

Q. Choose the correct alternative.

- I. The condemning wheel diameter of LHB coach is
a) 825 mm. b) 845 mm. c) 840 mm. d) 835 mm.
- II. The number of isolating cock provided in air suspension system of hybrid coach is.
a) 03 b) 05 c) 02 d) 06
- III. During full service application brake pipe pressure is reduced by.
a) 1.5 kg/cm.square b) 3.5 kg/cm.square c) 0.8 kg/cm.square d) 5 kg/cm.square
- IV. The standard buffer projection from Head stock is
a) 650mm b) 635mm c) 620mm d) 660mm
- V. The diameter of PEAV hole in ICF coach is
a) 15mm. b) 10mm. c) 12mm. d) 8mm.

Q. Choose correct answer:

- I. Mail/Express trains with Two –way journey more than 3500 km falls under RPC- 4 category
a) 2 b) 1 c) 4 d) 5
- II. The test which is done by reducing BP pressure at the rate of 0.3kg/cm² in 60 sec. is known as
a. Release b. application c. Sensitivity d. Insensitivity
- III. The state of West Bengal falls in region -----according to division of Hindi region.
a) A b) B c) C d) D
- IV. In Hybrid coaches BSS hangers and Equalizing stay rods are
a) Fitted in same place b) Excluded c) Fitted at another place
- V. The standard buffer projection from Head stock is
a) 650mm b) 635mm c) 620mm d) 660mm
- VI. The quantity of grease required per axle box of a ICF coach is
a) 1.75 kg b) 2.00kg c) 2.5 kg d) 1.5 kg
- VII. Which type of brake blocks are used in Bogie Mounted Brake System?
a) 'K' type brake block b. 'L' type brake block.
c. Sand casting brake block. d. 'M' type brake block.
- VIII. The condemning dia of LHB wheel is
a. 906 mm b. 845 mm c. 915 mm d. 913mm
- IX. What is the axle load of CASNUB bogie ?
a. 22 t b. 16.25 t c. 35 t d. 40 t
- X. Which type of roller bearing is used in casnub bogie ?
a. CTRB b. Spherical roller bearing
c. Cylindrical roller bearing d. Plain bearing

Q. Fill in the blanks

- (i) Bihar falls under Hindi region _____
- (i) A-Dimension of BCN wagon is _____
- (ii) Condemning thickness of K type brake block is _____.
- (iii) PNM stands for _____.
- (iv) LWCZDAC is the codification of _____
- (v) In M&P programme, Demand no. and Plan head no are _____ & _____.
- (vi) The standard piston stroke of BCN Wagon is _____
- (vii) HYTREL Washers are used at _____
- (viii) The amount of grease used in ICF Axle Box is _____
- (x) Number of spherical roller per box is _____.
- (xi) IRCA part III is related to _____
- (xii) Codal life of ICF coach is _____
- (xiii) Brake block keys are manufactured from _____
- (xiii) For welding mild steel _____ class electrodes are nominated
- (xv) Percentage of carbon increases _____ in steel.
- (xvi) The condemning limit of BLC wagon wheel diameter is _____
- (xvii) _____ type composite brake blokes are used in coaching stock.
- (xviii) In air brake system the threaded joint gives tight joint with _____ tape
- (xix) APM stands for _____
- (xx) The condemning limit of wheel sharp flange is _____

Q. Fill up the blanks with the correct answer.

- I. Type of coupler fitted in Coaching Stock is _____
- II. Brake pipe and feed pipe diameter of ICF coach is _____
- III. RDSO's technical pamphlet no _____ is for Inspection and maintenance

of Casnub bogie.

- IV. The standard piston stroke of BMBC (ICF) is _____
- V. New and condemning limit of wheel diameter of BVZI are _____ and _____ respectively.
- VI. A Group-‘C’ Railway Servant is entitled for _____ sets of Pass in a year, as per extent rule.
- VII. CO₂ Gas is commonly used in _____ Welding.
- VIII. Carrying capacity of BOXN wagon is _____
- IX. Periodicity of POH of boy wagon is _____.
- X. All Freight trains are to be re- examined at TXR point if stabled for more than _____.
- XI. Argon Gas is commonly used in _____ Welding.
- XII. BPC become invalid when _____.
- XIII. On ICF coaches, hytel washer is fitted in _____
- XIV. The ABC analysis relates to _____.
- XV. Tare weight of ICF AC-III coaches is _____ tonnes.

Q. Fill in the blanks with correct answer:

- I. POH periodicity of LHB coach is _____
- II. PL No. is assigned for _____ item.
- III. The Brake Cylinder fitted on BOXNHL is _____ type
- IV. The quantity of oil in each side bearer of ICF coach is _____
- V. The number of rollers in CTRB is _____

Q. Choose the correct answer.

- I. No. of chapter in IRCF Part-IV is
(a) 2 (b) 3 (c) 4 (d) 5
- II. Cleaning of bitumen barrel is carried out with
a) Petrol (b) Kerosene oil (c) Vegetable oil (d) Soap water
- III. Force required to unlock ATL of BLCA wagon is
(a) 500 kg (b) 700 kg (c) 1000 kg (d) 600 Kg
- IV. Slack adjuster ‘A’ dimension for BFKI wagon is
(a) 70⁺²mm (b) 50⁺²mm (c) 90⁺²mm (d) 27⁺²mm
- V. Axle load of ICF all coil Non-AC coach is
(a) 13 t (b) 16.25 t (c) 20.3t (d) 22.82t

