MCQ FOR ASSISTANT LOCO PILOT (PROMOTIVE)

PREPARED BY DTC AJNI/C.RLY

1.General knowledge, Reasoning, Arithmetic

1. The Suez Canal joins Red sea with.

a)Black sea b) Caspian sea

c) Mediterranean sea d) Arabian sea

2. Mahatma Gandhi was born at

a) Baroda b) Sabarmati

c) Rajkot d) Wardha

3. Which of the following is a karif crop in our country?

a) Wheat b) Maize

c) Barely d) Opium

4. Pankaj Advani's name is associated with

a) Billiards b) Chess

c) Police service d) Politics

5. The term "Middle Path "associated with

a) Jainism b) Buddhism

c) Hinduism d) None

6. Which of the following is the oldest Dynasty?

a) Chalukyas b) Cholas

c) Pallavas d) Satavahanas

7. The founder of all Indian National congress.

a) A . O. Hume b) Nehru

c) Gandhi d) Tilak

8. Which Veda contains sacrificial formulae?

a) Rig-Veda b) Sama- Veda

c) Yajurveda d) None

9. Which was the main port city of Harappa civilization?

a) Harappa b) Mohenjodaro

c) Lothal d) None

10. The oldest Veda is

a) Rig-Veda b) Sama- Veda

c) Yajurveda d) None

11. At which place did Budda died.

a) Kusinagara b) Sarnath

c) Kundagrama d) None

12. The Buddhist literature was written in.

a) Sanskrit b) Pali

c) Hindi d) None

13. Where is the Meanakshi temple situated?

a) Karnataka b) Madurai

c) Maharashtra d) None

14. The Book titled Lilavati is related to

a) History b) Polity

c) Administration d) Mathematics

15. Where was the Capital of Shivaji Situated?

a) Sasaram b) Rajgarh

c) Raigarh d) None

16. Who build the Grand Trunk road?

a) Ashoka b) Chandragupta

c) Shershah d) Humayuh

17. Gidda is the famous folk dance of

a) Punjab b) Karnataka

c) Maharashtra d) None

18. Gandhara art

a) Kusinagara b) Sarnath

c) Kundagrama d) None

19. How many trings are there on a Sarod?

a) 19 b) 15

c) 20 d) 25

20. How many “Mahajanapadas “in Ancient Indian history

a) 13 b) 14

c) 15 d) 16

21. Which of the following is the currency of Bahrain?

a) Peso b) Dinar

c) Riyal d) Bahat

22. Common wealth games 2014 will be organized in.

a) London b) New Delhi

c) Glasgow d) Toronto

23. Deepika Kumari’s associated with

a) Swimming b) Archery

c) Billiards d) Cricket

24. Which of the following terms not associated with Banking or Finance?

a) SLR b) LBW

c) Credit d) Repo rate

25. Which of the following cups / Trophies is also associated with the games of cricket?

a) Ranji Trophy b) Davis cup

c) Thomas cup d) Nehru trophy

26. How many members are nominated by the president of India to the Rajya Sabha?

a) 05 b) 06

c) 08 d) None

27. Members of Lok Sabha are elected for a period of

a) 4 years b) 5 years

c) 6 years d) 7 years

28. Complete the following series A, D, G, J, M, P, S, V, ----------

a) B b) C

c) Y d) X

29. Complete the following series 7, 10, 8, 11, 9, 12 ----, -------

a) 12, 15 b) 13, 14

c) 7, 11 d) 10, 13

30. Find the odd man out

1. Eye 2. Nose 3. Ear 4. Brain

a) 1 b) 2

c) 3 d) 4

31. Find the odd man out

1. 27 2. 64 3. 8 4. 9

a) 1 b) 2

c) 3 d) 4

32. VAB : UCD : TEF : -------

a) RIJ b) SKL

c) SIJ d) SGH

33. Put in meaningful order.

1. Arrest 2. Theft 3. Punishment 4. Judgment 5. Court

a) 2, 1,5,4,3 b) 1, 5,2,3,4

c) 1, 2,3,4,5, d) 1, 2,3,5,4

33. Put in meaningful order.

1. SET 2. Go 3. Ready 4. Target 5. Court

a) 2, 1,5,4,3 b) 1, 5,2,3,4

c) 1, 2,3,4,5, d) 1, 2,3,5,4

34. Select the missing number

8 9 6

6 3 2

5 4 ?

240 108 96

a) 90 b) 36

c) 12 d) 8

35. The height of A and B are equal. C is shorter than A, D is shorter than E but taller than B, who is tallest of all?

a) E b) B

c) D d) C

36. Water gas consists of:

a. a mixture of carbon monoxide and hydrogen
b. water vapour and coal dust
c. a mixture of carbon monoxide and nitrogen
d .water vapour and methane

37. If " × " means " + " , " + " means " ÷ " , " – " means " × " , " ÷ " means " – " then 8 × 7 – 8 + 40 ÷ 2 = ?

1. 44 2. 7 2/5 3. 1 4. 8 3/5

38. From the given alternatives select the word which can be formed "SIMULTANEOUS "?

a) SINGLE b) SMILE
c) STEAL d) SILENT

39. "ROSHAN "starts from house and walks 2 km towards east, turns right and walks 1 km, turns right again and walks 1 km. What is the direction from him?

a) East b) West
c) North d) South

40. The ratio of boys and girls in a school is 3: 2. When 6 more girls join this ratio becomes 6: 5. Then the number of boys in the school is?

a) 42 b) 36
c) 24 d) 30

41. If 35 % of X is 735, then 80 % of x is

a) 1680 b) 880
c780 d) 1080

42. A dealer offers successive discounts of 20 %, 10 % and 5 %. A single equivalent discount rate is

a) 35 % b) 31.6 %
c) 22.8 % d) 30%

43. If the price of oil is increased by 25 %. What will be the percentage consumption of oil that a house must reduce, expenditure not increase?

a) 15% b) 10%
c) 20% d) 25%

44. Arun bought second hand music for Rs 2000. He spends Rs 400on repairing .The selling price of the system if he wants to gains 16 2/3% is?

a) Rs 2800 b) Rs 3000
c) Rs 2400 d) Rs 2600

45. If the ratio of the sides of two equilateral triangles is 1: 2, then the ratio of theirs areas is?

a) 4:9 b) 1: 4

c) 1:2 d) 2:3

46. The angle of a triangle is in the ratio 1:4:5 then the triangle are?

a) Scalene b) Right angle

c) Isosceles d) None

47. A person sells 36 oranges per rupees and suffers a loss of 4 % find how many oranges should be old per rupee to gain 8 %

a) 30 b) 28

c) 32 d) 40

48. The age of solar system is

a) 7.8 billion Years b) 3.2 billion Years

c) 3.8 billion Years d) 4.6 billion Years

49. Which of the following is the ore of iron?

a) Hematite b) Bauxite

c) Galena d) None

50. Name of river that DOES NOT ORIGINATES IN Western Ghats?

a) Kaveri b) Vaigai

c) Barak d) Godavari

51In which part of the transformer maximum heat is produced?

