Code: 1G162

III B.Tech. II Semester Supplementary Examinations May 2017
Cryptography and Network Security
(Computer Science and Engineering)

Max. Marks: 70   Time: 3 Hours

Answer any **Five** questions
All Questions carry equal marks (**14 Marks** each)
****

1. a) Why do you think protection of information plays a major role in the world's economy? Explaining the various security technologies available to protect the information in an organization, tell where and why these technologies fail in its role of providing security. **5M**

   b) What is buffer overflow? Why do you think buffer overflow is a flaw in providing security to the network? Explain. **5M**

   c) With an example, discuss how Man-in-the-middle attack is performed on a Wi-Fi network. **4M**

2. a) Explain at least three schemes that are available to encrypt messages larger than 64 bits. **6M**

   b) What is a keyed hah? Explain how a message authentication code with a hash computed. What are the two properties that defined HMAC as secure? **8M**

3. a) Explain the signing and verification process in the case of digital signature standard indicating the global public key components, user public-private key pair and a valid K. **5M**

   b) What is the advantage of obtaining certificates of keys from a certificate authority? How are the certificates distributed? **5M**

   c) How does Kerberos ensure a trusted access control? **4M**

4. a) Discuss the five services provided by PGP. **7M**

   b) Elaborate on the capabilities of S/MIME. **7M**

5. a) Reason out the need for defining two phases in Internet Key Exchange. Explain the two modes of the Phase 1 Internet Key Exchange. **7M**

   b) What is the need for encapsulation of security payload? Explain how encapsulating of the security payload is done. **7M**

6. a) Explain the process of establishing a logical connection between a client and a server using the SSL handshake protocol messages. **7M**

   b) How do the participants involved in SET help in ensuring secure transaction on the net? **7M**

7. a) Listing the security related information represented by SNMPv1, bring out the relationship among SNMPv1, SNMPv2, SNMPv3. **7M**

   b) What are the typical phases of operation of a virus? **7M**

8. a) Using the concept of trusted system, explain how security is provided against Trojan horse attack. **7M**

   b) Explain the two categories of statistical anomaly detection. **7M**

***

III B.Tech. II Semester Supplementary Examinations May 2017
Managerial Economics and Financial Analysis
(Common to EEE & CSE)

Max. Marks: 70   Time: 3 Hours

Answer any **Five** questions
All Questions carry equal marks (**14 Marks** each)
****

1.	Define managerial economics? Also explain how it helps in solving managerial problems.	14M
2.	What are the various methods of demand forecasting? Explain each of them in detail.	14M
3.	Write a short note on the following	
	a) Fixed cost Vs variable cost	07M
	b) Opportunity cost Vs outlay cost	07M
4.	How price is determined in perfect competition? Explain in detail.	14M
5.	What do you mean by partnership business? How is it different from Joint Stock Company? Explain.	14M
6.	A company is considering two investment alternative proposals that cost Rs.4, 00,000 and Rs.3, 00,000 respectively. The first project generates Rs.1, 00,000 a year for four years. The second generates Rs.60, 000, Rs.1, 00,000, Rs. 80,000, Rs.90, 000 and Rs. 70,000 over a five year period. The company's cost of capital is 8%. Which one do you choose under NPV method?	14M
7.	The trail balance of Sasi as on March 31, 2017 revealed the following information. Prepare a trading account, profit & loss account and balance sheet..	

Debit balances	Amount in Rs.	Credit balances	Amount in Rs.
Opening stock	5,000	Capital account	20,000
purchases	29,200	Sales	62,500
Sundry debtors	25,000	Sundry creditors	13,400
Bills receivables	2,800	Bills payable	5,000
Plant	10,000	Loan and mortgage	18,000
Interest on loan	300	Bank overdraft	2,400
Wages	15,000		
Buildings	24,000		
Loose tools	600		
Cash on hand	600		
Stationary	500		
Salaries	8,200		
discounts	100		
	1,21,300		1,21,300

Adjustments:

1. Closing stock Rs.5,600
2. Write off loose tools Rs.540
3. Interest on mortgage @15% per annum
4. Provide interest on capital @ 5% per annum
5. Provide 5% reserve for doubtful debts.   14M

8.   How ratio analysis is helpful in understanding financial statements? Explain.   14M

***

Code: 1G165

III B.Tech. II Semester Supplementary Examinations May 2017
Software Engineering
(Computer Science & Engineering)

Max. Marks: 70   Time: 3 Hours

Answer any **Five** questions
All Questions carry equal marks (**14 Marks** each)
****

1. a) What is a software myth? Discuss a few management and practitioners myths and their realities.   7M
    b) What is CMMI? Give its significance in software engineering.   7M

2. a) Distinguish between functional and nonfunctional requirements.   7M
    b) Explain drawbacks of different software models.   7M

3. a) Explain about Requirements validation.   7M
    b) Compare data models and object models.   7M

4. a) What are the characteristics of good software design?   7M
    b) What principles are applicable to data design at component level?   7M

5.   Explain steps of interface design.   14M

6. a) Explain about strategic approaches of software testing.   7M
    b) Distinguish between white box testing and black box testing.   7M

7. a) Mention the differences between reactive and proactive risk strategies. 7M
    b) Write about RMMM   7M

8. a) Write short notes on software quality assurance and software reliability. 7M
    b) What are the guidelines followed in formal technical review process?   7M

***