Candidates are required to give their answers in their own words as far as practicable.
The figures in the margin indicate full marks.

[HTML PROGRAMMING]

Group - A

Answer any *two* questions :   5×2=10

1. Explain <textarea> and <href> tag.   3+2

2. What are the different levels of heading in HTML?

3. What are the different types of lists supported in HTML programming?

Group - B

Answer any *one* question : 15×1=15

1. What are the different types of positioning techniques? Explain. Write a short note on DOM. Explain HTTP request method. 5+5+5

2. What is a form? What are the major attributes of the form? Explain any six form components with example. What is the use of <img> tag? Give the syntax of <img> tag. (2+2+6)+2+3

—————

OR

[XML PROGRAMMING]

Group - A

Answer any *two* questions :   5×2=10

1. How XML is different from HTML?

2. What is the meaning of version in XML?

3. What is a well formed XML document?

Group - B

Answer any *one* question :   15×1=15

1. What is a valid XML document? How can you apply a DTD to an XML document? What are the rules to write XML document? What is XSLT?   3+5+5+2=15

2. Is XML meant to be a replacement of HTML? Define element and attribute in an XML document. What is the difference between simple element and complex element? What is XML data binding? Why is it used? What is XML encoding error.

                                                2+3+3+4+3=15

―――――――

OR

[ORACLE (SQL / PL-SQL)]

Group - A

Answer any *two* questions : 5×2=10

1. When we insert data in a table where actually is it stored? State some uses of Grant and Revoke commands. 2+3=10

2. Compare the use of Exists Clause with Between clause? 5

3. Select......
   From.........
   Where.......
   out of 3 clause which one is executed first and why? 5

Group - B

Answer any *one* question : 15×1=15

1. Is SQL a 3rd generation or 4th generation language?—Justify your answer. What are the part of the SQL language. What is sub query? State its use. Write the difference between 'varchar' and 'varchar'-2 3+3+2+5+2

2. Explain various Data types that are available in oracle? How can you generate subtotals for a particular group of data. Define DDL and DML. 8+3+2+2

———————

OR

[LINUX / UNIX PROGRAMMING]

Group - A

Answer any *two* questions :   5×2=10

1. Define grep. Write a grep command to display the lines which does not matches all the given pattern.   5

2. Write the syntax of following functions. Explain each argument.
    (i) kill () (iii) raise () (iii) alarm ()
    What are the uses of fork() function?   3+2

3. Write a shell script which checks whether a given file contains a given word. If it does, the script should output the message "The file contains the word"; if not, it should output the message "The file doesn't contain the word".

Group - B

Answer any *one* question :   15×1=15

1. (a) Explain the following commands with syntax, options and examples : (i) head (ii) tail

    (b) Write a shell script to count the number of lines in a text file without using wc command.

    (c) Write the differences between unix domain and inter domain.

    (d) List out some APIs associated for shared memory.   6+4+3+2

2. (a) Explain how to control a shared-memory segment.

    (b) Explain briefly about the following socket APIs with clear syntax :
         (i) bind () (ii) listen ()

    (c) Explain how to attach and detach a shared-memory segment.   6+4+5

———————

OR

[R PROGRAMMING]

Group - A

Answer any *two* questions : 5×2=10

1. Differentiate between Vector, List, Matrix, and Data frame.

2. What are the features of R Programming?

3. Differentiate between library () and requre () functions in R Programming.

Group - B

Answer any *one* question : 15×1=15

4. (a) How do you write a custom function in R? Explain with an example.

   (b) What do you mean by Random Forest? How would you build a Random Forest in R? 7+8

5. (a) How do you build a linear regression model in R? Write down the steps and explain them.

   (b) What is the PCA model in R? Explain in detail. 8+7

———————