a) Core b) Oil

c) Windings d) Frame

52. The resistance of a100 watt 230 V lamps is?

a) 52 Ω b) 529 Ω

c) 2.3 Ω d) None

53. Core of the transformer is made up of?

a) Iron b) Copper

c) Low silicon steel d) 40 High silicon steel

54. If a 1000 W heater is used for 5 hrs then the cost of energy Rs 1.50/ unit will be?

a) Rs 1.50 b) Rs 15

c) Rs 225 d) Rs 7.50

55). Plug gauge is used for?

a) Checking hole size b) Checking oval size

c) Taper checking d) none

56). The least count of vernier bevel protractor is?

a) 5 sec b) 1^0

c) 5min d) 90^0

57. Surface plates are commonly used for checking?

a) Surface b) Right angle

c) Angle d) 60^0 angles

58. A complete turn of not on a bolt is called?

a) Pitch b) Lead

c) Helix angle d) Round

59. Thread angle of Acme thread is?

a) 60^0 b) 45^0

c) 90^0 d) 29^0

60. Why annealing is done?

a) Soften material b) Harden metal

c) Remove stresses d) NONE

61. The distance between two crests in a thread is named as?

a) Pitch b) Lead

c) Helix d) None

62. The ratio between force of friction and normal reaction is known as?

a) Angle of friction b) Angle of response

c) Coefficient of friction d) none

63. The efficiency of a screw jack independent of?

a) Load b) Helix angle

c) Angle of friction d) NONE

64. The efficiency of a screw jack independent of?

a) Load b) Helix angle

c) Angle of friction d) NONE

65. A" thyristor" is often used in?

a) Wall clocks b) Multi meters

c) 90^0 d) 29^0

66. Who was the first recipient of Bharat Ratna to be awarded posthumously?

a) Rajendra Prasad b) Indira Gandhi

c) Lal Bahadur Sastry d) Mother Teresa

67. "The Right to constitutional remedy" has been mentioned in which article of the constitution?

a) Article 30 b) Article 32

c) Article 35 d) None

68. The HCF of two numbers is 12 and their LCM is 144. If one of them is 36 the other is?

a) 36 b) 48

c) 52 d) NONE

69. The ratio of load lifted to effort applied is termed as?

a) Efficiency b) Velocity ratio

c) Mechanical advantage d) NONE

70. If a machine called as Reversible its efficiency?

a) <50% b) =50%

c) >50% d) 100%

71. Water stored in a "Dam" possesses?

a) No energy b) Electrical energy

c) Kinetic energy d) Potential energy

72. Find the areas of square if the sum of the diagonals is 100cm?

a) 1000 cm^2 b) 1250 cm^2

c) 5000 cm2 d) none

73. Work done is measured by?

a) Mass × Velocity b) Mass × Acceleration

c) Force × Displacement d) Force × time

74. Which layer of atmosphere is closest to the earth?

a) Stratosphere b) Troposphere

c) Mesosphere d) Thermosphere

75. Which is the first element in periodic table?

a) Hydrogen b) Oxygen

c) Neon d) Helium

76. One gallon = ---------- liters?

a) 3.785 b) 4.1

c) 3.54 d) 8

77. The sum of two numbers is 25 and their difference is 13. Find their product?

a) 204 b) 114

b) 315 d) 325

78. The difference between compound interest and simple interest on Rs 200 at 20% per annum for two years is?

a) Rs 5 b) Rs 6

c) Rs 7 d) Rs 8

79. Average of "n "even numbers is?

a) n^2 b) $n + 1/2$

c) n+1 d) n+2

80. If the number 7x394 is divisible by '11' then the value of 'x' is?

a) 3 b) 4

c) 5 d) 6

81. Bronze consists of copper and?

a) Zinc b) Tin

c) Silicon d) Phosphorous

82. The Hole provided in the anvil is?

a) Round b) Triangle

c) Rectangle d) Hexagon

83. The voltage less than 250 V is known as?

a) Low voltage b) High voltage

c) Extra High voltage d) Medium voltage

84. Difference between the synchronous speed and the induction motor speed is called as

a) Regulation b) Slip

c) Backlash d) Lag

85. Bench vice size is given by?

a) Length of jaw b) Size of spindle

c) Width of jaws d) Weight of vice

86. ON 'Lathe 'to support heavy rods while turning we use?

a) Dead centre b) $Tail\ stock$

c) STEADY REST d) Carrier

87. Micrometers have least count of?

a) 0.02mm b) 0.1mm

c) 0.001mm d) 0.01mm

88. Try square is used to check the job?

a) Length wise b) On 45^0

c) Depth wise d) On 90^0

89. Identify the operation that is not normally done on a lathe.

a) Knurling b) Treading

c) Tapering d) Square cutting

90. The refrigerant for ice plant is?

a) CO_2 b) Ammonia

c) Methyl d) Water

91. Borax flux is used in?

a) Soldering b) Welding

c) Brazing d) All of the above

92. One ton of refrigerant is?

a) 200KJ/min b) 211KJ/min

c) 215KJ/min d) 250KJ/min

93. Elbow is used to give ------turn to the pipe?

a) 45^0 b) 30^0

c) 180^0 d) 90^0

94. Tesla is the unit of?

a) Flux b) Field strength

c) Flux density d) none

95. “Megger “is an instrument to measure?

a) Very low resistance b) Insulation resistance

c) Inductance d) none

96. Two condensers of capacity 2F and 3F are connected in series and a third

Condenser of 1F is connected in parallel to them. The resultant capacity will be.

a) $11/5\ F$ b) 5/11 F

c) 5/6 F d) 6F

97. In drilling operation the feed is expressed in?

a) mm b) mm/sec

c) mm/min d) mm/revolution

98. Two bulbs are marked 100W/220V and 60W /220V.Which has the highest resistance?

a) 100W b) 60W

c) Both same d) none

99. In Diesel engine the fuel is ignited by?

a) Spark b) Injected fuel

c) Combustion chamber d) none

100. How are electrical circuits protected from overheating?

a) Thermocouple b) Shunts

c) Fuses d) Solenoids

2.ELECTRICAL

1. The ratio of voltage and electric current in a closed circuit

   a. remains constant b. varies c. increases d. falls

2. The curve representing ohm's law is

   a. Sine function b. linear c. Parabola d.Hyperbola

3. The resistance of a conductor having length l area of cross section a and resistivity ρ is given as:
   a. ρa/l b. ρl/a c. ρla d. l/ρ
4. The resistance of wire varies inversely as
   a. area of cross section b. length c. resistivity d. temperature

5. Which of the following quantities are same in all parts of a series circuit?

   a. voltage b. power c. current d. resistance

6. Which of the following statements is false in case of a series circuit?
   a. the voltage drop across each resister is same
   b. the current flowing through each resistor is the same
   c. applied voltage is equal to the sum of voltage drops across individual resistors are additive
   d.none

7. A resistance of 30 ohm is connected across 240v supply. If a resistance R ohm is connected in parallel with 30ohm resistor across the same supply, the current drawn becomes triple of original one The unknown resistor R is
   a. 15ohm b. 10ohm c. 5ohm d.30ohm
8. Three resistors, each of R ohms, are connected to form a triangle. The resistance between any two terminals will be:

   a. 2/3 R b. 3/2R c. R d. 3R

9. Which of the following is not correct?
   a. P=V/R^2 b. P=VI c. I=√ (P/R) d. V=√PR
10. A 100W bulb is connected in series with a room heater. If now 100W bulb is replaced by a 40w bulb, the heater output will:
   a. increase b. decrease c. remain the same

