?
(a) 2 (b) 3 (c) 5 (d) 1
29. How many 25KV CTs are in TSS?
(a) 1 (b) 3 (c) 5 (d) 7
30. What Is the resistance of a closing coil?
(a) 20 ohms (b) 30 ohms (c) 50 ohms (d) 10 ohms
31. For effective earthing system Coefficient of earthing is
(a) 1 (b) 0.9 (c) 0.8 (d) 2
32. For non effective earthing system coefficient of earthing is
(a) 1 (b) 0.9 (c) 0.8 (d) 2
33. What is current setting of OCR?
(a) 125% (b) 200% (c) 100% (d) 150%

34. What is the secondary current of AT (10 KVA)?
(Assume secondary voltage =240v)
(a) 41.67A (b) 42A (c) 43A (d) 40A
35. What is the burden of 132KV CT?
(a) 100VA (b) 30VA (c) 120VA (d) 60VA
36. What is the burden of 25KV CT?
(a) 100VA (b) 30VA (c) 120VA (d) 60VA
37. What is the burden of TYPE-I PT?
(a) 100VA (b) 30VA (c) 120VA (d) 60VA
38. What is the burden of TYPE-II PT?
(a) 100VA (b) 30VA (c) 120VA (d) 60VA
39. What is the secondary voltage of TYPE-I PT?
(a) 100V (b) 230V (c) 110V (d) none
40. What is the secondary voltage of TYPE-II PT?
(a) 100V (b) 230V (c) 110V (d) none
41. What is feeding zone?
(a) SP-SSP (b) FP-SP (c) SP-SP (d) SSP-SM
42. What is sub-sector?
(a) SP-SSP (b) FP-SP (c) SP-SP (d) SSP-SM
43. What is an elementary section?
(a) SP-SSP (b) FP-SP (c) SP-SP (d) SSP-SM
44. What is the permissible PI value of transformer? (R60/R10)
(a) 1.2 (b) 1.4 (c) 1.6 (D) none
45. What is the permissible PI value of transformer? (R600/R60)
(a) 1.2 (b) 1.4 (c) 1.6 (D) none
46. What is the temperature setting of WTI alarm?
(a) 950c(b) 500c (c) 750c(d) 850c
47. What is the temperature setting of WTI Trip?
(a) 950c(b) 500c (c) 750c(d) 850c
48. What is the temperature setting of OTI alarm?
(a) 950c(b) 500c (c) 750c(d) 850c
49. What is the temperature setting of OTI Trip?
(a) 950c(b) 500c (c) 750c(d) 850c
50. What is the setting of buchholz relay alarm?
(a) 100 CC (b) 300 CC (c) 200CC (d) 400 CC

51. What is the setting of buchholz relay Trip?
(a) 100 CC (b) 300 CC (c) 200CC (d) 400 CC
52. Which side of the traction transformer tap changer is available?
(a) HV side (b) LV side (c) both sides (d) none
53. What is the color of silica-gel in good condition?
(a) BLACK (b) PINK (c) BLUE (d) WHITE
54. What is the color of silica-gel in poor condition?
(a) BLACK (b) PINK (c) BLUE (d) WHITE
55. What is the normal condition of BCX (Bus coupler Interrupter)?
(a) Close (b) Open (c) none
56. What is the normal condition of BC (Bus coupler Isolator)?
(a) Close (b) Open (c) none
57. Current carrying capacity of 21.6MVA transformer?
(a) 800A (b) 600A (c) 1200A (d) 1000 A
58. What is the IR value of 120KV LA?
(a) >5000M Ω (b) <4000M Ω (c) 2000M Ω (d) none
59. Capacitance of shunt capacitor measured with
(a) Multi meter (b) Volt meter (c) ohm meter (d) Capacitance meter
60. What is the rating of Battery set used at SSP?
(a) 100AH (b) 200AH (c) 40AH (d) 80AH
61. What is the lubricating oil used in M/S CGL make CB compressor?
(a) SAE40 (b) SAE90 (c) Servo 220 (d) SAE 20/40
62. What is the lubricating oil used in reduction gear box in M/S ALIND VCB?
(a) Grease (b) SAE90 (c) Transformer oil (d) SAE 20/40
63. What is the rated gas pressure in SF6 circuit breaker?
(a) 4kg/sq.cm (b) 4.6 kg/sq.cm (c) 10.8kg/sq.cm (d) 18kg/sq.cm
64. What is the rated air pressure in circuit breaker?
(a) 15kg/sq.cm (b) 4.6 kg/sq.cm (c) 10.8kg/sq.cm (d) 18kg/sq.cm
65. What is the dia of sphere in a Transformer oil BDV test kit?
(a) 2.5mm (b) 4.5mm (c) 5mm (d) 12mm
66. What is the specific gravity to be maintained at 270c?
(a) 1.2 (b) 1.4 (c) 1.6 (d) 1.8
67. What type cooling used for Traction transformer (21.6MVA) in TSS?
(a) ONAN (b) ONAF (c) BOTH a & b (d) OFAF

