**NON DESTRUCTIVE TESTING** (BMEE1-777)

1. What are the advantages of NDT?
2. Differentiate destructive testing and non-destructive testing
3. List two disadvantages of Ultrasonic Testing.
4. What is the significance of contact angle in Liquid Penetrant Test?
5. Explain Dye penetrant test in detail.
6. What do you mean by dark light? What is its yse?
7. Give any two advantages of Destructive Testing over Non Destructive Testing.
8. What do you mean by H.W.D.C. and F.W.D.C.?
9. Classify different NDT techniques.
10. Illustrate the working principle of VT with suitable sketch
11. Explain Circular and Longitudinal magnetizations.
12. Discuss visual testing
13. List the NDT method used to detect internal defects.
14. Discuss various steps in Liquid penetrant testing.
15. List the types of defects analysis in LPT method
16. Name the different liquid penetrants.
17. Discuss the types of liquid penetrant inspection steps.
18. What are the advantages and disadvantages of LPT?
19. Describe the principle and applications of MPT.
20. Discuss different method for demagnetisarion.
21. Explain different equipment used in Magnetic Particle Testing. Also discuss Demagnetization techniques.
22. Explain with suitable sketch about the Casting defects during casting process.
23. What is the purpose of couplant in Ultrasonic Testing?
24. Discuss the method used for producing ultrasonic waves.
25. Explain the types of ultrasonic transducer.
26. Describe piezo electric effect.
27. Differentiate magnetization and piezo-electric method.
28. Describe the principle of pulse echo method
29. Write applications and limitations of Ultrasonic testing.
30. Illustrate with neat sketch about the following: A Scan, B Scan and C Scan.
31. Explain different factors influencing in ultrasonic testing technique
32. What do you mean by Dead Zone?
33. How Gamma rays are produced?
34. What are the applications of Radiography?
35. Discuss contact and immersion ultrasonic testing methods.
36. Differentiate between X-ray and Gamma ray radiography with their relative advantages and disadvantages.
37. Write short notes on:
38. Concrete test hammer
39. X-ray equipment.
40. Give any two limitations of Ultrasonic method.
41. What is Piezo Electric Effect?
42. How X-rays are produced?
43. Summarize the properties of X rays
44. What are the disadvantage of radiography testing
45. Describe radiography contrast.
46. Describe the construction of radiographic film.
47. Discuss various applications of Gamma Ray Radiography.
48. How Gamma rays are produced? Explain with the help of neat and clean sketch.
49. What are Gamma Rays?
50. Discuss Angle-Beam Technique for detecting flaws in a weldment.
51. What do you mean by Xeroradiography? Explain.
52. What are the variables affecting radiographs? Discuss each in detail.