11. The voltage applied across an electric iron is halved. The power consumption of the iron will be:
   a. one-half b. one-fourth c. 1/√2times d. three-fourth

12. Resistance of 200w, 250v lamp will be

a. 625ohm b. 1250ohm c.312.5ohm d.31.25ohm

13. Two heaters rated at 1000w, 250v each are connected in series across a 250v, 50Hz ac supply. The total power drawn from the supply will be:

a. 1000w b. 500w c. 250w d.2000w

14. A 200w, 100v lamp is to be operated on 250v supply. The additional resistance required to be connected in series will be:

a.125ohm b. 50ohm c. 75ohm d.25ohm

15. Kirchhoff's laws are valid for

a. linear ckt only
b. passive time invariant ckt
c. non-linear ckt only
d. both linear & non-linear ckt

16. KCL is applicable only to

a. electric circuits
b. electronic circuits
c. junctions in a network
d. closed loop in a network

17. KVL is concerned with

a. IR drop b. battery emf c. junction node d. both a and b

18. A wye arrangement of resistances has each resistance of 3ohm; the equivalent delta arrangement will have each resistance of values.

a. 9ohm b. 6ohm c. 3ohm d. 1ohm

19. A battery is connected to a resistance causing a current of 0.5A in the circuit. The current drops to 0.4 when an additional resistance of 5? is connected in series . The current will drop to 0.2A when the resistance is further increased by

a.10 ohm b. 15ohm c. 25ohm d.5 ohm

20. Cells are connected in series in order to increase the

a. current capacity b. life of the cells c. voltage rating d. terminal voltage

21. Cells are connected in parallel in order to increase

a. life of the cells b. efficiency c. current capacity d. voltage rating

22. When two cells are connected in parallel, it should ensure that have

a. identical internal resistances
b. equal emfs
c. same ampere hour capacity

23. The capacity of a battery is expressed in

a. Amperes b. amperes-hour c. watts d. watt-hour

a. amperes b. amperes-hour c. watts d. watt-hour

24. A series resonant circuit implies

a. zero pf and maximum current
b. unity pf and maximum current
c. unity pf and minimum current
d. zero pf and minimum current

25. Which one is classified as integrating instrument?

a. D'arsonval galvanometer
b. ampere-hour meter
c. ohm-meter
d. ammeter

26. Which of the following types of instrument is an integrating instrument?

a. power factor meter
b. energy meter
c. watt meter
d. frequency meter

27. Voltmeter should be of very high resistance so that

a. its range is high
b. Its accuracy is high
c. it may draw current minimum possible
d. its sensitivity is high

28. If a voltmeter is connected like a ammeter in series with a load

a. the measurement reading will be too high
b. Almost no current will flow in the circuit
c. the meter will burn out
d. an inadmissibly high current will flow

29. A multirange instrument (ammeter or voltmeter) has

a. Multiple shunt or series resistances inside the meter
b. variable coil turns
c. multi -coil arrangement
d. any of the above

30. The S.I. unit of power is

a. Henry b. coulomb c. watt d. watt-hour

31. Electric pressure is also called

a. resistance b. power c. voltage d. energy

32 The substances which have a large number of free electrons and offer a low resistance are called

a. insulators b. inductors c. semi-conductors d. conductor

33. Out of the following which is not a poor conductor
a. Cast iron b. Copper c. Carbon d. Tungsten

34. Out of the following which is an insulating material?
a. Copper b. Gold c. Silver d. Paper

35. The property of a conductor due to which it passes current is called a. resistance b. reluctance c. conductance d. inductance

36. Conductance is reciprocal of
(a) Resistance (b) inductance (c) reluctance (d) capacitance

37. The resistance of a conductor varies inversely as
(a) Length (b) area of cross-section (c) temperature (d) resistivity

38. With rise in temperature the resistance of pure metals
(a) Increases
(b) Decreases
(c) First increases and then decreases
(d) remains constant

39. With rise in temperature the resistance of semi-conductors
(a) Decreases
(b) Increases
(c) First increases and then decreases
(d) remains constant

40. The resistance of a copper wire 200 m long is 21 Q. If its thickness (diameter) is 0.44 mm, its specific resistance is around
(a) 1.2 x 10~8 Q-m (b) 1.4 x 10~8 Q-m
(c) 1.6 x 10""8 Q-m (d) 1.8 x 10"8 Q-m

41. Three resistances of 10 ohms, 15 ohms and 30 ohms are connected in parallel. The total resistance of the combination is
(a) 5 ohms (b) 10 ohms (c) 15 ohms (d) 55 ohms

42. An instrument which detects electric current is known as
(a) Voltmeter (b) rheostat (c) wattmeter (d) galvanometer

43. In a circuit a 33 Q resistor carries a current of 2 A. The voltage across the resistor is
(a) 33 V (b) 66 v (c) 80 V (d) 132 V

44. A light bulb draws 300 mA when the voltage across it is 240 V. The resistance of the light bulb is
(a) 400 ohm (b) 600 ohm (c) 800 ohm (d) 1000 ohm

45. The resistance of a parallel circuit consisting of two branches is 12 ohms. If the resistance of one branch is 18 ohms, what is the resistance of the other?
(a) 18 ohm (b) 36 ohm (c) 48 ohm (d) 64 ohm

46. Four wires of same material, the same cross-sectional area and the same length when connected in parallel give a resistance of 0.25 ohm. If the same four wires are connected is series the effective resistance will be
(a) 1 ohm (b) 2 ohm (c) 3 ohm (d) 4 ohm

47. A current of 16 amperes divides between two branches in parallel of resistances 8 ohms and 12 Ohms respectively. The current in each branch is
(a) 6.4 A, 6.9 A (b) 6.4 A, 9.6 A (c) 4.6 A, 6.9 A (d) 4.6 A, 9.6 A

48. Current velocity through a copper conductor is
(a) the same as propagation velocity of electric energy
(b) (b) independent of current strength
(c) of the order of a few micro second
(d) (d) nearly 3 x 108 m/s

49. Which of the following material has nearly zero temperature co-efficient of resistance?
(a) Manganin (b) Porcelain (c) Carbon (d) Copper

50. You have to replace 1500 ohm resistor in radio. You have no 1500 ohm resistor but have several 1000 ohm ones which you would connect
(a) two in parallel (b) two in parallel and one in series (c) three in parallel
(d) three in series

3. FITTER

1. The Tractor braking system is of
   a) Mechanical type
   b) Hydraulic type
   c) Pneumatic type
   d) Electrical type

2. The Power input of 1 ton air conditioner is
   a) 1kw
   b) 1.6kw
   c) 2.4kw
   d) 2.6kw

3. The refrigerator has a cooling capacity of 750 kcal/m. Its capacity in tons of refrigeration is equal to
   a) 7.5
   b) 10
   c) 15
   d) 30

4. The color code of refrigerator Ammonia is
   a) Orange
   b) White
   c) Light blue
   d) Green

5. The head used to remove any previous recording from the tape is
   a) Recording head
   b) Erasing head
   c) Play back head
   d) Running head