68. What type cooling used for Traction transformer (21.6 / 30.24MVA) in TSS?
(a) ONAN (b) ONAF (c) ONAN / ONAF (d) OFAF
69. What is the impedance of OHE / TKM in double line without RC?
(a) 0.41ohm/km (b) 0.24 ohm/km (c) 0.71ohm/km (d) none
70. What is the competency certificate issued to the PSI/TECH?
(a) TR01 (b) TR05 (c) TR06 (d) TR02
71. What is the competency certificate issued to the PSI/SUPERVISOR?
(a) TR01 (b) TR05 (c) TR06 (d) TR02
72. What is the competency certificate issued to the SUPERVISOR/ SKILLED ARTISAN FOR PROTECTIVE RELAYS?
(a) TR01 (b) TR05 (c) TR06 (d) TR07
73. What is the maximum permissible contact wear in VCB (vacuum CB)?
(a) 5mm (b) 4mm (c) 10mm (d) 3mm
74. What is the effect on Maximum Demand, if power factor decreases?
(a) Decreases (b) No change (c) Increases (d) none
75. what is the name of the electrolyte used in battery (TrD) ?
(a) Lead (b) lead peroxide (c) Sulphuric acid (d) Hydrogen chloride
76. Which of the following is NOT a standard plant item in a PSI maintenance depot?
(a) Battery charger (b) Oil filtration plant (c) Earth resistance tester (d) Pantograph
77. For insulation testing of PSI cables, which instrument is generally used?
(a) Earth tester (b) Megger (c) Clamp meter (d) Hot stick
78. PSI maintenance staff use a thermal imager for:
(a) Voltage measurement (b) Detecting hot spots in equipment (c) Measuring cable length (d) Checking feeder alignment
79. Which equipment is used to drain oil from a transformer for filtration?
(a) Oil testing kit (b) Oil filtration plant (c) Vacuum cleaner (d) Centrifuge
80. One major preventive measure for substation relay failures is:
(a) Increase relay sensitivity (b) Clean relay contacts and periodic testing (c) Lower circuit voltage (d) Change relay type
81. Power Transformer failure due to moisture can be prevented by:
(a) Use of additional lubricants (b) Periodic oil filtration and moisture removal (c) Keeping transformer tanks open (d) Increasing cooling fans
82. Regular measurement of earth resistance in substations helps in:
(a) Reducing wire theft (b) Improving personnel safety and equipment protection (c) Lowering power tariffs (d) Cooling transformers

83. Which instrument prevents the malfunctioning of equipment due to over-voltages in PSI?
(a) Lightning arrester (b) Circuit breaker (c) Earth tester (d) Voltmeter
84. The device used to monitor transformer oil temperature is called a:
(a) Thermometer (b) Oil filtration pump (c) Circuit breaker (d) Voltmeter
85. What is the immediate action on detecting smoke from PSI switchgear?
(a) Inform control, isolate equipment (b) Increase cooling (c) Clean with water (d) Adjust voltage

KEY FOR PSI OBJECTIVE QUESTIONS

1. (d) 3
2. (a) 1A
3. (a) 1
4. (b) 1km
5. (a) 10ohm
6. (d) 2ohm
7. (c) 0.5ohm
8. (a) 10 ohm
9. (c) 7
10. (b) 50mm
11. (c) 2.5mm
12. (b) 2
13. (c) 760mm
14. (b) 270mm
15. (c) 120kv
16. (a) 42kv
17. (d) 100mm
18. (d) 75X8mm
19. (c) 36mm
20. (d) 10min
21. (c) 1500/750/5A
22. (b) 3.8m
23. (a) 45cm
24. (a) 45KV
25. (b) 2amp
26. (a) 200AH
27. (c) 1amp

- 28. (c) 5
- 29. (d) 7
- 30. (b) 30 ohms
- 31. (c) 0.8
- 32. (a) 1
- 33. (b) 200%
- 34. (d) 40A
- 35. (b) 30VA
- 36. (d) 60VA
- 37. (b) 30VA
- 38. (a) 100VA
- 39. (a) 100V
- 40. (c) 110V
- 41. (c) SP-SP
- 42. (a) SP-SSP
- 43. (d) SSP –SM
- 44. (b) 1.4
- 45. (a) 1.2
- 46. (d) 85
- 47. (a) 95
- 48. (c) 75
- 49. (d) 85
- 50. (c) 200cc
- 51. (b) 300cc
- 52. (b) LV side
- 53. (c) BLUE
- 54. (b) PINK
- 55. (b) OPEN

