

MECHANICAL DEPARTMENT (CARRIAGE & WAGON)

COACHING

1. As per Board's guidelines, how much maintenance time should be given to a 24 coach length trains during primary maintenance?
 - a. 4hrs
 - b. 6hrs**
 - c. Between 4 to 6 hrs.
 - d. Time depending upon the availability of washing line slot & lie over of the train.

2. What is not the reason for very slow charging of Brake pipe pressure?
 - a. Insufficient supply of air through compressor/loco.
 - b. Leakage in distributor valve.
 - c. Leakage in BP line for complete train less than 0.2 kg/cm²/min.**
 - d. None of the above

- 3 Which test is done by checking that the brakes do not apply by reducing the pressure at the rate of 0.3 kg/cm² in 60 sec.
 - a. Release
 - b. application
 - c. Sensitivity
 - d. Insensitivity**

4. If the coach No. is NR 99104. What type of coach is this?
 - a. ACCW
 - b. ACCN**
 - c. FACCW
 - d. SCZAC

- 5 What is the ride index of a LHB Coach?
 - a. 3.25 - 3.50
 - b. 2.75 - 3.00
 - c. 2.50 - 2.75**
 - d. More than 3.50

6. As per watering committee recommendations for enroute watering in coaches, the rate of flow at the delivery end of a hydrant should not be less than..... ltrs./min.
 - a.100**
 - b. 75
 - c. 125
 - d. 150

7. What is/are the advantage(s) of Bogie Mounted Brake System over conventional air brake system?

- a. Reduction of weight
- b. Reduction of braking distance.
- c. Less wear and tear of wheel sets
- d. All of the above

8. Which type of brake blocks are used in Bogie Mounted Brake System?

- a. High friction composite 'K' type brake block.
- b. High friction composite 'L' type brake block.
- c. Sand casting brake block.
- d. High friction composite 'M' type brake block.

9. Passenger carrying capacity of a LHB Chair Car is?

- a. 67
- b. 71
- c. 72
- d. 78

10. 1st Shatabdi train was started between?

- a. NDLS - LKO
- b. NDLS - JHS
- c. NDLS - CSTM
- d. NDLS - JAT

11. How much inclination has been given on wheel flange?

- a. 1 in 2.5
- b. 2 in 3.5
- c. 1 in 3.5
- d. 2 in 2.5

12. What is the hole dia of Standard Test Plate?

- a. 8.7 mm
- b. 9.2 mm
- c. 10.5 mm
- d. 7.5 mm

13. Yellow strips on end wall panels of coaches, what represents?

- a. Anti telescopic coach body
- b. Integral design coach body
- c. All coil springs coach body
- d. Stainless steel body for anti corrosion coach body

14. White dumbbell mark on end wall panels of coaches, what represents?

a. Coach fitted with enhanced capacity screw coupling.

b. Unreserved second class coach.

c. Women coach.

d. Handicapped people coach.

15. Yellow strips on exterior panel above the Lav. Window on coaches, what represents?

a. Unreserved second class coach

b. Second class general coach.

c. Women coach.

d. Handicapped people coach.

16. What is the average life of light utilization categories of coaches?

a. 40 years

b. 50 years

c. 70 years

d. 30 years

17. At what time interval the POH attention to the non-AC coaches earning less than 2.0 Lakh kms. per annum will be given?

a. 10 Months

b. 11 Months

c. 12 Months

d. 9 Months

18. What level of dash pot oil is being maintained on the coaches at W/line?

a. 40 mm

b. 45 mm

c. 70 mm

d. 60 mm

19. What is the condemning limit of side bearer bronze wearing piece for Shatabdi coaches?

a. 43.5 mm

b. 42.0 mm

c. 35.5 mm

d. 32.0 mm

20. Thickness of flange measured below which height from the top of the flange?

a. 15 mm

b. 12 mm

c. 13 mm

d. 10 mm

21. What is the working capacity of enhanced capacity screw coupling?

- a. 36.0 Ton
- b. 37.8 Ton
- c. 40.2 Ton
- d. 32 Ton

22. What is WGPFC?

- a. Self generation partial 1st AC & first class coach code.
- b. Vestibule self generating 3 tier
- c. First class AC coach
- d. Vestibule chair car with dining car

23. What is the brake cylinder dia of air brake system?

- a. 355 mm
- b. 350 mm
- c. 300 mm
- d. 250 mm

24. During testing, what is the permissible leakage in FP & BP?

- a. 0.5 Kg/cm² per minutes.
- b. 2 Kg/cm² per minutes.
- c. 0.8 Kg/cm² per minutes.
- d. 0.2 Kg/cm² per minutes.

