| 7 | Discuss about the range based localization algorithms |
|---|---|
| 8 | Explain about the clock phase difference estimation in time synchronization |
| 9 | Describe the ranging techniques uses RSS |
| 10 | Explain about the other localization algorithms |

## UNIT-V
### SENSOR NETWORK PLATFORM A

**Part - A (Short Answer Questio**

| 1 | List the major concern sensor node hardware. |
|---|---|
| 2 | What is TinyOS? Where is it used? |
| 3 | Highlight the salient feature of component-based operating system |
| 4 | Classify sensor node hardware |
| 5 | What are the challenges in selecting a programming tool? |
| 6 | What do you mean by node level simulation? |
| 7 | Define Berkely motes |
| 8 | Write the Future directions of WSN. |
| 9 | What are the various node level simulation. |
| 10 | What are the attacks in Network Security? |
| 11 | write various key management approaches |
| 12 | Explain MANTIS. |
| 13 | Explain Sen OS. |
| 14 | What are the various node level software platforms. |
| 15 | write short note on MECN |
| 16 | What is fidelity management? |
| 17 | Explain the basic requirements of network security |
| 18 | What is called Wormhole attack? |
| 19 | Describe the sensor node architecture with appropriate figure. |
| 20 | Explain EYES OS |

**Part – B (Long Answer Question**

| 1 | Explain in detail the programming challenges and state-centric programming in sensor networks. |
|---|---|
| 2 | Write detailed notes on any one node-level software platforms. |
| 3 | Briefly explain node-level software platforms and node-level simulators. |
| 4 | Explain clearly about Berkely Motes. Mention the advantages and disadvantages of it. |
| 5 | What are the different types of platforms available for sensor networks and explain any one in details. |
| 6 | Explain the challenges for sensor network platforms. |
| 7 | Explain about TINYGALS |