- 56. (a) CLOSE
- 57. (a) 800A
- 58. (a) >5000 M ohm
- 59. (d) Capacitance Meter
- 60. (c) 40AH
- 61. (c) Servo 220
- 62. (b) SAE90
- 63. (b) 4.6kg/sq.cm
- 64. (a) 15kg/sq.cm
- 65. (d) 12mm
- 66. (a) 1.200
- 67. (a) ONAN
- 68. (c) ONAN/ONAF
- 69. (b) 0.24ohm/km
- 70. (b) TR05
- 71. (c) TR06
- 72. (d) TR07
- 73. (d) 3mm
- 74. (c) increases
- 75. (c) sulphuric acid
- 76. (d) Pantograph
- 77. (b) Megger
- 78. (b) Detecting hot spots in equipment
- 79. (b) Oil filtration plant
- 80. (b) Clean relay contacts and periodic testing
- 81. (b) Periodic oil filtration and moisture removal
- 82. (b) Improving personnel safety and equipment protection
- 83. (a) Lightning arrester

84. (a) Thermometer

85. (a) Inform control, isolate equipment

ONE WORD ANSWER QUESTIONS (PSI)

1. What relay will act when two different phases are bridged?
Ans: WPC relay
2. What instrument used for measuring earth resistance?
Ans: Earth resistance tester
3. What do you measure with Hydrometer?
Ans: Specific gravity
4. What is the purpose of Oil testing kit?
Ans: to measure BDV value
5. What is the unit for Energy consumption?
Ans: Watt-hours
6. What breaker will trip when a fault is there on OHE?
Ans: feeder CB
7. What do you measure with Meggar?
Ans: Insulation resistance
8. What is the name of solution of water and Sulphuric Acid used in batteries?
Ans: Electrolyte
9. What type of fire extinguisher is used for electrical fires?
Ans: DCP (Dry chemical powder)
10. Specific gravity means?
Ans: Ratio of density of acid to that of density of water
11. Power factor is the ratio
Ans: True power to apparent power
12. What is the overall protection at TSS yard against Lightning Arrester?
Ans: Earth screen wire
13. What is the purpose of arcing horns provided for Ats?
Ans: As lightening arrester
14. What CB will trip when there is overload?
Ans: LV CB
15. What is the maximum distance between two discharge rods?
Ans: 1000m
16. What is the purpose of shunt capacitor bank in TSS?
Ans: to improve power factor

17. What is the purpose of transformer oil in transformer?
Ans: Cooling and insulation
18. What is the main safety item required for disconnecting buried rail connection
Ans: Rail Jumper
19. What is the name of BM through which OHE supply is extended from one TSS to another?
Ans: Bridging BM
20. What are the min & max clearances of SPI in open condition?
Ans: 38-50 cm
21. What is the purpose of AT in a station?
Ans: to provide LT supply to CLS
22. What is the purpose of AT in TSS?
Ans: battery charger and lighting purpose
23. What CT protects the transformer from internal faults (differential)?
Ans: Turret (or) bushing CT
24. What type of tap changer is used for traction transformer?
Ans: off load tap changer
25. What type of earthing used for equipment is in a substation?
Ans: Double earthing
26. What extra item is provided for an isolator at trip shed?
Ans: Earthing heel
27. How the temperature of the transformer winding is known?
Ans: WTI (winding temperature indicator)
28. How the arc quenched in the gas CB?
Ans: SF6
29. How the feed is extended from one TSS zone to another TSS zone?
Ans: by closing bridging interrupter in SP
30. What is the purpose of tap change in AT?
Ans: by changing primary taps, variation on secondary voltage is obtained
31. Which CT on 25KV side gives total load current?
Ans: Transformer CT
32. How the entry of moisture is restricted in traction transformer?
Ans: Silica gel breather
33. Where 33KV pedestal insulators are used for?
Ans: 132KV DP isolators