6. A Knee is a part of
   a) Lathe
   b) Milling machine
   c) Jig boring machine
   d) Grinding

7. Files are made of
   a) H.S.S
   b) C.I.
   c) M.S.

d) None of these

8. The non ferrous metal with the lowest melting point is
   a) Aluminum
   b) Copper
   c) Lead
   d) Tin

9. The Front clearance angle of turning tool is maintained between
   a) 3^o to 4^o
   b) 8^o to 12^o
   c) 15^o to 18^o
   d) 22^o to 25^o

10. The number of Guide ways provided on the lathe bed is
   a) One
   b) Two
   c) Three
   d) Six

11. The formula for cutting speed in meter/minute for turning a job of diameter 0 mm is given by
   a) πDN/100 meter/min
   b) πDN/1000 meter/min
   c) π/1000 meter/min
   d) None of these

12. Mandrel is a
   a) Work holding device
   b) Supporting device
   c) a and b both
   d) none

13. The following tool is used of r boring a deep hole
   a) Drill
   b) Reamer
   c) Boring bit
   d) Augur bit

14. Power Hack-saw blade cuts the material during
   a) Return stroke
   b) Forward stroke
   c) a & b
   d) None

15. For gear cutting operation the type of milling used is
    a) End milling
    b) Face milling
    c) Side milling
    d) Slit Milling

16. Open and cross belt device quick return motion mechanism is used in
    a) Horizontal shaper
    b) Vertical Shaper
    c) Slotter
    d) Planner

17. In Direct Indexing the indexing plate used rotating the job spindle is provided with
    a) 44 holes
    b) 20 holes
    c) 24 holes
    d) None of these

18. One watt-hour is equal to
    a) 36000 joules
    b) 3000 joules
    c) 3600 joules
    d) None of these

19. Otto cycle is also known as
    a) Bell Coleman Cycle
    b) Carnot Cycle
    c) Constant Volume Cycle
    d) Sterling Cycle

20. The brake thermal efficiency and mechanical efficiency of a diesel engine are 50% and 70% respectively. The indicator thermal efficiency is
    a) 20%
    b) 70%
    c) 60%
    d) 80%

21. The king pin is indeed
    a) Back wards
    b) Front wards
    c) Out wards
    d) In wards

22. The grade of lubricant used in gear box is
    a) SAX 30
    b) SAE 40
    c) SAE 90
    d) SAE 150

23. The number of piles provided for a truck tyre is
    a) 10
    b) 20
    c) 25
    d) 15

24. Propeller Shaft takes the drive from
    a) Clutch
    b) Flywheel
    c) Gear box
    d) Differential

25. Petrol engine uses the following thermodynamic cycle
    a) Carnot Cycle
    b) Sterling Cycle
    c) Otto Cycle
    d) None

26. In gear ration between the starter pinion and the fly wheel ring gear is
    a) 8
    b) 1:12
    c) 1:16
    d) 1:25

27. For measuring the ovality of the cylinder bore the gauge used is
    a) Dial Indicator
    b) Plug gauge
    c) Micro meter
    d) Compression gauge

28. The crank shaft made of
    a) Aluminum alloy
    b) Cast Iron
    c) Steel
    d) Forged steel alloy

29. The composition of petrol fuel is approximately given as
    a) 60% carbon, 40% hydrogen
    b) 75% carbon, 25% hydrogen
    c) 85%carbon, 15% hydrogen
    d) 95% carbon, 5% hydrogen

30. The lubricating oil pump develops a pressure of
    a) 1 to 2 kg/cm2
    b) 3 to 5 kg/cm2
    c) 5 to 8 kg/cm2
    d) 8 to 10 kg/cm2

31. Fastening of one part of rope to the other part of rope is known as
    a. Loop
    b. Bight
    c. Knot
    d. Round turn

32. Which one of the following is used for making branch right angle to the main line in pipe fitting?
    a. Union
    b. Elbow
    c. Tee
    d. Flange

33. Clutch used to transmit less power is?
    a. Plate clutch
    b. Cone clutch
    c. Dog clutch
    d. Plate clutch

34. Gear drive used to change rotary motion into linear motion?
    a. Spur gear drive
    b. Bevel gear drive
    c. Worm and worm gear drive
    d. Rack and pinion gear drive

35. Which among the following method is generally used to cut threads on G.I PIPES?
    a. By centre lathe
    b. By thread roller
    c. By tap sets
    d. By die and stocks

36. Depth of tooth space below the pitch circle in a gear is known as?
    a. Deddendum
    b. Addendum
    c. Crest
    d. Root
37. Belt drive used with jockey pulley is?
    a. Open belt drive
    b. Cross belt drive
    c. Right angle drive
    d. Quarter twist drive
38. Face of rim of pulley is made convex. It is called?
    a. Crackness
    b. Effective diameter
    c. Flank
    d. Crowning
39. Which galvanizing is providing a protective coating on mild steel?
    a. Zinc
    b. Lead
    c. Tin
    d. Aluminum
40. Which metal is suitable for anodizing?
    a. Copper
    b. Nickel
    c. Aluminum
    d. Iron
41. The general ratio of mixture of soluble with water is?
    a. 1:5
    b. 1:10
    c. 1:15
    d. 1:20
42. Solid lubricant is?
    a. Castor oil
    b. Lord oil
    c. Graphite
    d. Grease

43. Cutting compound used during machining operation is?

a. Water
b. Soluble oil
c. Tarpin oil
d. Grease

44. Lubricator used for lubrication on the sliding surface of machine is?

a. Oil can
b. Weak feed lubrication
c. Ring lubricator
d. Hand pump

45. Splash lubrication is done by?

a. Oil can
b. Grease gun
c. Pump lubricator
d. Hand lubricator

46. Which friction occurred when journal bearing is not lubricated?

a. Dry Friction
b. Rolling Friction
c. Sliding Friction
d. Fluid Friction

47. The following is machined dry?

a. Aluminum
b. Cast iron
c. Titanium
d. All of these

48. Preventative maintenance is carried out?

a. Before failure of machine
b. After failure of machine
c. Both a & b
d. None of these

49. Jigs and fixtures are?

a. Machining tools
b. Precision tools
c. Both a & b
d. None of these

50. Composition of HSS cutting tools is in the ratio of 18:4:1.In this 18 indicates?

a. Chromium
b. Tungsten
c. Cobalt
d. Vanadium

51. Coupling is used for joining of shafts, when shafts are?

a. Joints permanently
b. Removed frequently
c. Joined and misalignment occurs
d. Open frequently to fulfill the misalignment

52. Monel metal has?

a.60%Copper 38% Nickel
b.60% Nickel 38% Copper
c.6% Nickel 4% Copper
d.6%Copper 4% Nickel

53. Activity log is?

a. Written record how you spend time
b. Measure of procreativity
c. To check the movement
d. None of these

54. The process in which surface is made smooth and uniform is known as?

a. Buffing
b. Polishing
c. Metal spinning
d. None of these

55. Carburizing is done on?

a. High carbon steel
b. Medium carbon steel
c. Low carbon steel
d. Tight speed steel

56. Which hoisting mobile equipment is used for self loading and shifting it to different places in a factory?

a. Jib crane
b. Fork lift
c. Chain hoist
d. Gear hoist

57. Bushing in jigs is used?

a To locate and guide the tool
b. To locate the tool
c. To guide the tool
d. None of these

