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MAGNETIC PARTICLE TESTING – ASSIGNMENT

1. Magnetic Particle testing is suitable for _____, _____, _____materials
2. Permeability Means _____
3. MPI testing can detect Flaws: Surface / Subsurface / Both
4. Reason for having different colour powders in MPI testing _____
5. The retentivity of a material describes _____
6. The unit usually used to denote flux density is _____
7. Magnetic Flux lines that are parallel to a discontinuity produce Strong/weak/No/Fuzzy Indications
8. An Electric Yoke Produces _____(Longitudinal / Circular / Radial)magnetic Field
9. _____ rule describes the direction of current flow when lines of magnetic force surround a conductor
10. Magnetic Flux lines
    a) are most dense at the poles of a magnet (T/F)
    b) Seek the path of most resistance (T/F)
11. Subsurface Indication Usually appear as _____
12. Which MPI testing technique is most sensitive _____(Continuous / Residual / Interrupted)
13. Effective Technique for detecting subsurface flaws: Dry / Wet (Choose One), AC/HWDC/FWDC (Choose One), Permanent magnet/Yoke/Prod (Choose One)
14. Causes of Non Relevant Indications (At least three Causes) _____ _____
15. _____(Circular/Parallel/Vectored/Longitudinal) type of magnetization uses Formula: Ampere-turns=45000/(L/D)
16. Materials which are repelled magnetically are called: _____(Dia/Para/Ferro)
17. The pattern of Iron powder sprinkled on a paper placed over a bar magnet is called a _____
18. What is dark adaptation time? _____
19. Curie Temperature is _____
20. In general, UV light light intensity required for Fluorescent Examination is _____
21. Maximum White light intensity inside darkroom for Fluorescent Examination _____
22. Hysterisis curve describes the relationship between _____ & _____
23. The preferred wavelength for MPI fluorescent examination is around_____
24. Write 3 safety accessories useful for MPI testing _____
25. Magnetic Particles should have the _____(High/low) Permeability and _____(High/Low) Retentivity
26. The Best Current for detecting Fatigue Cracks _____(AC/HWDC/FWDC)
27. When using wet particles in water suspension _____agents are added to ensure proper wetting of the part
28. The formula used to calculate current in coil technique if L/D ration is more than 4_____
29. What is coercive force_____
30. Inspecting a part by magnetizing, removing the current flow, then applying the medium is called _____(Continuous, Residual, True Continuous)

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