34. What is the minimum PF required?
Ans: 0.9 – 0.95
35. How the PF is improved?
Ans: by providing shunt capacitor bank
36. What relay will act when there is a heavy gas collection inside the transformer body?
Ans: Buchholz relay
37. What relay will act when transformer overloaded?
Ans: LVIDMTL
38. What relay will act when a fault across on the phase of 132KV side?
Ans: HV CB
39. What happens if CT secondary becomes open circuit?
Ans: High voltage in the secondary circuit. (May burst)
40. What relay will act when short circuit across on OHE at farthest point of feeding zone?
Ans: MHO relay (DPR)
41. What for a semaphore is provided in control panel?
Ans: status indication
42. What is the purpose of oil in the choke of breather?
Ans: to observe foreign particles
43. When a bridging BM in an SP can be closed?
Ans: when one side there is no catenary voltage
44. What for 100KVA AT is provided in TSS?
Ans: power supply to filter plant
45. What is name of compound used for battery terminal connections?
Ans: Petroleum jelly
46. Expand PRD
Ans: Pressure Relief Device
47. Voltage rating of LA is given by the formula
Ans: $(1.1) \times (\text{line to line rms voltage}) \times (\text{coefficient of earthing})$
48. Variation in Tap changes for Traction transformer
Ans: +10% to -15% (insteps of 5%)
49. What is the overall protection provided for a TSS yard equipment from lightning source?
Ans: Earth screen wire
50. Expand DGA
Ans: Dissolved Gas Analysis

51. what is the length of buried rail provided at TSS?
Ans: 13m
52. What is the cross section of MS flat used for earthing of secondary terminal of traction transformer?
Ans: M.S. flat 75x8mm
53. What is the mutual separation between two earth electrodes?
Ans: not less than 6m
54. What is the length of discharge rod cable?
Ans: 7.5m
55. What is the cross section of discharge rod cable?
Ans: 40sq.mm
56. What is the height of earth screen wire provided at TSS?
Ans: not less than 2.5m (above the live wire)
57. Who is the electrical inspector to the government (EIG)?
Ans: CEE (chief electrical engineer)
58. What is the plug setting multiplier (PSM) in relays?
Ans: fault current in relay coil / rated secondary current of CT x current setting
59. How much time 50% overloading allowed on traction transformer?
Ans: 15minutes
60. How much time 100% overloading allowed on traction transformer?
Ans: 5minutes
61. What is the maximum torque angle of MHO relay?
Ans: 750
62. What is the maximum torque angle of WPC relay?
Ans: 1250
63. What is the current setting range of differential relay?
Ans: 20 to 80%
64. What is the bias setting range of differential relay?
Ans: 20 to 40%
65. What is the current setting of restricted earth fault relay?
Ans: 10 to 40%
66. What is the purpose of series reactor?
Ans: to limit the inrush of current due to switching over voltage and harmonics

67. What is the Minimum height between any guard wire and live crossing conductor under the most adverse condition?

Ans: not less than 1.5m

68. Expand CTD?

Ans: Capacitor Tripping Device

69. What is the purpose of CTD in CB?

Ans: Whenever 110V D.C supply fails, it will extend the supply to Trip coil and open the CB.

70. What is the function of Anti pumping relay in CB?

Ans: Continuously applied closing command does not cause the breaker to reclose after it has tripped out on a fault, to prevent damage by pumping effect.

71. which device that detects the fault and initiates the operation of Circuit Breaker (CB) to isolate the defective system from the rest of the system?

Ans: Relay

72. How much percentage capacitive reactance is equal to the series reactor inductive reactance?

Ans: $X_L = 13\% X_c$

OBJECTIVE TYPE RC QUESTIONS

1. What is the name of the equipment used to convert digital information into analog information?
(a) Transducer (b) modem (c) digital meter (d) all of the above
2. What is the name of the equipment used to convert the energy in one form to another form?
(a) Oscillator (b) transformer (c) transducer (d) none of the above
3. How many AI cards are provided in TSS?
(a) 1 (b) 3 (c) 4 (d) 8
4. Which relay recognizes the dead line and live line?
(a) OCR (b) Panto Flash Over Relay (c) WPC(d) DPR
5. What type of cooling is provided for the power supply unit at RC?
(a) Forced cooling (b) Natural Air Cooling (c) none
6. How many AI cards are provided in SP RTU?
(a) 2 (b) 3 (c) 1 (d) 4
7. How many AI cards are provided in SSP RTU?
(a) 4 (b) 1 (c) 2 (d) nil
8. How many types of input interface cards are available in logic chassis of scada?
(a) 2 (b) 1 (c) 4 (d) nil
9. What is the voltage level of status & alarm signal of field devices?
(a) 230v (b) 110v (c) 74v (d) 24v
10. What is the voltage level of status & alarm signal of field devices?
(a) 230v (b) 110v (c) 74v (d) 24v
11. What is the comm. Scheme adopted for modems used for SCADA?
(a) Frequency shift keying (b) Amplitude modulation (c) none
12. What is the transmission capacity of modem?
(a) 230 baud (b) 100 baud (c) 600 baud (d) 30 baud
13. What is the current rating of a contactor?
(a) 15amps (b) 25amps (c) 10amps (d) 24amps
14. What is the coil voltage of a contactor?
(a) 230v (b) 100v (c) 74v (d) 24v
15. How many contacts are available for CB?
(a) 6 no (b) 8 no (c) 4 no (d) 2 no
16. How many Tele commands are provided for RTU in TSS?
(a) 24 (b) 48 (c) 6 (d) 2

