



SNS COLLEGE OF TECHNOLOGY (An Autonomous Institution)

DEPARTMENT OF BIOMEDICAL ENGINEERING

19BMT301- Biocontrol System: Unit 2 and 3

2 Marks QB:

- 1. What is time response?
- 2. What is transient and steady state response?
- 3. What is the importance of test signals?
- 4. Name the test signals used in control system.
- 5. Define Step signal.
- 6. Define Ramp signal.
- 7. Define parabolic signal.
- 8. What is an impulse signal?
- 9. What is the order of a system?
- 10. Define Damping ratio.
- 11. How the system is classified depending on the value of damping?
- 12. Sketch the response of a second order under damped system.
- 13. List the time domain specifications:
- 14. Define Delay time.
- 15. Define rise time.
- 16. Define Peak time.
- 17. Define Peak overshoot.
- 18. Define settling time.
- 19. What is type number of a system? What is its significance?
- 20. What is steady state error?
- 21. Define static error constants.
- 22. What are generalized error coefficients?
- 23. Define BIBO Stability.
- 24. What is characteristic equation?

- 25. How the roots of characteristic equation are related to stability?
- 26. What is the necessary condition for stability?
- 27. What is Routh stability condition?
- 28. What is root locus?
- 29. How will you find root locus on real axis?
- 30. What is centroid and how it is calculated?
- 31. What is frequency response?
- 32. What are advantages of frequency response analysis?
- 33. What are frequency domain specifications?
- 34. Define Resonant Peak.
- 35. What is resonant frequency?
- 36. Define Bandwidth.
- 37. What is cut-off frequency and cut-off rate?
- 38. Define gain margin.
- 39. Define phase margin.
- 40. What is phase and Gain cross-over frequency?
- 41. What is Bode plot?
- 42. Define corner frequency.
- 43. What are the advantages of Bode Plot?