

Subjective questions on MWT – 02

- Q1. What are the objectives and applications of work measurement techniques?
- Q2. Explain the different types of work measurement techniques with advantages and disadvantages.
- Q3. Explain the concept of work sampling in details with suitable applications.
- Q4. Describe the work sampling procedure.
- Q5. What is the difference between probability sampling and non-probability sampling?
- Q6. What is the confidence level in work sampling? Explain it with suitable example.
- Q7. Explain the types of incentive schemes in details.
- Q8. Explain the meaning of incentive schemes with its objectives.
- Q9. What is rate fixing? Explain different methods.
- Q10. What are the different methods to organise work order?
- Q11. Explain the site inspection report.
- Q12. Define method study. Explain its merits and demerits.
- Q13. Explain the objectives and scope of method study.
- Q14. Describe the procedure of method study.
- Q15. What are the considerable factors for method study? Explain in details.
- Q16. Explain commonly used recording techniques.
- Q17. Explain the principal of motion economy.
- Q18. Explain the different techniques of work measurement.
- Q19. Explain about diagram used in method study.
- Q20. Explain macro motion chart and its types.
- Q21. Explain the different symbols used in method study.
- Q22. Explain SIMO chart.
- Q23. What are the differences between Merit Rating and Job Evaluation?
- Q24. Explain the job evaluation methods.
- Q25. Describe job costing with its objectives.

- Q26. Describe the calculation procedure for job costing.
- Q27. What is the difference between destructive and non destructive testing methods?
- Q28. Briefly describe the non destructive inspection methods used in trains.
- Q29. Explain the destructive testing methods.
- Q30. Draw the organisational structure of chemical and metallurgical department.
- Q31. Explain the role of chemical and metallurgical lab in railway.
- Q32. Define the responsibilities of metallurgical and chemical directorate.
- Q33. What are the different types of chemical and metallurgical tests used in railway?
- Q33. What is corrosion? How the corrosion repair attended?
- Q34. Explain the types of corrosion in railway tracks.
- Q35. What is the different corrosion prevention techniques used in railway?
- Q36. What are the main causes behind corrosion in railway?
- Q37. What is welding? Explain any welding process used to weld stainless steel.
- Q38. Explain NTR examination.
- Q39. Explain different procedure of NTR examination with merits and demerits.
- Q40. Discuss the importance of design and material selection in controlling corrosion.
- Q41. Discuss about the use of inhibitors in corrosion control?
- Q42. Explain the two important factors that influence the corrosion of metals?
- Q43. Mention the theories of corrosion and explain any one of them in detail.
- Q44. What is the mechanism by which rusting occurs?
- Q45. What is paint? What are the constituents and functions of paints?
- Q46. Write a note on pitting corrosion, stress corrosion and cathodic Protection.
- Q47. Draw the organisational structure of store department in railway.
- Q48. Explain the role of stock department in railway.
- Q49. Explain types of stocks and non stock items.

- Q50. Explain the POH of different type of wagon with the help of flowchart? And also explain the need of POH?
- Q51. What are the basic components of the suspension system? Also explain it.
- Q52. What are the causes of failure of spring? Also explain remedies?
- Q53. Explain the POH of stainless wagons in workshop? Write down its procedure?
- Q54. Explain rehabilitation and conversion of wagons?
- Q55. Explain the POH of ICF coaches in a workshop?
- Q56. Explain the procedure of the POH of LHB coaches?
- Q57. Write down the difference between ICF and LHB bogies in details?
- Q58. What are the POH of boggie? Explain its component?
- Q59. What type of springs uses in boggie? Explain its failure, cause and remedies?
- Q60. What are the components comes in body repair? Explain the procedure of repair?
- Q61. Explain passenger amenity items? And also explain its uses?
- Q62. Write a short note on bio toilet and also explain bio vacuum fitment during POH?
- Q63. Explain the POH ac system of coaches for ICF coaches?
- Q64. Write down short notes about the component of ac coaches and also explain the POH of LHB coaches?
- Q65. What the factor involving in the formation of corrosion? Also explain the method to reduce the corrosion?
- Q66. Explain corrosion repair practice in coaches & wagons & under frame?
- Q67. Explain the air brake system used in coaches & wagon and mention the advantage of twin pipe brake system over single pipe braking system?
- Q68. What are the various type of coupler used in locomotive and coaches? Explain it in details?
- Q69. Explain in detail about the POH procedure & testing methods employed for coaches?
- Q70. What is POH? Explain about the POH of different type of locomotive in workshops?

