

NEW
Part-II 3-Tier
2015
COMPUTER SCIENCE
(General)

PAPER—IIB (Set-2)

(PRACTICAL)

Full Marks : 50

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

[Part-I]

Answer any *two* questions.

10×2

1. Given the following schema definition :

employee (emp_name, street, city)

company (emp_name, city)

manager (emp_name, manager_name)

(a) Create the above tables.

(b) Find all employees who live in the same city.

(c) Find the details of all employees who are manager.

2. Supplier (Sid, Sname, Saddr)
 Customer (Cid, Cname, Caddr)
 Item (Ino, Iname, Icolour, Iprice)
 Order (Sid, Cid, Ino, Qty, Qno)
- (a) Create the above tables.
 (b) List names of all suppliers who have supplied at least one red item. 10
3. Student (Name, Roll, Class, Dept_name)
 Course (C_name, Credit_hours, Dept_name)
 Grade (Roll, grade)
- (a) Create the above tables.
 (b) Display the all details of a students having grade 'A'.
 (c) Display the name, roll of all students whose Dept_name is "Computer Sc". 10
4. Hotel (h_no, h_name, h_add)
 Fair (h_no, Fair)
- (a) Create the above tables.
 (b) Display h_no, h_name, h_add, Fair whose h_no is 50.
 (c) Display h_name which have highest Fair. 10
5. Book (Isbn, book_name, author, price)
 Lib (acc_no, book_name)
- (a) Create the above table.
 (b) Display all information about book which have acc_no equals to "500".
 (c) Display author name, price where book_name is "Let-us C". 10

[Part-II]

[C-Language]

Answer any *two* questions : 10×2

1. Write a program to find the no. of digits in an integer.
2. Write a program to convert a decimal number to binary number.
3. Write a program to check if a given number is Prime or not.
4. Write a program to find the factorial of a given number.
5. Write a program to find the largest number among n number.
6. Write a program to sort n element.
7. Write a program to find the value of ${}^n P_r$.
8. Write a program to check given string is palindrome or not.

9. Write a program to generate the following diagram :

```
1
2 2
3 3 3
.....
```

10. Write a program to find the transpose of a matrix.

Practical Note Book — 05

Viva-Voce — 05

NEW
Part-II 3-Tier
2015
COMPUTER SCIENCE
(General)

PAPER—III (Set-1)

(PRACTICAL)

Full Marks : 100

Time : 6 Hours

The figures in the right-hand margin indicate full marks.

Group—A

Answer any one question.

1×20

1. Construct an OR gate using NAND gates only. Verify the truth table. 20
2. Demonstrate the use of Full adder using NOR gates. 20
3. Set up exclusive OR function using NAND gates verify the truth table. 20

(Turn Over)

4. Implement the following boolean function using basic logic gates. 20

$$f(A, B, C) = AB + A\bar{B}C$$

5. Demonstrate the use of half adder using NAND gates. 20

Group—B

(FORTRAN / BASIC)

Answer any *one* question. 1×20

1. Write a Program to find the sum of digits in an integer number. 20
2. Write a program that will print the following sequence

1

2 3

4 5 6 20

3. Write a program to find the factorial of an given number. 20
4. Write a program to find the nature of the root of an quadratic equation. 20
5. Write a program to find the roots of the following equation using Newton-Raphson method.

$$x^3 - 3x^2 - 2 = 0$$

Group—C

Answer any *one* from each section. 3×5

DOS (Section — I)

1. Write a DOS command to display or modify the current date. 5
2. Write a DOS command to create and edit text file. 5
3. Write a DOS command to move a file from one location to another. 5

UNIX / LINUX (Section — II)

1. Write-down Linux command to display the contents of file. 5
2. Write a Linux command to print the current working directory on the screen. 5
3. Write down Linux command to create a directory. 5

WINDOWS (Section — III)

1. How sound records are recorded and save in windows? 5
2. How can we copy files and folders in windows? 5
3. How to create a shortcut files and folders? 5

Group—D**[MS - WORD]**

Answer any *one* question. 1×10

1. Make a cover page for your practical Note-book. Use word art, logo, Page border. 10

2. Write a bio-data which contains personal details and Educational qualification. 10
3. Write a notice to the principal to arrange a tour. 10⁶

Group—E

[MS - EXCEL]

Answer any *one* question. 1×15

1. Create a marksheet of H.S Examination. 15
2. Create a routine of your class. 15
3. Create a tabulation sheet using the following data :

Sl No.	Player Name	Runs
1.	Virat Kohli	450
2.	M. S. Dhoni	437
3.	Suresh Raina	317
4.	Sikhar Dhawan	534
5.	Rohit Sharma	479

Create a Pie Chart for the above data.

