UNIT-IV

**INTRODUCTION TO IoT**

1. DEFINE IoT & EXPLAIN ITS CHARACTERISTICS.
2. DESCRIBE AN EXAMPLE OF IoT SYSTEM IN WHICH INFORMATION & KNOWLEDGE ARE INFERRED FROM DATA.
3. WHY DO IoT SYSTEMS HAVE TO BE SELF-ADAPTING & SELF- CONFIGURING?
4. WHAT IS THE ROLE OF THINGS & INTERNET IN IoT?
5. EXPLAIN IN DETAIL A GENERIC BLOCK DIAGRAM OF AN IoT DEVICE.
6. WHAT IS THE FUNCTION OF COMMUNICATION BLOCK IN AN IoT SYSTEM?
7. LIST THE VARIOUS IoT PROTOCOLS AT DIFFERENT LAYERS & EXPLAIN IN BRIEF.
8. LIST AND EXPLAIN THE VARIOUS COMMUNICATION MODELS OF IoT.
9. WITH A NEAT DIAGRAM EXPLAIN THE FUNCTIONAL BLOCKS OF IoT.
10. DESCRIBE AN EXAMPLE OF IoT SERVICE THAT USES PUBLISH-SUBSCRIBE COMMUNICATION MODEL.
11. DESCRIBE AN EXAMPLE OF IoT SERVICE THAT USES WEB SOCKET BASED COMMUNICATION MODEL
12. WHAT ARE THE ARCHITECTURAL CONSTRAINTS OF REST?
13. DISCUSS IN BRIEF VARIOUS IoT ENABLING TECHNOLOGIES.
14. BRIEFLY EXPLAIN ALL THE SIX IoT LEVELS.
15. ILLUSTRATE THE HOME AUTOMATION IoT APPLICATION W.R.T. LEVEL-1 DEPLOYMENT MODEL.
16. WHAT IS THE ROLE OF A CONTROLLER SERVICE IN AN IoT SYSTEM?
17. WHAT IS THE ROLE OF A COORDINATOR IN WSN?
18. ILLUSTRATE THE TRACKING PACKAGE IoT APPLICATION W.R.T SUITABLE DEPLOYMENT LEVEL.
19. ILLUSTRATE THE FOREST FIRE DETECTION IoT APPLICATION W.R.T SUITABLE DEPLOYMENT LEVEL.
20. ILLUSTRATE THE WEATHER MONITORING IoT APPLICATION W.R.T. SUITABLE DEPLOYMENT LEVEL.

**DOMAIN SPECIFIC IoT’S**

1. DESCRIBE THE HOME AUTOMATION IoT APPLICATION W.R.T. SMART LIGHTING & INTRUSION DETECTION SYSTEM.
2. DESCRIBE THE ENVIRONMENT DOMAIN IOT APPLICATION W.R.T. WEATHER & NOISE POLLUTION MONITORING.