

PART C (6 x 5 = 30 Marks)

21. Describe the working of SMPS in industrial instrumentation. [K₂]
22. Compare the solid- state circuit breaker with ordinary circuit breaker. [K₃]
23. Explain the intelligent system monitoring and supervision control. [K₂]
24. Explain the difference between cranes and hoists. [K₂]
25. Explain how are the opto electronic devices working. [K₂]
26. Develop the automation system for a water treatment plant. [K₃]

PART D (4 x 10 = 40 Marks)

27. Design and develop the on-line and off-line UPS topologies. [K₃]
28. Describe the open loop and closed loop CNC system. [K₂]
29. Explain the ladder logic and I/O processing of PLC system. [K₂]
30. Explain the industrial control electronics applicable in a cement plant. [K₂]
