RAGHUNATHPUR COLLEGE

Department of Computer Application

NOTICE **Date: 23/12/2020**

All the students of 3rd Semester and 5th semester of Computer Application department are hereby notified that they will have submitted the internal assignment in each paper through online mode within 28th December, 2020. Every students should write their registration no, and mention the paper name with course code in assignment. Students will send the assignment in BCA department's mail id or examiner's what's app no.

- **BCA(H)SEM-III**

Sl. No.	Course Code	Course Title	Course Type	Examiner	Mail Id/WhatsApp (Where the assignment to be submitted)	Full marks
1	BBCACCHT301	Computer Networks	CC-5	SANCHITA BANERJEE	rnpc.bcadept@gmail.com 8906511091	10
2	BBCACCHC302	Principles of Operating System	CC-6	SOUGATA MUKHERJEE	rnpc.bcadept@gmail.com 9832179729	20
3	BBCACCHC303	Introduction to Algorithm	CC-7	SOUGATA MUKHERJEE	rnpc.bcadept@gmail.com 9832179729	20
4	BBCAGEHT304	Introduction to Accounting & Costing	GE-3	BISHNU KUMAR SAW	rnpc.bcadept@gmail.com 89273 35375	10
5	BBCASEHC305	Programming in Python	SEC-1	SANCHITA BANERJEE	rnpc.bcadept@gmail.com 8906511091	20

The assignments of CC-5, CC-6, CC-7,GE-3 and Sec-1 of SEM-III will provide in the what'sapp group of SEM-III(BCA Group 2019) and in the college website (raghunathpurcollege.ac.in).

- **BCA(H)SEM-V**

Sl. No.	Course Code	Course Title	Course Type	Examiner	Mail Id/WhatsApp (Where the assignment to be submitted)	Full marks
1	BBCACCHT501	Theory of Computation	CC-11	SOUGATA MUKHERJEE	rnpc.bcadept@gmail.com 8906511091	10
2	BBCACCHC502	Internet & E-Commerce	CC-12	SANCHITA BANERJEE	rnpc.bcadept@gmail.com 8906511091	20
3	BBCADSHC503	Computer Graphics	DSE-1	SOUGATA MUKHERJEE	rnpc.bcadept@gmail.com 9832179729	20
4	BBCADSHT504	Software Engineering	DSE-2	SANCHITA BANERJEE	rnpc.bcadept@gmail.com 8906511091	10

The assignments of CC-11, CC-12, DSE-1and DEC-2 of SEM-V will provide in the what's app group of SEM-V(BCA 2018 Batch) and in the college website (raghunathpurcollege.ac.in).

The assignments of above mentioned papers are followed in the next few pages.

BCA (H) Semester-III

Internal Assessment Examination-2020

Course Code	Course Title	Course Type	Full Marks
BBCACCHT301	Computer Networks	CC-5	**10**

Answer any five questions:- **2x5=10**

a. Write about the different transmission impairments?
b. Differentiate between half-duplex and full-duplex.
c. Write short note on MAN.
d. What are the advantages of bus topology over ring topology?
e. Encode the given binary stream using manchester encoding scheme.
0101101
f. Which type of switching technique is better and why?
g. Write functions of session layer and transport layer of OSI model?
h. Describe the structure of a co-axial cable.

Course Code	Course Title	Course Type	Full Marks
BBCACCHC302	Principles of Operating System	CC-6	**20**

Group-A

Answer any five questions: **2X5=10**

1.What is page fault?

2.Why paging is used?

3.What is latency time and seek time?

4.Define time sharing operating system.

5.What is aging?

6.What is thrashing?

7.What is bit vector?

8.Define co-operating process.

Group-B

Perform any two experiments **5X2=10**

1. Write a shell script to find the GCD for the two given numbers

2. Write a shell script to find all prime numbers between 300 to 999.

3. Write a shell program to concatenate two strings and find the length of the resultant string.

4. Write a shell script to check whether a year is leap year or not.

Course Code	Course Title	Course Type	Full Marks
BBCACCHC303	Introduction to Algorithm	CC-7	**20**

Group-A

Answer any five questions: **2X5=10**

1.What is chromatic number?

2.What is theta(Θ) notation?

3.What is greedy approach?

4.Define recurrence.

5.What is max and min heap?

6.Define divide and conquer method?

7.What are major characteristics of algorithm?

8.Write down the differences between Prim's and Kruskal's algorithm.

Group-B

Perform any two experiments **5X2=10**

1. Write a C program to implement insertion sort.

2. Write a C program to implement binary search.

3. Write a C program to implement quick sort.

4. Write a C program to implement DFS or BFS.

Course Code	Course Title	Course Type	Full Marks
BBCAGEHT304	Introduction to Accounting & Costing	GE-3	**10**

Answer any five questions taking at least two from each Group: **2x5=10**

GROUP-A

1.Define Entity Concept?

2.Write two differences between Journal and Ledger?

3.Mention two causes of Depreciation?

4.What is Cash Flow Statement?

GROUP-B

1.What is cost unit? Give Examples.

2.What is Opportunity Cost?