Q. Write TRUE or FALSE against the following sentences.

- (a) FIAT bogie with air suspension is fitted in ICF coach.
- (b) If KM is logged properly on case of CC rake BPC, then the BPC will remain valid for 20 days
- (c) Under gear and brake system maintenance of Mail / Exp. Train One way run < 3500 Kms but round trip run > 3500 Kms are carried out at both the ends.
- (d) Diameter of brake cylinder of BVZC is 305 mm.
- (e) If roller bearing temperature is found more than 90°C, then rolling stock is to be detached for hot axle.
- (f) ICF rigid wheel base is 2896mm.
- (g) Empty load box is capable of increasing or decreasing brake cylinder pressure.
- (g) Stronger welds are produced in overhead welding.
- (i) The purpose of provide Elastomeric pads is to reduce wheel flange wear.
- (j) Capacity of the overhead water tank in a conventional coach is 150 litres

Q. Match the following

- | | |
|------------------------|----------------------|
| a) Double Suspension | i) DV |
| b) Sckahu | ii) FIAT bogie |
| c) Disc brake | iii) LHB Coach |
| d) CBC | iv) Coach |
| e) In-Shot Valve | v) EMU |
| f) Reclining mechanism | vi) Amenities |
| g) DRS Card | vii) AC Chair Car |
| h) Seat | viii) Statement |
| i) Master Valve | ix) Condemning limit |
| j) IRCA | x) Tank Wagon |

Q. Match the following:

- | | |
|------------------------|-----------------|
| a) POP mark | i) AC Chair Car |
| b) Bacteria | ii) RMPU |
| c) AC coaches | iii) Anticreep |
| d) CBC | iv) Wheel base |
| e) Reclining Mechanism | v) Bio Toilet |
| f) Alarm Chain | vi) WSP |
| g) DRS Card | vii) Safety |
| h) Speed Sensor | viii) Statement |
| i) Contour gauge | ix) Electrode |
| j) Flux | x) CBC |

Q. Very Short Answer type question.

- I. What is the brand of greased used in cylindrical roller bearing?
- II. What is the wheel base of ICF bogie ?
- III. What will be effect on bearing due to defective rubber 'O' rings of cover perished?
- IV. What is the minimum buffer height from rail level in production unit ?
- V. What is the crown clearance of ACCN?

Q. Write full form of the following as per railway terminology.

- (a) RITES (b) WWP (c) CONCOR (d) AAR (e) COIS
(f) PLB (g) BOXNHL (h) LHB (i) RELHS (j) PAC

Q. (a) Explain the various wheel defects measure by tyre defect gauge.
(b) What are the advantaes of WWP?

Q. (a) What are the reasons of brake binding ?
(b) How to reduce the same by good maintenance practice ?

Q. (a) What are the machineries and plants required in ROH shed?
(b) Write the procedure for routine overhauling of BOXN wagon?
(c) List out the non destructive tests which are carried out in C&W Sheds / Depots as preventive measures during rolling stock maintenance.

Q. (a) What do you mean by train parting?
(b) What are the checks to be carried out on CBC of goods stock during yard examination?
(c) List out the particulars to be recorded by the Supervisor who have been deputed to attend a train parting at section.

Q. (a) What is meant by primary maintenance and secondary maintenance of coaches?
(b) Explain RPC-4.

Q. Write short notes on the following :
(a) Check digit of PL No. (b) HOER (c) Section 3/3
(d) Minor Penalty (e) Privilege pass

Q.(a) What is the adverse impact of loading up to CC+6/CC+8? What preventive measure do you suggest to avoid these adverse repercussions of loading up to CC+6/CC+8?
(b) What do you mean by inventory control? Give one example.

Q. (a) What are the differences between Stock & Non-Stock items?
(b) What are the procedures of train leakage test ?
(c) How the LOCO compressor capability is tested ?

- Q. (a) What are the common defects in CBC ? What are its reasons and what remedial measure do you suggest?
 (b) What are the advantages of Rolling in examination and where is it done?
- Q. (a) What do you mean by WILD? Why is WILD needed?
 (b) Name the defects that can cause high impact loads?
 (c) What are the items to be checked during B-schedule?
- Q. (a) What is the procedure of ROH of BOXN wagon?
 (b) What is the examination pattern of CC rake ?
- Q. (a) Name eight documents which are statutorily required to be bilingual according to subsection(3) of section(3) of official language act.
 (b) How do you classify Hindi Regions?
 (c) Explain maternity leave ?
- Q. (i) What are the procedures of train leakage test?
 (ii) Draw a schematic diagram of twin pipe air brake system? Explain procedure of charging, application and release.
- Q. (i) How is a compressor capability test done?
 (ii) What do you mean by hot axle?
 (iii) What are its symptoms?
 (iv) What are its causes?
- Q. (i) What are the causes of train parting ?
 (ii) What are the special features of BLC wagon ?
 (iii) How is train leakage test done?
- Q. (i) What type of examinations are carried out in freight stocks of Indian railway?
 (ii) Write the salient features, advantages and disadvantages of close circuit rake.
 (iii) State main two points of differences between cast wheel and forged wheel ?
- Q. (i) Name ten documents which are statutorily required to be bilingual according to sub-section(3) of Section(3) of official language act.
 (ii) How do you classify Hindi Regions?
 (iii) Write Short Notes on Pass Rule
- Q. (i) State and explain SCTR.
 (ii) Explain the procedure of ROH of BOXN wagon.
- Q. (i) What do you mean by Stock and Non-Stock items? (ii) What are the differences between Major Penalty and Minor Penalty?