17. How many Telemetry signals are available in RTU in TSS?
(a) 24 (b) 6 (c) 12 (d) 36
18. How many Tele signals are available in RTU in TSS?
(a) 48 (b) 6 (c) 96 (d) 26
19. How many Type-I Tele signals can be sensed at TSS for relay WPC/DPR/OCR?
(a) 2 (b) 3 (c) 6 (d) 1
20. How many Type-II Tele signals can be sensed during 25kv feeder PT fuse failure?
(a) 2 (b) 3 (c) 5 (d) 1
21. How many Type-II Tele signals can be sensed during 25kv feeder shunt capacitor fuse failure?
(a) 2 (b) 3 (c) 5 (d) 1
22. What is the voltage level required for sensing type II Tele-signals?
(a) 110 AC & 240v AC (b) 110 v DC only (c) 240v ac only (d) 24v

KEY FOR RC OBJECTIVE QUESTIONS

1. (b) modem
2. (c) transducer
3. (a) 1
4. (b) Panto Flash Over Relay
5. (b) Natural Air Cooling
6. (c) 1
7. (d) nil
8. (c) 4
9. (b) 110v
10. (b) 110v
11. (a) Frequency shift keying
12. (c) 600 baud
13. (c) 10amps
14. (d) 24v
15. (c) 4 no
16. (a) 24
17. (b) 6
18. (a) 48
19. (c) 6
20. (a) 2
21. (d) 1
22. (a) 110 AC & 240v AC

ONE WORD ANSWER (RC)

1. What is meant by volatile memory?
Ans: The memory which loses its content when power is switched off.
2. What is the purpose of DO cards in Logic Chassis?
Ans: For sending data output signals from the field.
3. What are Telemetry signals?
Ans: voltage and current
4. What is the function of Analog input card of Logic chassis?
Ans: To get Telemetry signals and sent to RCC
5. What is meant by volatile memory?
Ans: The memory which loses its content when power is switched off.
6. What is the purpose of MOV provided in the digital input interface unit?
Ans: As a Surge Arrestor.
7. What is the purpose of opt coupler?
Ans: To isolate the logical chassis from field winding.
8. Expand SMPS?
Ans: Switched Mode Power Supply
9. What is the modulation technique used in the inverter of UPS?
Ans: Pulse Width Modulation (PWM)
10. What is meant by volatile memory?
Ans: The memory which loses its contents when power is switched off.
11. What is the transmission capacity of RS 232 C?
Ans: 110 to 38.4 k baud
12. What is the function of type-II input interface card?
Ans: AC voltage sensing
13. What is the function of type-III input interface card?
Ans: DC voltage comparison
14. What is the name of the module provided in RTU that is used to sense the status and alarm of field devices?
Ans: type-I status termination module
15. What is the purpose of type-II AC voltage sensing interface card?
Ans: for sensing AC input and PT fuse failure voltages and to step down.
16. What is the purpose of OPTO coupler?
Ans: to isolate the logical chassis from field winding.

17. What is the type of input interface unit to sense catenary indication?
Ans: type – IV AC voltage comparison
18. What is the name of the section of power supply unit used to monitor the AC input supply and to changeover to battery supply during supply failures?
Ans: supervisory section
19. What is the reason for adopting pulse width modulation (PWM) In the inverter?
Ans: to suppress lower order harmonics
20. What is the purpose of telemetry signals?
Ans: to measure voltage, current and maximum demand
21. What is the rating of PT used for voltage measurement in telemetry of TSS?
Ans : 30kv/132v
22. What is the rating of PT used for voltage measurement in telemetry of SP?
Ans: 30kv/132v
23. How many Tele commands are sensed at RTU of SSP?
Ans: 8
24. How many Tele signals are sensed at RTU of SSP?
Ans: 12
25. What is the process of scanning the RTU by RCC, called?
Ans: Polling
26. How many Tele signals are sensed at RTU of TSS?
Ans: 48
27. How many status are sensed at RTU of SSP?
Ans: 6
28. How many Telemetry are sensed at RTU of SP?
Ans: 2
29. How many Telemetry are sensed at RTU of SSP?
Ans: zero
30. How many Tele command signals are sensed at SP, SSP?
Ans: 8
31. How many Tele command signals are sensed at TSS?
Ans: 24
32. What is rating of CT used for current measurement in telemetry?
Ans: 1500/5 or 750/5 Amps
33. What is the expansion of MOV?
Ans: Metal oxide varistor

