KING POPCY's OS TRIALS

1. What is a deadlock
2. What are the four conditions of deadlock?
3. What are the methods for handling deadlocks?
4. Differentiate between deadlock prevention and deadlock avoidance
5. What are Operating systems?
6. Explain the components of OS?
7. What are the functions of OS?
8. What are kernels? and explain the components of kernels
9. What is a middleware? And give two examples of a middleware
10. Describe the storage device hierarchy and distinguish between volatile and non-volatile storage devices?
11. Explain Direct Memory Access (DMA)
12. Distinguish between a simple processor system and a multiprocessor system
13. What are some of the advantages of a multiprocessor system?
14. Distinguish between a grace degradation and a fault tolerant
15. What are the types of a multiprocessor system?
16. What is a Uniform Memory Access?
17. What is a Non-Uniform memory Access?
18. With the aid of the diagram, explain the term "clustered systems"?
19. What are the types of clustered systems?
20. What are the two ways of linking a file?
21. What is a trap?
22. What is a process?
23. State some of the responsibilities of an OS in connection with the Process Management, Memory Management, File system, and Disk management
24. What are the Operating System services?
25. What are the 6 system calls?
26. With the aid of a diagram, explain the process state
27. What is a program counter?
28. Distinguish between a multiprogramming and multitasking?
29. Differentiate between SSD and HDD
30. Differentiate between Independent process and cooperation process
31. What are some of the reasons they allow process cooperation?
32. What are the types of buffers?
33. What are the two types of communication?
34. What are the two types of direct communications?
35. What is a socket ?
36. What is a pipe?
37. What is a thread?
38. With the aid of a diagram, distinguish between a single threaded and a multithreaded process.
39. Use a diagram to explain a multithreaded server architecture
40. Define the term parallelism and concurrency
41. What are the two types of parallelism?
42. What are the user threads and a kernel threads?

43. Explain the various types of multithreading models
44. Explain the term CPU scheduler
45. Distinguish between the preemptive scheduling and non preemptive scheduling
46. What are the four decisions the CPU schedules to take place?
47. What is a dispatcher and a dispatcher latency
48. What are the CPU scheduling criteria's
49. Explain all the CPU scheduling algorithms
50. What is a processor Affinity
51. What are the types of processor affinity
52. Define the term load balancing and the 2 approaches

DO NOT FORGET TO LEARN ALL THE CALCULATIONS IN CHAPTER 6

THANK YOU!!!