58. Block spirit level is used to check?

a Horizontal level
b. Vertical level
c. Both a & b
d. Only Angular measurement

59. Dry chemical extinguisher is used for?

a Carbonaceous fire
b. Electrical fire
c. Both a & b
d. None of these

60. The pattern on the work surface caused by the movement of the cutting tool is called?

a Roughness
b. Surface texture
c. Waviness
d. Lay

4.WELDER

1 Helmet is used to safe technician from
a. Arc radiation
b. Spark
c. Metal chip
d .All of them

2 Wires of wire brush is made of
a. Iron
b. Tin
c. Spring steel
d .Soft steel

3 Melting point of filler metal is..... Than joining metal
a. Less
b. More
c. Equal
d .None of them

4 Shielding gas used in MAG welding is
a. Argon
b. Helium
c. Xenon
d .Carbon dioxide

5 Which of the given metal is used as transfer metal
a. spray transfer
b.Globular transfer
c. Deep transfer
d . All of them

6 Gas used for MAG welding is
a. Inert gas
b. Active gas
c. Flammable gas
d. None of them

7 In MAG/CO2/MAG welding to feed wire till torch we use
a. Wire feeder unit
b. pressure unit
c. Flux unit
d. Filler metal unit

8 In MAG/CO2/MAG welding wire is used for
a. Solid wire
b. Cord wire
c. Both 1 & 2
d. None of them

9 wire used in FCAW welding is
a. Solid wire
b. Flux core electrode
c. Hollow wire
d. All of them

10 Which types of gases are used in MIG/MAG welding
a. 100 % CO_2
b. Ar +100 % CO_2
c. CO_2 + Ar + O_2
d. All of them

11 Distortion is type of
a. Defect
b. Filler metal
c. Fusion metal
d .Root

12 GMAW stands for
a. Gun metal arc welding
b. Gas manual arc welding
c. Gas metal arc welding
d .None

13 PENETRESION is said to be
a. Fusion depth
b. Width of bead
c. Thickness of filler rod
d .Length of arc

14 To remove internal tension of material which of given process is done
a. Maximum of heat input
b. Preheating
c. By minimum heating
d .None of them

15 Unit of heat in metric system is
a. CHU
b. BHU
c. Calorie
d .Pascal

16 Indicating crayons is used for
a. To detect temperature of base metal
b. To detect temperature of filler metal
c. Both 1 & 2
d .None of them

17 Power source for SAW is
a. AC
b. DC
c. Both 1 & 2
d .None of them

18 In SAW electrode wire is coated with
a. Steel
b. Nickel
c. Aluminum
d .Copper

19 In SAW shape of bead depends on
a. Arc voltage
b. Current
c. Shape of electrode
d .Root Gate

20 In SAW flux is used in form of
a. Paste
b. Grains
c. Liquid
d .All of them

21 In electrode slag arc welding temperature of electrode is
a. 500-600^{0}C
b. 500-800^{0}C
c. 1650-1950^{0}C
d. 2000-2300^{0}C

22 Given is part of electrode arc welding
a. Wire guide
b. Metal weld
c. Weld pool
d .All of them

23 Mixture used as thermit is
a. Aluminum oxide + iron
b. Iron oxide + Aluminum
c. Coke + lime + iron

d. Coke + lime + Aluminum

24 Temperature of thermit welding is
a. 1500^0C
b. 2000^0C
c. 3000^0C
d. 1000^0C

25 Full form of TIG welding is
a. Thermit inert gas welding
b. Tungsten inert gas welding
c. Tip inlet gas welding
d Tungsten inlet gas welding

26 In TIG welding torch used is
a. Water cooled
b. Air cooled
c. both 1& 2
d .None of them

27 In TIG welding shielding gas used is
a. Inert gas
b. Active gas
c. both 1& 2
d .None of them

28 Is a part of TIG welding torch
a. Nozzle
b. Trigger
c. Tungsten electrode
d .All of them

29 Edge preparation is required for
a. For safety
b. For fusion
c. both 1& 2
d .None of them

30 Pulse TIG welding contains
a. Constant current
b. Constant voltage
c. Constant speed
d. Constant angle

31 Boiling point of argon gas is
a. 1600^0C
b. 1700^0C
c. 1875^0C
d. 1950^0C

32 Thermal conductivity of helium gas is
a. High
b. Low
c. Good
d .Poor

33 Circular metal is welded by which of the given process
a. Forging
b. Tempering
c. Friction
d .Detonation

34 Which of the given is used in friction welding
a. Temperature
b. Friction
c. both 1 & 2
d .All of them

35 In laser beam welding pumping source consists of which gas
a. Xenon gas
b. Argon gas
c. Helium gas
d .Neon gas

36 In plasma arc welding inert gas is used for
a. To make plasma arc
b. To make safety layer
c. Both 1 & 2
d. None of them

37 What is plasma
a. Flux
b. Ionized gas
c. Filler metal
d. All of them

38 Plasma arc welding can be of types
a. 1
b. 2
c. 3
d. 4

39 Roller electrode is used in which type of resistant welding
a. Projection welding
b. Spot welding
c. Flash butt welding
d. Seam welding

40 In automobile sector which type of welding is used heavily
a. Resistant
b. TIG
c. MIG
d. All of them

41 Which of the given is part of metal sprayer
a. Air Valve
b. Shield
c. Air turbine
d. Constant angle

42 Which inert gas is used for plasma arc spraying
a. Helium
b. Argon
c. Both 1 & 2
d. None of them

43 In spray cutting unit voltage data is
a. 24-36 KW
b. 28-40KW
c. 32-49KW
d. 36-48KW

44 Full form of WPS is
a. Welding procedure specification
b. welding process specimen
c. Both 1 & 2
d. None of them

45 Layer coated in hard surfacing is
a. Thick
b. Thin
c. Medium
d. All of them

46 Process used for hard surfacing is
a. To check quality of weld beads
b. To check quality of base metals
c. Both 1& 2

d. All of them

47 Weld gauges are used for
a. Destructive test
b. Non Destructive test
c. Both 1& 2
d. None

48 In which test job get destroyed
a. Destructive test
b. Non Destructive test
c. Both 1& 2
d. None

49 Ultrasonic test is related with
a. Destructive test
b. Non Destructive test
c. Both 1& 2
d. None

50 PROBE is used in which test
a. Magnetic test
b. Nick Breast test
c. Die penetrate test
d. Ultrasonic test

5.AC LOCOMOTIVE

1) Transformer rating in WAG-7 loco is
   (A) 5400KVA (B) 6531 KVA
   (C) 7475 KVA (D) 7775 KVA

2) Minimum lateral clearance in end axle of WAG-7 loco is
   (A) 30.7 mm (B) 22.0mm
   (C) 22.2mm (D) None of above

3) Gear ratio of WAG-7 loco is
   (A) 16:65 (B) 21:107
   (C) 15:77 (D) None of above

4) Minimum lateral clearance in middle axle of WAG-7 loco is
   (A) 11.5 mm (B) 6.0mm
   (C) 2.4mm (D) None of above

5) Minimum longitudinal clearance in middle and end axle of WAG-7 loco is
   (A) 2.0 mm (B) 6.0 mm
   (C) 4.0 mm (D) None of above

6) Maximum ovality allowed in armature of Hitachi make TM after turning is
   (A) 20 microns (B) 60 microns
   (C) 40 microns (D) none of above