3.Mention two causes of over and under absorption of overhead?

4.Define Margin of Safety?

Course Code	Course Title	Course Type	Full Marks
BBCASEHC305	Programming in Python	SEC-1	**20**

Answer any 10 questions: **2X10=20**

1. What is the maximum possible length of an identifier?

a. 16

b. 32

c. 64

d. None of these above

2. Who developed the Python language?

a. Zim Den

b. Guido van Rossum

c. Niene Stom

d. Wick van Rossum

3. In which language is Python written?

a. English

b. PHP

c. C

d. All of the above

4. Which one of the following is the correct extension of the Python file?

a. .py

b. .python

c. .p

d. None of these

5. Which of the following is not a keyword in Python language?

a. val

b. raise

c. try

d. with

6. Which of the following operators is the correct option for power(ab)?

a. a ^ b

b. a**b

c. a ^ ^ b

d. a ^ * b

7. Study the following statement: **>>>"a"+"bc"**
What will be the output of this statement?

a. a+bc

b. abc

c. a bc

d. a

8. Study the following statements:

```
>>> print(0xA + 0xB + 0xC)
```

What will be the output of this statement?

a. 33

b. 63

c. 0xA + 0xB + 0xC

d. None of these

9. Study the following program:

```
x = ['xy', 'yz']
for i in a:
i.upper()
print(a)
```

Which of the following is correct output of this program?

a. ['xy', 'yz']

b. ['XY', 'YZ']

c. [None, None]

d. None of these

10. Study the following program:

```
a = 1
while True:
if a % 7 = = 0:
        break
print(a)
a += 1
```

Which of the following is correct output of this program?

a. 1 2 3 4 5

b. 1 2 3 4 5 6

c. 1 2 3 4 5 6 7

d. Invalid syntax

11. Which of the following option is not a core data type in the python language?

a. Dictionary

b. Lists

c. Class

d. All of the above

12. Which of the following data types is shown below?

L = [2, 54, 'javatpoint', 5]

What will be the output of this statement?

a. Dictionary
b. Tuple
c. List
d. Stack

13. What happens when '2' == 2 is executed?

a. False
b. Ture
c. ValueError occurs
d. TypeError occurs

14. What is called when a function is defined inside a class?

a. Module
b. Class
c. Another Function
d. Method

15. To remove string "hello" from list1, we use which command?

a. list1.remove("hello")
b. list1.remove(hello)
c. list1.removeAll("hello")
d. list1.removeOne("hello")

BCA (H) Semester-V

Internal Assessment Examination-2020

Course Code	Course Title	Course Type	Full Marks
BBCACCHT501	Theory of Computation	CC-11	**10**

Answer any five questions: **2X5=10**

1.Define trap state.

2.Draw DFA over the language ∑={a,b} that accept all the string starting with 'ab'.

3.What is Null String?

4.Define Kleene star.

5.Define regular expression.

6.Define CNF.

7.If L={ ʌ, 00,01,10,11}, find L' over the alphabet {0,1}.

8.What is transducer?

Course Code	Course Title	Course Type	Full Marks
BBCACCHC502	Internet & E-Commerce	CC-12	20

GROUP-A

Answer any five questions:- **2x5=10**

a. Write the utility of Usenet
b. What are the services provided by IP datagram?
c. Write the structure of e-mail messages?
d. Write the tags used to draw a horizontal line and tag used for attach a picture?
e. Difference between intranet and extranet.
f. Write the advantage of v-sat over dial-up connections?
g. Define freeware and shareware.
h. Write use of firewall?

GROUP-B

1. Write HTML code for bank account opening form.
2. Write HTML code to implement different types of list.
3. Write HTML code for hyperlink, insert image and table formation.
4. Write HTML code to display your resume in a webpage.

Course Code	Course Title	Course Type	Full Marks
BBCADSHC503	Computer Graphics	DSE-1	20

Group-A

Answer any five questions: **2X5=10**

1.Define clipping and clip window?

2.Differentiate between Boundary fill and flood fill algorithm?

3.What are the types of projection?

4.Define reflection.

5.Distinguish between uniform scaling and differential scaling?

6.What is refresh buffer?

7.What is viewing transformation?

8.Write down the advantages of Bresenham's line drawing algorithm over DDA line drawing algorithm .

Group-B

Perform any two experiments **5X2=10**

1. Write a c program to draw circle using mid-point circle drawing algorithm.
2. Write a c program to simulate Bresenham's line drawing algorithm.
3. Write a c program for flood fill algorithm.
4. Write a c program to draw ellipse using mid-point ellipse drawing algorithm.

Course Code	Course Title	Course Type	Full Marks
BBCADSHT504	Software Engineering	DSE-2	10

Answer any five questions:- **2x5=10**

a. Write advantages of v-model?
b. Determine the development time required to develop a software having 40kilo lines of source code of an semi-detached type ?
c. What do you understand by SRS?
d. Write the principle of system documentation?
e. Define any one type of software testing techniques?
f. What are benefits of CASE?
g. When does a module said to be functionally independent of the other modules?
h. What are the three different types of system testing activities?