

**B.Tech. SEM -VII ( Computer) 2014 Course (CBCS) : WINTER - 2018**  
**SUBJECT: ELECTIVE-III AD- HOC AND SENSOR NETWORKS**

Day: Monday  
Date: 03/12/2018

**W-2018-2543**

Time: 02.30 PM TO 05.30 PM  
Max. Marks: 60

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**N.B:**

- 1) All questions are **COMUPLSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Assume suitable data if necessary.
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**Q.1** a) Explain Ad-hoc network architecture. (05)  
b) What is need of sensor networks? (05)

**OR**

**Q.1** a) Discuss working of Ad-hoc and Sensor networks. (05)  
b) What are limitations of Ad-hoc and Sensor networks? (05)

**Q.2** What are requirements for Ad-hoc and sensor network connectivity? How to configure wireless LAN. (10)

**OR**

**Q.2** Explain Wireless communication technology? What is role of radio waves in wireless networks? (10)

**Q.3** What is main purpose of TCP/IP in Ad-hoc network? Explain Routing Protocols in Ad-hoc networks? (10)

**OR**

**Q.3** Discuss classifications of multicast routing protocols. Compare different multicast routing protocols. (10)

**Q.4** What are various issues and challenges of security in Ad-hoc network attacks? Explain role of transport layer in Ad-hoc and sensor networks? (10)

**OR**

**Q.4** Explain with real life example to understand need of security in Ad-hoc networks. List different issues in designing a transport layer protocol? (10)

**Q.5** a) How QoS Frameworks is important for Ad- hoc wireless network works. (05)  
b) Write different issues and challenges in system power management schemes. (05)

**OR**

**Q.5** a) What are various utilization schemes in Ad-hoc and Sensor networks? (05)  
b) Explain transmission power management schemes in details. (05)

**Q.6** What are different steps to establish Ad-hoc and sensor network. (10)

**OR**

**Q.6** Explain an application of Ad-hoc and Sensor networks in Internet of Things. (10)

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