34. What is the modulation technique used in the inverter of UPS?
Ans. Pulse Width Modulation (PWM)
35. What is the serial data interface used in RC for communication?
Ans: RS 232 d
36. Expand CVT?
Ans: Constant Voltage Transformer---
37. With which language the SCADA software designed?
Ans: UNIX operating system with C language.
38. Expand RTU?
Ans: Remote Terminal Unit
39. Expand OWS?
Ans: Operator Work Station
40. What is meant by Tele Command?
Ans: One opening command + one closing command + Two Status Commands.
41. What is meant by Digital Output (DO)?
Ans: Signal which goes out of RCC to RTU
42. What is meant by Digital Input (DI)?
Ans: Signal which comes to RCC from RTU
43. What is meant by Tele signal?
Ans: Signals which comes from field (ex: alarms)
44. What is the purpose of logic chassis?
Ans: It is used to control and process the all field signals.
45. What is the purpose of Interface unit?
Ans: It receives and controls the field signal devices.
46. What are TYPES of Tele signals available?
Ans: TYPE –I, TYPE-II, TYPE-III &TYPE –IV

ONE WORD ANSWER (TPC)

1. What is called when a section of line is blocked against movement of electrically hauled only i.e., a section where 25 KV electric supply to the OHE is cut off and the section made dead?
Ans: Power Block
2. Expand PTW?
Ans: Permit to work
3. How many types of power blocks are there?
Ans: Three types
4. What are the three types of power blocks?
Ans: Emergency Power Block, Pre arranged power block, Local power block
5. Expand SWR?
Ans: Station Working Rule
6. What is called the protection provided to stop the movement of electric rolling stock running on the same track on which a section has been made dead?
Ans: Longitudinal Protection
7. what is called the protection provided to stop the movement of electric rolling stock running into a section , which has been made dead, from another track or from siding through a cross overs?
Ans: Transverse or Cross Protection
8. What is called the smallest section which can be made dead by opening two isolators (or) isolator and interrupter?
Ans: Elementary Section
9. What is the number that should be exchanged with all power block related messages?
Ans: Private Number (PN)
10. What is the name of the computers that are used by TPC?
Ans: Operator Work Station Computers
11. What is issued to a driver of other than electric loco about the power block and staff working on OHE?
Ans: Caution Order is issued regarding the working of OHE staff.
12. Station Masters to take protective measures in accordance with
Ans: Station Working Rules
13. When more than one working party is working in the same section, how many PTWs issued by TPC?
Ans: One PTW issued by the TPC to the authorized person.

14. Isolator means?

Ans: Isolator is a OFF load switch

15. What is the desirable distance between stop signal and sectioning point of IOL?

Ans: 120m

III. Official Language Policy

Rajbhasha Questions

1. The Official Language of Union of India is _____.
2. The form of numerals to be used for official purposes of the Union is _____.
3. Part _____ of the Constitution contains provisions regarding Official Language.
4. Part XVII of the Constitution was passed in Parliament on _____.
5. There are _____ chapters in Part XVII of the Constitution.
6. There are _____ articles in Part XVII of the Constitution.
7. The nine Articles covered under Part XVII of the Constitution are from Article _____ to _____.
8. The provision regarding the language to be used for transaction of business in Parliament exists in Article _____ of Part V.
9. The provision regarding the language to be used for transaction of business in State Legislatures exists in Article _____ of Part VI.
10. The provisions regarding the language to be used in courts exist in Article _____ and _____.
11. The articles of the Constitution which contain provisions for the official language of the Union of India are _____.
12. The article of the Constitution which contains provisions regarding the official language of States is _____.
13. As per Article 343(1) of the Constitution, Hindi became the official language of the Union of India on _____.
14. The articles of the Constitution that mention the Eighth Schedule are _____.
15. The scheme introduced by the Railway Board for doing official work in Hindi is called _____.
16. The category of employees whose mother tongue is Hindi or Hindustani or its dialect is called Category _____.
17. The category of employees whose mother tongue is Urdu, Punjabi, Kashmiri, Pushto, Sindhi, or other allied languages is called Category _____.
18. The category of employees whose mother tongue is Marathi, Gujarati, Bengali, Oriya, or Assamese is called Category _____.