Viva-voce 10

Practical Note Book 10

NEW
Part-II 3-Tier
2015
COMPUTER SCIENCE
(General)

PAPER—III (Set-2)

(PRACTICAL)

Full Marks : 100

Time : 6 Hours

The figures in the right-hand margin indicate full marks.

Answer any five questions taking one from each group.

Group—A

Answer any one question 1×20

1. Design a full substructure using basic gates.
2. Construct a 4×1 MUX using NAND gate any.
3. Design a decade counter using 8273/8276 chips.

(Turn Over)

4. Implement the following using NAND gates—

$$F(a, b, c, d) = a'bc + a'b'c' + c'd' + abcd$$

5. Design a J-K master slave flip-flop and satisfy its truth table.
6. Design a 3×8 decoder and satisfy its truth table.

Group—B

(FORTRAN / BASIC)

Answer any one question.

1×20

1. Write a program that calculate Simpson $1/3$ rule to evaluate.

$$\int_0^1 x^2 dx \text{ taking } n = 100$$

2. Write a program to generate n term fibonacci series.
3. Write a program to sort a set of number using bubble sort method.
4. Write a program to calculate mean from the given list of number —

5.2 3.1 6.9 1.2 5.9.

5. Write a program for finding a particular number from an array, using linear search technique.

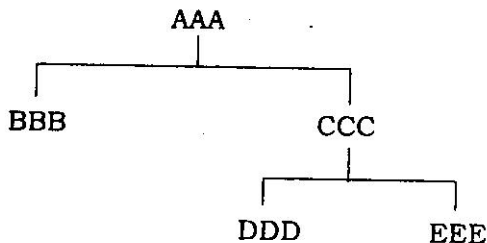
- Write a program to calculate ${}^n P_r$.
- Generate an unit matrix of order 3×3 .

Group—C

Answer any one from each section. 3×5

DOS (Section — I)

- How to display directory of D drive. How to delete an files including directory structure.
- Write a DOS command to change current date and time.
- Write a DOS command to create following directory tree—



UNIX / LINUX (Section — II)

- Display all the file name including the hidden file in your home directory.
- Create a file and then rename it.

3. Write at least 4 sentence using vi editor and then save it.

WINDOWS (Section — III)

1. Change system date and time of your computer.
2. Create a folder on the desktop and change its property to hidden.
3. How to change screen server of your computer.

Group—D

[MS - WORD]

Answer any one question.

1×10

1. Create a mail merge for at least 5 person.
2. Create a word file that contains some image, table, header & footer.
3. Create a word file that contain following features —
 - (i) Drops cap;
 - (ii) Clipart;
 - (iii) Bold, Underline test.

Group—E
[MS - EXCEL]

Answer any *one* question.

1×15

1. Create the following structure —

Name	Basic	DA	HRA	PF	Gross
AAA	20,000				
BBB	15,000				
CCC	17,500				
DDD	16,900				
EEE	14,750				

Perform the following —

- (a) DA = 32% of Basic.
- (b) HRA = 22% of Basic.
- (c) PF = 11% of Basic.
- (d) Gross = Basic + DA + HRA.

2. Create following sheet :

Sl. No.	a	b	c	d	e
1	10	37	10	11	19
2	20	24	8	14	27
3	30	32	12	15	28
4	40	42	15	17	24
5	50	10	17	20	24

- (a) Find the average of 2nd row.
 (b) Create a bar-chart of above table
 (c) Create a pie-chart of above table.

Practical Note Book	10
Viva-voce	10