Navrachana University

School of Business and law

End-Semester Examination May-2017

SYBCA (SEM-4)

Mobile Technology – IT310

Date: 10-05-2017
Time: 1:00 PM to 3:00 PM **Marks: 40**

Instructions:

- ➔ Write each answer on a new page
- ➔ Demonstrate and give example if applicable

Q1. Answer the following question. (Any 5) **(10 marks)**

1. Which algoritham provides 100% authentication and 100% confidentiality? And what is the main disadvantage of this scenario?
2. What is smart card and where it is embedded?
3. Which technology helps to identify the ownership of copyright data?
4. What is bluetooth Core Protocols also list out them?
5. What's the difference between passive and active tags?
6. What is the difference between TLS and WTLS?

Q2. Do as directed. **(18 marks)**

1. How multifactor Security works?**[4]**

OR

1. Explain working of Mobile IP. **[4]**

2. Explain WiMAX with its Layer description.**[4]**

3. Explain Master/slave relationships in Piconets compare it with Scatternet.**[5]**

OR

3. How Does the SSL Certificate Create a Secure Connection? **[5]**

4. Explain the MCC Architecture in detail with its advantages. **[5]**

Q 3. Solve the following problems. **(12 marks)**

1. Generate RSA Decryption and Plaintext. The given Cipher text is "KQS".
   Where, p=11, q=3, e=3, d=? And A = 2, B=3,..... Z=27 (5 marks)
2. Write steps for DES algorithm and generate keys using 10 bit block cipher(1010000010).
   Where, P10 = 3,5,2,7,4,10,1,9,8,6 and P8 = 6,3,7,4,8,5,10,9 (3 marks)
3. Verify the digital signature where p=11, q=3,S='Y',e=3. (2 marks)
4. Bob wants to send the message M = 13 to Alice. Using Alice's public (33,3) he calculate the ciphertext C, and at the Alice side she recover the PlainText using her Private key(33,7). (2 marks)

---------End of Question Paper---------