25. What is the train pipe dia/size of air brake goods stock?

- a. 30 mm
- b. 25 mm
- c. 32 mm
- d. 40 mm

26. Total number of plates in laminated springs of BOX wagon is ?

- a. 10
- b. 11
- c. 15
- d. 12

27. Sharp flange will occur when the top radius at the corner towards tread reduces to ?

- a. 5 mm
- b. 4 mm
- c. 2 mm
- d. 10 mm

28. DV of goods stock can be provided on coaching stock?

- a. False
- b. True

29. Breaking strength of screw coupling of ICF/BG coaches is 71.12T?

a. False

b. True

30. Sodium base grease is recommended for roller bearings?

a. False

b. True

31. Intermediate piece is used at which location in air brake system?

a. Between DV & common pipe bracket.

b. Between BC & common pipe bracket.

c. Between BP & common pipe bracket.

d. Between FP & common pipe bracket.

32. What is the reason for FP pressure rushing to BP pipeline?

a. SAB defective

b. DV defective

c. Brake Cylinder defective

d. Dirt Collector defective

33. How much fading of brake power is permissible in air brake train from originating station to destination?

a. Nil.

b. 0.5 kg/cm^2

c. 0.6 kg/cm^2

d. 0.7 kg/cm^2

34. How many shock absorbers are fitted in IRY coach?

a. 10

b. 12

c. 20

d. 25

35. Which valve control skidding of IRY coach?

a. Dump Valve

b. Skid Valve

c. Magnet Valve

d. Solenoid Valve

36. How many rubber pads are used in one buffer of ICF coach?

a. 15

b. 20

c. 25

d. 30

37. What happens if BP pressure rushes to FP pipeline?

- a. C-2 Relay Valve defective
- b. NRV defective
- c. VA1B control valve defective
- d. A9 Valve defective

38. What is the position of isolating cock when its handle is in vertical position?

- a. Open position
- b. Closed position
- c. In-operative position
- d. Non-functional position

39 Where is 'U' controller fitted?

- a. In BMBC
- b. In DV
- c. In AR
- d. In CR

40 What is ultrasonic test?

- a. It is a non destructive test which gives information about internal flaws in metal.
- b. It is a non destructive test which gives information about External flaws in metal
- c. It is a non destructive test which gives information about surface flaws in metal
- d. It is a non destructive test which gives information about peripheral flaws in metal

41. Which type of hand brake is used in power cars of IRY coaches?

- a. Manual parking brake
- b. Automatic parking brake
- c. Emergency parking brake
- d. Self generating parking brake

42. What is the minimum buffer height of loaded ICF coach?

- a. 1020 mm
- b. 1030 mm
- c. 1010 mm
- d. 1040 mm

43. What is the free height of dashpot spring of Rajdhani power car?

- a. 372 mm
- b. 362 mm
- c. 370 mm
- d. 374 mm

44. When a wheel flange is declared deep?

- a. On 32 mm
- b. On 35 mm**
- c. On 33 mm
- d. On 37 mm

45. What is the maximum limit of flat place in ICF coach?

- a. 50 mm**
- b. 45 mm
- c. 40 mm
- d. 60 mm

46. What is the full form of YS?

- a. Second class**
- b. Driving Unit
- c. Half postal van
- d. Second-class with brake van

47. What is the maximum wear limit between brake gear pin & bushes?

- a. 1.2 mm
- b. 2.5 mm
- c. 1.5 mm**
- d. 2.0 mm

48. What is the full form of RT?

- a. Tool Van**
- b. Store Van
- c. Medical Van
- d. Self Propelling Tower Van

49. How much pressure should be dropped for brake application of an air brake train?

- a. 1.5-1.8 Kg/sQ- cm
- b. 1.3-1.6 Kg/sQ- cm**
- c. 1.8-2.5 Kg/sQ- cm
- d. 2.0-3.0 Kg/sQ- cm