7) The difference in wheel diameter from bogie to bogie in WAG-7 loco is
   (A) 15 mm to 20mm (B) 15mm to 25mm
   (C) 2 mm to 5mm (D) 2 mm to 6mm

8) No. of teeth of bull Gear of WAG-7 loco is
   (A) 65 (B) 107
   (C) 77 (D) None of above

9) The weight of a WAG-7 locomotive is
   (A) 123 T (B) 135 T
   (C) 180 T (D) None of above

10) Type of traction motor used in WAG-7 loco is
   (A) 3-phase induction motor (B) Single phase induction motor
   (C) DC shunt motor (D) DC series motor

11) Maximum ovality allowed in armature of Hitachi make TM is
   (A) 0.06 mm (B) 0.02 mm
   (C) 0.04 mm (D) None of above

12) Type of battery used in WAG - 7 loco is

(A) Nickel cadmium (B) Lead Acid

(C) Lithium (D) None of above

13) No. of auxiliary converters (BUR) used in 3-phase locomotive are

(A) 1 (B) 2

(C) 3 (D) 4

14) Difference in wheel diameter on same bogie in WAG-7 loco is

(A) 15 mm to 20 mm (B) 15mm to 25mm

(C) 2 mm to 8 mm (D) 0.5 mm to 2.5 mm

15) Difference in wheel diameter on same axle in WAG-7 loco is

(A) 15 mm to 20 mm (B) 15 mm to 25 mm

(C) 2 mm to 8 mm (D) 0.5 mm to 2.5 mm

16) No. of oil pumps (MPH) used in WAG-7 loco are

(A) 1 (B) 2

(C) 3 (D) 4

17) Fire detection Unit (FDU) is located in cubicle

(A) SB1 (B) SB2

(C) HB1 (D) HB2

18) Weight of a WAG-9 H locomotive is

(A) 132 T (B) 146 T

(C) 113 T (D) 133 T

19) In Loco, Bull gear is fixed on

(A) TM (B) Axle

(C) SMGR (D) MP

20) No. of TE/BE meters used in3-phase loco

(A) 3 (B) 2

(C) 4 (D) 1

21) Type of traction motor used in 3-phase loco is

(A) 3 ph induction motor (B) 1ph induction motor

(C) DC shunt motor (D) DC series motor

22) LSCE indication lamp glows at

(A) 70°C (B) 30°C

(C) 60°C (D) 50°C

23) The number of axle dampers in 3-phase loco is

(A) 16 (B) 8

(C) 4 (D) 2

24) Type of battery used in3-phase loco is

(A) Nickel cadmium (B) Lead Acid

(C) Lithium (D) None of above

25) No of Bus stations for communication used in3-phaseGTO based loco is

(A) 2 (B) 4

(C) 7 (D) 3

26) A-9 handle at RUN position, BP pressurein3-phase Loco is

(A) 3 kg/cm^2 (B) 5 kg/cm^2

(C) 4 kg/cm^2 (D) 6 kg/cm^2

27) No. of 3-phase 415 V Auxiliary Motors used in 3-phase loco are

(A) 13 (B) 12

(C) 15 (D) 14

28) No of valve sets, in a Traction Convertor of 3-phase loco are

(A) 2 (B) 4

(C) 8 (D) 16

29) In 3-phase loco, when wheel slips occur, the indication glows

(A) LSAF (B) LSP

(D) LSCE (C) LSDJ

30) Total no. of oil pumps used in GTO based 3-phaselocomotives are

(A) 1 (B) 2

(C) 3 (D) 4

31) The working of Traction Link in3-phase Loco is

(A) Transfer the TE from body to bogie

(B) Transfer the TE from bogie to body

(C) Transfer the TE from bogie to bogie

(D) Transfer the TE from Axle to body

32) In 3-phase loco, BUR-1 gives supply to

(A) OCB 1 and 2 (B) TMB 1 and 2

(C) MPH (TFP + SR) 1 and 2 (D) CP 1 and 2

33) In3-phase Loco, the battery charger gets supply from

(A) BUR-2 (B) BUR-1

(C) BUR-3 (D) None of the above

34) In German language, short form of Over voltage protection unit is

(A) SR (B) BUR

(C) MUB (D) WRE

35) Machine room blower (MRB) motor takes supply of-

(A) 415 V, 3-phase AC (B) 110V, single phase AC
(C) 415 V, Single phase AC (D) 110 V, 3-phase AC

36) The working of harmonic filter is

(A) To filter dirt (B) To filter moisture
(C) To filter harmonics (D) none of above

37) The type of VCB used in 3-phase loco is

(A) Double pole (B) Single pole
(C) SF6 (D) Minimum oil

38) In GTO based 3-phase loco total No. of WRE module is

(A) 6 (B) 3
(C) 9 (D) 1

39) In 3-phase loco, the Brake pipe (BP) is charged by.

(A) Additional C2 relay (B) C3W distributor valve
(C) E-70 Valve (D) None of the above

40) After glowing LSVW, driver has to press BPVR after

(A) 2 min (B) 1 min
(C) 3 min (D) 5 min

41) KVA rating of TFP in WAG-9 loco is

(A) 6321 KVA (B) 6531 KVA
(C) 6251 KVA (D) 6500 KVA

42) BPCS Push Button will function if speed is above

(A) 2 kmph (B) 10 kmph
(C) 5 kmph (D) 6 kmph

43)B-Z-V-O-F buzzer activates when

(A) Speed becomes 105% (B) Speed becomes 110%
(C) Speed becomes 100% (D) None of the above

44) Power supply provided to heater coil of 3-phase loco is

(A) 415 V, 3-phase AC (B) 110V, single Phase AC
(C) 415 V, 1 phase AC (D)None of the above

45) In 3-phase loco, Instrument cooling fan are supplied with

(A) 24 volts DC (B) 32 volts DC
(C) 48 volts DC (D) 110 volts DC

46) 3-phase loco will shut down when the battery voltage is less than

(A) 86 volts (B) 92 volts
(C) 82 volts (D) None of the above

47) Total No of white keys in 3-phase loco

(A) 6 (B) 2
(C) 1 (D) 7

48) In GTO based 3-phase loco, totalNo of valve sets are.

(A) 2 (B) 4
(C) 8 (D) 16

49) The minimum height of Rail guard from rail level in 3-phase loco, is

(A) 102mm (B) 104mm
(C) 106mm (D) 108mm

50) The minimum height of Rail guard from rail level in WAG-7 locos

(A) 102 mm (B) 104 mm
(C) 106 mm (D) 108 mm

51) The kW output of a traction motor in3-phase Loco is

(A) 630 kW (B) 850 kW
(C) 1125 kW (D) None of the above

52) The kW output of a traction motor in WAG-7 Loco is

(A) 630 kW (B) 850 kW
(C) 1125 kW (D) None of the above

53) Electrolyte used in 3-phase Loco batteries is

(A) Lithium hydroxide
(B) Potassium hydroxide
(C) Mixture of Lithium hydroxide and potassium hydroxide
(D) None of above

54) Scavenging blower is used for

(A) cleaning the dust (B) Cleaning the harmonics
(C) Both A and B (D) None of above

55) The number of scavenging blower's in3-phase Loco is

(A) 2 (B) 4
(C) 8 (D) 1

56) In 3-phase Loco, the output voltage of DC-DC convertors is

(A) 24 volt, 12 volt (B) 24 volt, 48 volt
(C) 16 volt, 24 volt (D) 12 volt, 64 volt