Q71. Write a short note on wheel shop and also explain wheel profile and defect related its?

Q72. Explain different types of welding defects in details.

Q73. What are important performance indices of a workshop? Explain in details.

Q74. What is production control organisation in workshop? Write its working in details.

Q75. Explain time motion study in details.

Q76. Write down shortcomings of incentive schemes.

Q77. Briefly discuss the corrosion prone area in wagons.

Q78. Explain the types of tools used in paint shop.

Q79. Describe the store draw procedure.

Q80. Explain standardisation, specification and rationalisation.

Q81. According to rolling stock code 2016, what are the duties of supervisors in workshop?

Q82. Explain the Roller Bearing Defects and its remedies.

Q83. What is Oil Bath Method in maintenance of bearings?

Q84. Briefly explain the Inspection Procedure of Roller Bearings in Mounted Position.

Q85. Briefly explain the maintenance procedure when bearing is dismounted.

Q86. Explain the following terms:

- a) Thin Flange b) Sharp Flange c) Worn Root d) Deep Flange

Q87. Write the service limits for difference in Wheel Diameter in locos.

Q88. Explain the following types of defect:

- a) Shattered Rim b) Spread Rim c) Shelled Tread d) Thermal Cracks e) Heat Checks

Q89. Explain any two material handling equipments.

Q90. Explain the NDT method used for railway axle and wheel.

Q91. What are the objectives of material management department?

Q92. What are the points to be observed while placing requisition?

- Q93. Explain the methods of recouperment in railway.
- Q94. Explain different theory of inventory control.
- Q95. Explain replenishment procedure of stocks in stores.
- Q96. Mention the system capability required for wheel impact load detector (WILD) system.
- Q97. Write the name of different units of wheel impact load detector system (WILD). Draw the block diagram of WILD.
- Q98. Write short notes on instrumented truck and strain gauge mounting.
- Q99. What are the guidelines for maintenance and repair of stainless steel wagons?
- Q100. Briefly explain the types of wagons used in Indian railway system?
- Q101. Explain lube oil system used in locomotive.
- Q102. Explain about fuel oil system used in locomotives in detail.
- Q103. Explain the defects in fuel oil system.
- Q104. Briefly explain the designation and function of higher rank officer in railway workshop.
- Q105. Mentions the safety precautions used in railway workshop.
- Q106. Briefly describe about the different production units of Indian railway with their codes.
- Q107. What are the dimensions given on engine block of Alco locomotive during POH? Explain with permissible limit.
- Q108. Explain the procedure to check the deflection in traction generator.
- Q109. Mention the precautions taken during POH of sub assembly of engine block.
- Q110. Briefly explain the different test during POH.
- Q111. What are the functions of wheel shop in railway workshop?
- Q112. Explain the defects in railway wheel.
- Q113. What are the passenger amenity items? Name any five used in coach.
- Q114. What is bio toilet and who invented it? Explain the types of bio toilet used in railway.
- Q115. Explain the process of load distribution in LHB coach.

Q116. Explain the process of load distribution in ICF coach.

Q117. Explain the function of lifting shop in railway workshop.

Q118. Explain the modification techniques to increase the IOH time period in railway.

Q119. How to procure the material for non stock item?

Q120. What are the functions of TL and AC system in coaching stock during POH?

Q121. What is the procedure to convert ICF trolley from 13 ton to 16 ton?