50. What is the condemning limit of ICF tyred wheel?

- a. 851 mm**
- b. 841 mm
- c. 861 mm
- d. 855 mm

51. What is height of ICF coach from rail level?

- a. 4026 mm
- b. 4025 mm**
- c. 4030 mm
- d. 4029 mm

52. What is the flange thickness of ICF wheel?

- a. 28.5 mm
- b. 26.5 mm
- c. 22.5 mm
- d. 29.5 mm

53. What the condemning limit of flange thickness in case of high-speed coach?

- a. 15 mm
- b. 10 mm
- c. 33 mm
- d. 22mm

54. What is the standard play between rail and wheel flange?

- a. 19 mm
- b. 20 mm
- c. 22 mm
- d. 15 mm

55. What is the thickness of brake pad used in IRY coaches?

- a. 32 mm/22 mm
- b. 35 mm/24 mm
- c. 45 mm/34 mm
- d. 25 mm/24 mm

56. Variation in wheel dia on the same axle in service will only cause biased wear on the wheels, reducing wheel life but will not effect safety in any way?

- a. True
- b. False

57. Full name of PEASD?

- a. Passenger Emergency Alarm Signal Device
- b. Public Emergency Alarm Digital
- c. Positive Emergency Attention Single Device
- d. Passenger Entertainment Attention Scheduling Device

58. What are the choke sizes of ACP and Guard emergency valve?

- a. 3 mm & 4 mm respectively
- b. 4 mm & 5 mm respectively
- c. 2 mm & 4 mm respectively
- d. 5 mm & 4 mm respectively

59. What is the filling up time for brake cylinder from 0 to 3.6 kg/cm² pressure on full service application in a coaching stock?

- a. 3 – 5 seconds
- b. 3 – 4 seconds
- c. 3 – 6 seconds
- d. 2 – 3 seconds

60. What type of Air brake system should be fitted on the coaches, allow to run on 24 coach trains?

- a. Single pipe graduated release system.
- b. Brake Pipe graduated release system
- c. Feed Pipe graduated release system
- d. Only Twin pipe graduated release system

61. How much gap should be maintained in between toothed wheel and pulse generator?

- a. 0.2 to 1.2 mm
- b. 0.4 to 1.4 mm
- c. 0.4 to 1.2 mm
- d. 1.4 to 2.4 mm

62. What is the condemning dia of IRY wheel set?

- a. 814 mm
- b. 812 mm
- c. 811 mm
- d. 824 mm

63. What does AB represents which is marked near to coach number on exterior panel of coach?

- a. Coach fitted with bogie mounted air brake cylinders
- b. Coach fitted with air brake cylinders
- c. Coach fitted with non-bogie mounted air brake cylinders
- d. Coach fitted with air brake cylinders with Twin pipe system

64. Pin for lever hanger in BMBC is similar to the pin for lever hanger in conventional air brake stock. Is it true or false?

- a. True
- b. False

65. What does G represents in coach code WGACCN ?

- a. Self Generation Coach
- b. End on Generation Coach
- c. Non-self-generating coach
- d. Power Car Generation Coach

66. "There shall be no gap between the buffers of adjoining coaches after tightening of screw coupling", is one of the technical requirement for running 24 coach train. Is it true or false?

- a. True
- b. False

67 What is the name of Bio-toilet Bacteria?

- a. Bacterionema Bacteria
- b. Vibrosol Bacteria
- c. Anaerobic Bacteria
- d. Septikleen Bacteria

68 What is the thickness of the body sheet for Bio-digester tank ?

- a. 1 mm S.S. Sheet
- b. 2 mm S.S. Sheet
- c. 3 mm S.S. Sheet
- d. 4 mm S.S. Sheet

69 What is the thickness of sheet in inside partition of Bio-digester tank?

- a. 1 mm S.S. Sheet
- b. 2 mm S.S. Sheet
- c. 3 mm S.S. Sheet
- d. 4 mm S.S. Sheet

70 What is the weight of empty Bio-Toilet Tank?

- a. 105 Kg. (Approx)
- b. 115 Kg. (Approx)
- c. 151 Kg. (Approx)
- d. 511 Kg. (Approx)

71. What is the identification of Bio-Toilet Coach?

- a. Yellow band on exterior below toilet glass
- b. Black band on exterior below toilet glass
- c. Green band on exterior below toilet glass
- d. Red band on exterior below toilet glass