57) BUR-3 gives supply to

A) OCB 1 and 2 (B) TMB 1 and 2

(C) MPH (TFP + SR) (D) CP 1 and 2

58) In 3-phase Loco BLCP switch has ---- positions

(A) 2 (B) 3

(C) 1 (D) 4

59) Parking brake gauge shows ____ pressure in applied condition

(A) 6 kg/cm2 (B) 3.5 kg/cm2

(C) 5 kg/cm2 (D) 0 kg/cm2

60) Parking brake gauge shows _____ pressure in released condition

(A) 6 kg/cm2 (B) 3.5 kg/cm2

(C) 5 kg/cm2 (D) 0 kg/cm2

61) In 3-phase loco, the throttle can be moved to F/R position when

(A) FLG = 570 (B) FLG = 590

(C) MR Pressure > 6.4Kg/cm2 (D) A and C both

62) The maximum permissible speed limit of WAG-9 Loco is

(A) 90 kmph (B) 100 kmph

(C) 165kmph (D) 140 kmph

63) The maximum permissible speed limit of WAP-7 Loco is

(A) 90 kmph (B) 100 kmph

(C) 165 kmph (D) 140 kmph

64) The maximum permissible speed limit of WAG-7 Loco is

(A) 90 kmph (B) 100 kmph

(C) 165 kmph (D) 140 kmph

65) The maximum permissible speed limit of WAG-9H Loco is

(A) 90 kmph (B) 100 kmph

(C) 165 kmph (D) 140 kmph

66) GTO is a ---- controlled device

(A) Voltage (B) current

(C) Pressure (D) temperature

67) No. of oil pumps used in 3-phase IGBT based locomotives are

(A) 1 (B) 2

(C) 3 (D) 4

68) Radiator cools the oil of

(A) TFP (B) Traction converter

(C) A and B (D) None of above

69) In 3-phase Loco Control Circuit earth fault relay is

(A) 89.5 (B) 89.2

(C) 89.6 (D) 89.7

70) Programmed switch No. 152 failure mode operation has positions

(A) 0 (B) 1

(C) 0 and 1 (D) 0, 1, 2

71) Line converter of SR converts

(A) Single phase AC to DC (B) 3-phase AC to DC

(C) DC to DC (D) DC to three phase AC

72) Axle load of WAG-9 loco is

(A) 20 Tonne (B) 20.5 Tonne

(C) 21 Tonne (D) None of above

73) Transformer rating in WAG-9H loco is

(A) 6531 KVA (B) 5400 KVA

(C) 7475 KVA (D) None of above

74) Minimum vertical clearance between axle box and bogie frame of 3- phase loco is

(A) 30 mm (B) 35 mm

(C) 40 mm (D) None of above

75) Minimum vertical clearance between bogie frame and under frame of 3- phase loco is

(A) 30 mm (B) 35 mm

(C) 40 mm (D) None of above

6. C & W

1. Length of modified brake beam hanger in Indo-German project is ----------mm.
(a) 325 (b) 235 (c)250 (d) 150

2. Maximum Flange thickness of worn wheel profile is …… mm.
(a) 22 (b) 16 (c) 25 (d) 28.5

3. Roof sheet thickness in BCNA wagon is ---------- mm.
(a) 2.4 (b) 0.6 (c) 1.6 (d) 2.5

4. Material of Floor sheet of BOXR wagon is ----------
(a) Mild Steal (b) Carbon Steal (c) Stainless Steel (d) None

5. Wheel base of casnub bogie is ---------- mm.
(a) 2000 (b) 2400 (c) 1200 (d) 900

6 Length of anchor link is ---------- mm.
(a) 451 (b) 500 (c) 580 (d) None of these

7. Testing of alarm chain is done at --- Kg weight.

(a) 05 (b) 10 (c) 25 (d) 20

8. Greasing of equalizing stay rod is done in---------- Schedule.
(a) A (b) B (c) C (d) D

9. DCP Type fire extinguisher is suitable to extinguish
(a) Diesel (b) Electric (c) Petrol (d) All

10. There are……Nos. of lavatory in (ACF) of LHB coach
(a) 02 (b) 03 (c) 04 (d) 06

11. Minimum buffer height of goods wagon is ---------- mm.
(a) 1030 (b) 1075 (c) 1105 (d) 995

12. Minimum Wheel dia of Casnub Bogie is ---------- mm.
(a) 1000 (b) 906 (c) 1092 (d) 950

13. Condemn Thickness of Elastomeric Pad is ---------- mm.
(a) 40 (b) 42 (c) 46 (d) None

14. ----------mm packing is used in Casnub Bogie to adjust CBC height.
(a) 37 (b) 25 (c) 35 (d) None of these

15. A dimension of BOXN is ---------- mm.
(a) 70 ± 2 (b) 70+2-0 (c) 50 ± 2 (d)22 ± 2

16. In empty condition of BOXN Piston stroke is---------- mm
(a) 75±10 (b) 85±10 (c) 130±10 (d) 60±10

17. BOXNHL feed pipe pressure is ---------- Kg/Cm2
(a) 5 (b) 6 (c) 3.8 (d) None of these

18. Axle is checked by ---------- .
(a) DPT (b) UST (c) Wheel gauge (d) None of these

19. Track gauge distance on a straight track is ---------- mm.
(a) 1676±6 (b) 1600+2-1 (c) 1599 (d) None

20. Over hauling of Alarm chain system is done after ---------- Month.
(a) 3 (b) 5 (c) 9 (d) None of these

21. Centre pivot of Casnub Bogie is made of ----------
(a) Cast Iron (b) Cast steel (c) Mild Steel (d) Stainless Steel

22. Proof load Capacity of enhance screw coupling is ---------- ton.
(a) 36 (b) 70 (c) 75 (d) 130

23. In one unit of BLC wagon there are ---------- car A unit.
(a) 3 (b) 5 (c) 2 (d) 4

24. Maximum buffer height of goods wagon is ----------
(a) 1030 (b) 1075 (c) 1105 (d) 995

25. Maximum Wheel dia of UIC bogie is ---------- mm.
(a) 1000 (b) 990 (c) 1092 (d) 950

26. Free height of CC Pad is ---------- .
(a) 114 (b) 36 (c) 56 (d) None of these

27. ---------- Bearing is used in casnub bogie.
(a) Cylindrical (b) Spherical (c) CTRB (d) None of these

Permissible Wheel dia.

