Code No.: **30517** MR13

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)
Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajgiri (Dist), Hyderabad

III B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, MAY-2018

Subject: **Information Security**

Branch: **CSE**

Time: 3 hours **Max. Marks: 75**

PART – A

I. Answer ALL questions of the following **5x1Mark=5 Marks**

1. What is Confidentiality? Give example.
2. Differentiate the terms plaintext and cipher text?
3. What is a public key?
4. What is a Security Association in IP security?
5. Define threats?

II. Answer ALL questions of the following **10x2Mark=20 Marks**

1. What is a spoofing attack?
2. What is vulnerability? Give example.
3. Write about hashing
4. What is Message Authentication Code?
5. What is a Kerberos? What are its features?
6. Write the goals of information security.
7. Write a short note on IP Security Architecture?
8. What are the key features of Secure Electronic Transaction (SET)?
9. What are the uses of SNMP?
10. Give any two differences between virus and threats.

PART-B

Answer ALL questions of the following **5x10 Marks= 50Marks**

1. List out and discuss in detail different types of threats that exist for an information system.

(OR)

2. a) Explain about confidentiality and integrity **[5M]**
   b) Describe about buffer overflow with an example **[5M]**

3. a) Explain Symmetric Encryption principles with a neat sketch? **[5M]**

   b) Explain about any two Symmetric Encryption Algorithms with required diagrams? **[5M]**

(OR)

4. Describe detail how the RSA algorithm works. Also discuss different applications with an example.

5. Explain Pretty Good Privacy (PGP) cryptographic functions with a supporting diagram.

(OR)

6. a) Explain the Diffie-Hellman Key Exchange algorithm with an example ? **[5M]**
   b) Explain X.509 Authentication Service in Public Key Encryption system? **[5M]**

7. a) Write about encapsulating security payload? [5M]
   b) Explain Secure Socket Layer (SSL) [5M]

(OR)

8. a) Explain about the IP security with suitable example. [5M]
   b) Write short notes on Key management [5M]

9. a) Describe the overview of SNMPV3 Protocol Architecture? [5M]

   b) What are Trusted Systems? What is its significance? [5M]

(OR)

10. a) Explain about different Firewall Design principles? [5M]

    b) What are the different types of viruses? Explain in detail. [5M]

Code No.: **30518/40516** | **MR13/ MR14**

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III B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, MAY-2018

Subject: **Computer Communication (MR13) / DC Computer Networks(MR14)**

Branch: **CSE**

Time: 3 hours **Max. Marks: 75**

PART – A

I. Answer ALL questions of the following **5x1Mark=5 Marks**

1. What is frame relay?
2. List the four methods to construct the frame.
3. What is the use of Switch and define Aggregation Points?
4. Expand the term SCTP.
5. What is the need of cryptography in the computer networks?

II. Answer ALL questions of the following **10x2Mark=20 Marks**

1. Describe briefly about MAN and WAN.
2. What are the different transmission media?
3. Write about IEEE802.3 briefly.
4. Write about IEEE 802.11.
5. What is masking. What its use.
6. Where do we get the Congestion?
7. What are the main causes for data traffic?
8. What is addressing?
9. What are the different types of services ATM network offers?
10. Draw HTTP request and response header.

PART-B

Answer ALL questions of the following **5x10 Marks= 50Marks**

1. Discuss about Concatenated Virtual Circuits.

OR

2. Write short notes on interface, service and protocol.
3. Explain principle of CSMA/CD control access mechanism with a neat flow chart.

OR

4. a) Explain the design issues of data link layer.
   b) Explain the sliding window protocol with a neat sketch.
5. a) With an example explain subnet masking.
   b) Write short notes on link state routing.

OR

6. a) What is tunneling? When it is used? Is it used in wireless LAN's? **[3+2+1]**
   b) Discuss about Internet work Routing. **[4]**
7. a) Explain classful IP addressing.
   b) Explain the QoS in switched networks?

OR

8. What are the flow characteristics and classes in Quality of Service?
9. Explain the complete working model of electronic mail and the protocols involved in sending and receiving of a mail.

OR

10. Write about different types of web documents with example.

Code No.: **30516/40517** | **MR13 / MR14**

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III B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, MAY-2018

Subject: **Compiler Design**

Branch: **CSE**

Time: 3 hours **Max. Marks: 75**

PART – A

I. Answer ALL questions of the following **5x1Mark=5 Marks**

1. What is parsing?
2. Write the stands for YACC
3. What is type system?
4. What is an optimization?
5. Write object code forms.

II. Answer ALL questions of the following **10x2Mark=20 Marks**

1. Explain the lexical analyzer.
2. Write the Following rules.
3. What is left most derivation and rightmost derivation?
4. Write the operator precedence relations, with example.
5. Construct abstract syntax tree.
6. Explain the heap allocation strategies.
7. Write the loop optimization techniques.
8. Eliminate common sub expressions with one example.
9. Write the register assignment.
10. Write different object code forms.

PART-B

Answer ALL questions of the following **5x10 Marks= 50Marks**

Q1. What is the LL(1) Grammar and construct LL (1) grammar for
S->iEtS|iEtSeS|a
E->b

(OR)

Q2.Differencs between compiler and interpreter and construct first and follow rules for the following grammar S->(L)|a
L->L,S|S

Q3. Construct LALR parsing table for the following grammar

S->L=R|R

L->*R|id

R->L

(OR)

Q4. Define LR(0) item, explain the model of LR parser and handling ambiguous grammar with an example.

Q5. Construct quadruples, triples and indirect triples for the following

a=b*-c+b*-c

(OR)

Q6. Explain about non block structure storage allocation strategies.

Q7. Explain about the principal sources of code optimization.

(OR)

Q8. What is flow graph and explain about the global data flow analysis.

Q9.What is a DAG and applications of DAG , give DAG for The following

a+b*(a+b)+c+d

(OR)

Q10. How registers are allocated and assigned in order to generate good code?