72. What is the total volume of Bio-Toilet tank ?

- a. 200 Litres
- b. 300 Litres
- c. 400 Litres
- d. 500 Litres

73. What is the effective volume of Bio-Toilet tank?

- a. 200 Litres
- b. 300 Litres
- c. 400 Litres
- d. 500 Litres

74. What is the height of Bio-Toilet tank from Rail level?

- a. 200 mm
- b. 225 mm
- c. 250 mm
- d. 275 mm

75. POH of ICF Coach is done at the interval how many month.

- a. 24
- b. 12
- c. 18
- d. 30

76. What is the minimum buffer height of coach from Rail level ?.

- a. 1030
- b. 1105
- c. 900
- d. 1075

77. Over hauling of Alarm chain system is done after how many Month?

- a. 3
- b. 5
- c. 6
- d. 9

78. 'A' schedule of coaching stock is done after how many month.?

- a. 01
- b. 03
- c. 09
- d. 12

79. Lateral and longitudinal guidance to wheel of ICF bogie is taken from where?

- a. Dashpot
- b. Spring
- c. Side bearer
- d. None of these.

80. Speed of Medical vane is fixed at what kmph ?

- a. 100
- b. 110
- c. 75
- d. 120

81. Length of LHB coach is what mm.?

- a. 23540
- b. 22996
- c. 26740
- d. 24351

82. Maximum diameter of Axle mounted Disc brake in LHB coach in mm is?

- a. 890
- b. 640**
- c. 540
- d. 740.

83. Thickness of brake pad in disc brake system in mm

- a. 32
- b. 38
- c. 35**
- d. 40

84. No. of brake cylinders in one LHB coach are how many?

- a. 08**
- b. 04
- c. 18
- d. 16

85. No. of dump valve in one LHB coach are how many?

- a. 08
- b. 02
- c. 06
- d. 04**

86. Type of coupler used in LHB coach is which one?

- a. H-type.**
- b. HETA
- c. Alliance-II
- d. ARR (H) type.

87. Cylinder Piston stroke of LHB coach in mm

- a. 32
- b. 10**
- c. 15
- d. 20.

88. Cylinder dia of disc brake system in inch.

- a. 08
- b. 18
- c. 10**
- d. 12

89. Capacity of auxiliary reservoir of LHB coach?

- a. 100 litres
- b. 125 litres**
- c. 200 litres
- d. 150 litres

90. Choke dia of PEAV of LHB coach?

- a. 08 mm
- b. 19 mm**
- c. 7.5 mm
- d. 9 mm.

91. POH of LHB coach is done in the interval of how many months.

- a. 12
- b. 18
- c. 36**
- d. 48

92. Rehabilitation of coaching stock is carried out between which of the following ?

- a. 10 to 15 years
- b. 12 to 15 years**
- c. 15 to 18 years
- d. 18 to 20 years.

93. The periodicity of pest control in AC coaches is?

- a. 15days**
- b. 7 days
- c. 1 month
- d. 3 weeks.

94. At what interval should Dirt collector be cleaned ?

- a. One month**
- b. Two month
- c. Three month
- d. Four month.

95 Which Oil is used in dashpot guide?

- a. Servo RR-3
- b. Servoline 68**
- c. Lithium base grease
- d. Polyurea grease

96. What is the diameter of buffer plunger face of ICF coaches?

- a. 552 mm
- b. 457 mm**
- c. 493 mm
- d. 510 mm

97. What is the distance between two buffers at one end?

- a. 1956 mm**
- b. 1952 mm
- c. 1976 mm
- d. 1992 mm

98. What is the ICF buffer plunger made of?

- a. Mild Steel
- b. Cast Steel**
- c. Cast iron
- d. None of these.

99. What is the water tank capacity of ICF coach ?

- a. 1600 litre**
- b. 1800 litre
- c. 1700 litre
- d. 1500 litre.

100. What is the capacity of control reservoir of passenger coach ?

- a. 6 litre
- b. 7 liter
- c. 9 liter**
- d. 5 liter.

101. What is the time of overcharged protection in control chamber of coaching stock?

- a. 25 sec**
- b. 30 sec
- c. 45 sec
- d. 35 sec