28. difference of both casnub bogies of a wagon is----mm
(a) 5 (b) 10 (c) 13 (d) 25

29. Permissible limit of Deep flange in wheel is---------- mm.
(a) 35 (b) 50 (c) 28 (d) 22

30. 37 MM packing is used in 22 WM casnub bogie to adjust CBC height wheel dia---------- mm
(a) 924 (b) 900 (c) 905 (d) 950

31. A dimension of BTPN is---------- mm.
(a) 70 ± 2 (b) 70+2-0 (c) 50 ± 2 (d)22 ± 2

32. Piston stroke of BTPN (empty condition) is ---------- mm.
(a) 70±10 (b) 87±10 (c) 130±10 (d) 117±10

33. Brake pipe pressure is---------- Kg/Cm2
(a) 5 (b) 6 (c) 3.8 (d) 4

34. ----------is checked with tyre defect gauge.
(a) wheel defect (b) Buckle defect (c) CBC defect (d) door defect

35. Wheel gauge (distance between two wheels) is ----------
(a) 1600±2 (b) 1600+2-1 (c) 1599 (d) 1676±3

36. Riding index of LHB coach is ----------
(a) 2.5 (b) 2.0 (c) 4.8 (d) None of these

37. friction coefficient of K type composite brake block is----------.
(a) 1.4 (b) 2.8 (c) 1.6 (d) 0.25

38. In one unit of BLC wagon there are ---------- car B unit.
(a) 3 (b) 5 (c) 2 (d) 4

39. ----------gms Grease is used in CTRB.
(a) 455±30 (b) 250±30 (c) NIL (d) 1500

40. ---------- roller bearing is used in BTPGLN Coach.
(a) Cylindrical (b) Plan (c) Cartage taper (d) Ball

41. IOH of ICF Coach is done in the interval of ----------month.
(a) 12 (b)9 (c) 18 (d) 54

42.Limit of flat tyre in wagon is ---------- mm.
(a) 20 (b) 50 (c) 75 (d) 60

43 Axle Load of AC coach is
(a) 16.3 (b) 13.3 (c) 20.3 (d) 18.3

44.'A' schedule of coaching stock is done after ---------- Month.
(a) 01 (b) 03 (c) 09 (d) 12

45. Speed limit of A Class ODC during day is ---------- kmph.
(a) 100(b) 110 (c) 90 (d) 40

46. Minimum Flange thickness in worn wheel profile is ---------- mm.
(a) 22 (b) 16 (c) 25 (d) 20

47. A- dimension of BOXN is ----------mm.
(a) 85 (b) 22 (c) 16 (d) 70

48. Material of Floor sheet of BOXNHL is ----------
.
. (a) Mild Steal (b) Corton Steal (c) IRSM 44 (d) None of these

49. Wheel base of UIC bogie is ---------- mm.
(a) 2000 (b) 2400 (c) 2896 (d) none of these

50. Lateral and longitudinal guidance to wheel of ICF bogie is taken from ……. . (a) Dashpot (b) Spring(c) Side bearer (d) None of these.

7. OHE

1 ACTM

(a) AC Train Manual
(b) AC Traction Manual
(c) AC Traffic Manual
(d) AC Training Manual

2. GR & SR

(a) General Rules & Subsidiary Rules
(b) General Rules & Safety Rules
(c) Grand Rules & Subsidiary Rules
(d) Grand Rules & Safety Rules

3 AFTC

(a) Auto Frequency Track Circuit
(b) Auto Frequency Track Control
(c) Advanced Frequency Track Circuit
(d) Audio Frequency Track Circuit

4 CLW

(a) Carriage Locomotive Workshop
(b) Carriage Locomotive Works
(c) Chittarangan Locomotive Workshop
(d) Chittarangan Locomotive Works

5 COFMOW

(a) Centre For Modernization of Workshop
(b) Combination of Frequency Modulation & Output Wattage
(c) Council for Modernization of Workshop
(d) Central Organization for Motivation of Workers

6 CORE

(a) Centre For Rural Electrification
(b) Central Organization for Railway Electrification
(c) Co-Related
(d) Centre of Research & Economy

7 CRIS

(a) Central Research Institute of Safety
(b) Centre For Railway Information System
(c) Central Research Institute of Savings
(d) Centre for Railway Instruments & Standard

8 DCW

(a) Diesel Component Works
(b) Direct Carrier Wagons
(c) Diesel Component Workshop
(d) Diesel Carriage Workshop

9 DLW

(a) Dummy Loco Wagon (b) Directorate for Revenue & Wages

(c) Diesel Loco Works (d) Diesel Loco Workshop

10 In AC traction, minimum height of contact wire under ROB/FOB from rail level to permit "C" class ODC

(a) 4.92 m (b) 4.80 m (c) 4.65 m (d) 5.03 m

11 In AC traction, height of contact wire at support from rail level (regulated OHE) with 50 mm pre sag in contact wire is

(a) 5.50 m (b) 5.55 m (c) 5.60 m (d) 5.65 m

12 In AC traction, height of contact wire at support from rail level (regulated OHE) with 100 mm pre sag in contact wire is

(a) 5.50 m (b) 5.55 m (c) 5.60 m (d) 5.75 m

13 In AC traction, height of contact wire from rail level in Car shed is

(a) 5.60 m (b) 5.65 m (c) 5.75 m (d) 5.80 m

14 In AC traction, normal height of the catenary wire at support from rail level (regulated OHE) with 100 mm pre sag in contact wire is about

(a) 7.20 m (b) 7.75 m (c) 7.25 m (d) 7.45 m

15 The fittings, which is used to transfer the weight of contact wire to the catenary wire is called

(a) Section insulator (b) Jumpers

(c) Cantilever assembly (d) Droppers

16 Droppers are used for

(a) Leveling the contact wire (b) To maintain stagger

(c) Reduced the sag in catenary wire (d) None of the above

17 Droppers are made out of

(a) Annealed copper (b) Hard drawn copper

(c) Cadmium copper (d) Bronze

18 Diameter of in-span dropper in AC traction is

(a) 7 mm (b) 6.75 mm

(c) 6 mm (d) 5 mm

19 Diameter of inclined dropper in bracket assembly is

(a) 7 mm (b) 5 mm

(c) 9 mm (d) 6 mm

20 The displacement of contact wire with respect to the pantograph axis is called

(a) Implantation (b) Stagger of contact wire

(c) Gradient of contact wire (d) Sag

21 In AC traction, maximum stagger of contact wire on curved track is

(a) 380 mm (b) 300 mm

(c) 229 mm (d) 200 mm

22 In AC traction, maximum stagger of contact wire on tangent track is

(a) 380 mm (b) 300 mm

(c) 229 mm (d) 200 mm

23 Maximum stagger is allowed at mid span is

(a) 229 mm (b) 200 mm

(c) 152 mm (d) 100 mm

24 Contact wire is placed in zig- zag manner in entire span length , why ?

(a) To avoid formation of groove on pantopan strip

(b) Uniform rubbing of pantopan strip within current collection zone

(c) To avoid breakdown due to formation of groove in pantopan strip

25 Cantilever assembly, both insulators are located nearer to the mast

(a) To avoid contamination due to steam & diesel locomotives

(b) To hold the tubes in proper tension

(c) To Cantilever assembly is swiveling type

(d) To avoid transferring the weights on OHE

26 The arrangement of the cantilever assembly depends upon the

(a) Height of contact wire (b) Setting distance

(c) Stagger (d) All of the above

27 The arrangement of the cantilever assembly does not depend upon the

(a) Height of contact wire (b) Super elevation

(c) Encumbrance (d) None of the above.

28 The tubes of the cantilever assembly are made out of

(a) Aluminum bronze (b) Aluminum

(c) Electrolyte copper (d) Galvanized steel

29 Which is not a part of the cantilever assembly ?

(a) Steady arm (b) Adjuster sleeve

(c) Anti wind clamp (d) PG clamp

30 Which is related to mechanical clearance

(a) At cross over, min track separation for erecting section insulator

(b) Implantation

(c) ODC

(d) All of the above

END