19. The category of employees whose mother tongue is a South Indian language or English is called Category _____.
20. Hindi training is not required for employees in Category _____.
21. Who was the first Chairman of the Official Language Commission?
22. Who was the first Chairman of the committee formed on the recommendation of the Official Language commission?
23. As per the Constitution, who is responsible for translating statutory rules, regulations, and orders?
24. What is the main official language used for government purposes up to 1965?
25. What is the co-official language used for government purposes up to 1965?
26. How many languages are listed in the Eighth Schedule of the Indian Constitution?
27. What is the name of the scheme implemented by the Railway Board for doing work in Hindi?
28. Who are classified as Category A employees regarding their mother tongue?
29. Who are classified as Category B employees regarding their mother tongue?
30. Who are classified as Category C employees regarding their mother tongue?
31. The Parliamentary Committee on Official Language is chaired by the _____.
32. The number of members in the Parliamentary Committee on Official Language is _____.
33. The Parliamentary Committee has _____ sub-committees.
34. The periodicity of meetings for the Town Official Language Implementation Committee is _____.
35. The Annual Programme on Official Language is prepared by the _____.
36. The final Hindi course prescribed for Clerical cadre employees of Central Government is _____.
37. The Hindi training facilities available to Central Government employees include _____, Intensive, Correspondence, and Private methods.
38. The Regular Hindi exams are conducted _____ times a year.
39. The eligible employees for Hindi training include all Central Government employees in Class _____ and above.
40. The award for passing Hindi Typing Examination by private study is _____.

41. The Personal Pay given for passing Hindi Stenography to a stenographer whose mother tongue is not Hindi is for _____ months.
42. The minimum quantum of Hindi Typing work to be done by a Typist/Steno to become eligible for Hindi incentive allowance is _____ notings in Hindi in a day or quarter.
43. The cash award for passing Hindi typing with 88 to 92 marks is _____.
44. The cash award for passing Hindi Stenography with 95 or more marks is _____.
45. The honorarium amount given to Part-time Hindi Librarian is _____ per month.
46. The lumpsum award given for passing Hindi Stenography Examination is _____.
47. The Rajbhasha Padak awarded to General Managers or higher officials is named _____.
48. The Rajbhasha Padak awarded to Sr. Administrative Grade or higher officials is named _____.
49. The Rail Mantri Rajbhasha Shield/Trophy awarded to Head of Office of Zonal Railways is called _____.
50. The cash awards provided under Rail Yatra Vrittant include _____ prizes for 1st, 2nd, and 3rd place respectively.
51. The number of prizes awarded under the Rajbhasha Individual Cash Award Scheme is _____.
52. The awards given under Lal Bahadur Shastri, Maithili Sharan Gupta, and Premchand awards include first, second, and third prizes of _____, _____, and _____ rupees respectively.
53. The Rajbhasha award for best poetry books is named _____.
54. The Rajbhasha award for writing technical books in Hindi on railway subjects is named _____.
55. The Rajbhasha award for best story or novel writing in Hindi is named _____.
56. The amount of lumpsum award given under Rajbhasha Individual Cash Award Scheme is _____.
57. The maximum number of artists allowed to participate in Hindi drama competitions is _____.
58. The number of inspections in a month mandatory for Rajbhasha Adhikari of Railways is _____.
59. Which Ministry conducts exams for Central Government employees for Hindi language?

60. The chairman of the Town Official Language Implementation Committee is the _____.
61. The periodicity of meetings of the Town Official Language Implementation Committee is _____.
62. The chairman of the Central Hindi Committee is _____.
63. The chairman of the Railway Hindi Salahkar Samiti is _____.
64. The parliamentary committee on official language was constituted in the _____.
65. The number of Lok Sabha members in the parliamentary committee on official language is _____.
66. The name of the committee which prepares the draft for the parliamentary committee on official language is _____.
67. The year in which the post of Hindi Assistant was created in Railway Board is _____.
68. The year and the Railway Minister during which the Hindi translation of Railway Budget was prepared is _____.
69. The states classified under Region A according to Official Language rules include _____.
70. The states classified under Region C include _____.
71. The award given for progressive use of Hindi in Railway Board is _____.
72. The number of employees awarded under Rajbhasha Individual Cash Award Scheme annually from South Western Railway is _____.
73. The first prize amount under Collective Cash Award Scheme is _____.
74. The second prize amount under Collective Cash Award Scheme is _____.
75. The name of the award given to an Adarsh Division situated in Region 'A' & 'B' is _____.
76. The name of the award given to an Adarsh Division situated in Region 'C' is _____.
77. What percentage of letters in Hindi sent from 'C' region to 'A', 'B', and 'C' region is fixed as target?
78. The target fixed for writing noting in Hindi in Annual Programme is _____.
79. The target fixed in Annual Programme for letters received in Hindi to be answered in Hindi is _____.
80. The order in which name boards, sign boards, and designation boards should be exhibited is _____.

