

2015

MCA

5th SEMESTER EXAMINATION

PAPER—503

Full Marks : 100

Time : 3 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Elective-I

(INTERNET TECHNOLOGY)

Answer Q. No. 1 and any four from the rest.

1. Answer any five questions : 5×2

(a) RIP and OSPF is based on _____ and _____ algorithm.

(b) What is trigger update ?

(c) What is TTL ? What is the maximum hop-count of RIP ?

(Turn Over)

- (d) What is periodic update ?
 - (e) What is tag ?
 - (f) What is hyperlink ?
 - (g) What is event ? Give two examples.
2. (a) What is CSS ? What are the advantage of CSS ?
2+3
- (b) Describe all the CSS measurement unit with proper example. 5
- (c) Describe in detail three properties of a border in CSS. 5
3. (a) What is Cookie ? How it works ? Write the syntax to store Cookie ?
2+2+3
- (b) What are the advantages and limitations using Java Script ?
2+2
- (c) What is alert box ? How it created ? 4
4. (a) What is the difference between static and dynamic webpage ? What do you mean by active webpage ?
3+2
- (b) Create an HTML page with the following features :
Hyperlink, Navigation, Button, Tables, Forms. 6

- (c) What is DOCTYPE? Compare Java Technology and Microsoft Technology.

$$1\frac{1}{2} + 1\frac{1}{2}$$

5. (a) Briefly discuss about various types of attack. 6

- (b) What is Intranets and Extranets? Differentiate both.

3

- (c) What is firewall? Describe about various types of firewall. What is the difference between firewall and intrusion detection system.

$$1+3+2$$

6. (a) Briefly describe IPV₄ header format. 7

- (b) You can given 172.16.0.0 IP address, and you have to create 513 sub-networks

- (i) What will be the new subnet mask?
 (ii) What will be the broadcast address of last network?
 (iii) Maximum how many computer can be connected in a single sub-network?
 (iv) What is the network address of last network?

$$2+2+2+2$$

7. Write shorts note on any *three* : 3×5
- (a) Telnet ;
 - (b) FTP ;
 - (c) URL ;
 - (d) http ;
 - (e) Netstat ;
 - (f) Traceroute.

[Internal Assessment]

30

(PATTERN RECOGNITION)

Answer any *five* questions : 5×14

1. Answer any *five* questions : 5×2
- (a) What do you mean by pattern recognition ? Write its applications. 2+3
 - (b) Describe the components of pattern recognition system. 5
 - (c) Write the differences between supervised and unsupervised learning. 4

2. (a) What do you mean by speech recognition? 4
(b) Write about the speech recognition system. 5
(c) Write the categories of speech recognition system.
Describe template matching procedure. 2+3
3. (a) Write the differences between Eager and Lazy Learning. 3
(b) Give an example of Eager Learner Method. 2
(c) What do you mean by Classification? 2
(d) Describe K-NN method for Classification. 7
4. (a) What is cluster analysis? Write its applications. 2+3
(b) Explain the importance of quality measurement in clustering. 4
(c) Describe the partitioning approach in clustering. 5
5. Write short notes on any four : $4 \times 3 \frac{1}{2}$
(a) Feature selection ;
(b) Feature extraction ;
(c) ANN ;
(d) Unsupervised learning ;

- (e) Good clustering ;
- (f) Template matching.
6. (a) What do you mean by syntactic pattern recognition ? 4
- (b) Explain Syntactic pattern recognition with the help of a block diagram. 7
- (c) Describe syntax parsing. 3
7. (a) What is feature reduction ? 3
- (b) Write the differences between feature reduction and feature selection. 2
- (c) What is LDA ? How LDA use in feature reduction and feature selection techniques ? 2+7
- [Internal Assessment]** 30
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