81. The order of languages in which forms used by the public should be prepared is _____.
82. The order of languages in which station announcements are made is _____.
83. Roof boards of coaches are exhibited in _____.
84. Roof boards are displayed in _____ proportion of languages.
85. The form in which panel boards of trains are exhibited is _____.
86. Name badges are prepared in _____.
87. Subjects on files/registers are written in _____.
88. Rubber stamps are prepared in _____.
89. Standard forms which are not used by the public are printed in _____.
90. Reservation charts of trains are prepared in _____.
91. What facility should be ensured while purchasing a computer system according to Official Language policy?
92. World Hindi Day is observed on _____.
93. World Hindi Day was first observed in the year _____.
94. Hindi Day/Divas is celebrated to _____.
95. Hindi Libraries are opened in various Offices and Stations to _____.
96. The honorarium given to part-time OLIC Part Time clerk is _____ per month.
97. The scheme under Railway Board for encouragement of Hindi is called _____.
98. Personal Pay is given on passing _____ prescribed course.
99. The minimum mark required for Personal Pay for course Prabodh or Praveen is _____.
100. The Personal Pay equivalent to one increment is given for a period of _____ months.

Answers

1. Hindi in Devanagari Script
2. International form of Indian numerals
3. XVII
4. 14.09.1949
5. 4
6. 9
7. 343 to 351
8. 120
9. 210
10. 348 and 349
11. Articles 343 and 344
12. Article 345
13. 26.01.1965
14. Articles 344(1) and 351
15. Rajbhasha Individual Cash Award Scheme
16. A
17. B
18. C
19. D
20. A
21. B.G. Kher
22. G.B. Pant
23. Law Ministry
24. English
25. Hindi
26. 22
27. Rajbhasha Individual Cash Award Scheme

28. Employees whose mother tongue is Hindi or Hindustani or its dialect
29. Employees whose mother tongue is Urdu, Punjabi, Kashmiri, Pushto, Sindhi, or allied languages
30. Employees whose mother tongue is Marathi, Gujarati, Bengali, Oriya, or Assamese
31. Home Minister
32. 30
33. 3
34. Once in 3 months
35. Ministry of Home Affairs
36. Pragma
37. Regular
38. Two
39. III
40. Rs. 1600/-
41. 12
42. 300
43. Rs. 800/-
44. Rs. 2400/-
45. Rs. 1000/-
46. Rs. 3000/-
47. Kamalapati Tripathi Rajbhasha Swarna Padak
48. Rail Mantri Rajbhasha Rajat Padak
49. Adarsh Rail
50. Rs. 4000, Rs. 3000, Rs. 2000
51. 134
52. Rs. 20,000, Rs. 10,000, Rs. 7,000
53. Maithili Sharan Gupt Award
54. Lal Bahadur Shastri Award

55. Premchand Award
56. Rs. 3,000
57. 15
58. One
59. Hindi Teaching Scheme Ministry of Home Affairs
60. Senior most Central Govt. Officer of the city
61. Once in 3 months
62. Prime Minister
63. A senior Minister or Railway Minister
64. 1976
65. 20
66. Drafting Sub-Committee
67. 1952
68. 1956, Lal Bahadur Shastri
69. Bihar, Jharkhand, Delhi, Haryana, Himachal Pradesh, Madhya Pradesh, Chhattisgarh, Rajasthan, Uttar Pradesh, Uttarakhand, Andaman Nicobar Islands
70. Tamil Nadu, Kerala, Karnataka, Andhra Pradesh, Odisha, West Bengal, Goa, Jammu & Kashmir, Assam, Nagaland, Meghalaya, Arunachal Pradesh, Sikkim, Tripura, Mizoram, Manipur, Puducherry, Lakshadweep, Telangana
71. Rajbhasha Individual Cash Award Scheme
72. Five
73. Rs. 9,000
74. Rs. 6,000
75. Acharya Mahaveer Prasad Running Shield
76. Acharya Raghuveer Running Shield
77. 55%
78. 30%
79. 100%
80. Trilingual Form (Regional Language, Hindi & English)

81. Trilingual Form (Regional Language, Hindi & English)
82. Trilingual Form (Regional Language, Hindi & English)
83. Trilingual Form (Regional Language, Hindi & English)
84. Equal proportion
85. Trilingual Form (Regional Language, Hindi & English)
86. Hindi & English – Bilingual Form
87. Hindi & English – Bilingual Form
88. Hindi & English – Bilingual Form
89. Hindi & English – Bilingual Form
90. Hindi & English – Bilingual Form
91. Facility to support data entry in Hindi & English
92. 10 January
93. 2006
94. Create awareness of Official Language
95. Propagate Hindi through books and magazines
96. Rs. 300
97. Rajbhasha Individual Cash Award Scheme
98. Prescribed Hindi course (Prabodh, Praveen, Pragya)
99. 55%
100. 12

Handwritten signature and text in Hindi:
ग. र. व.
संस्कृत मन्त्रालय