St. Vincent Pallotti College, Raipur

Program/Curriculum/Syllabus of Courses

M.Com – 4th Semester

St.Vincent Pallotti College

Commerce & Management Department

Parameters for Internal evaluation

Internal evaluation is done in each semester in which candidate becomes eligible to appear in the concerned semester examination. The internal assessment marks obtained by the candidate in the first attempt is retained & considered valid for all subsequent attempts.

Marks allotment for M.COM course

Out of 20 marks allocated for internal assessment for each paper:

i. 10 marks are to be assigned for class test
ii. 5 marks are to be assigned for assignment/seminar presentation
iii. 5 marks are to be assigned for attendance.

The marks for attendance shall be as follows:

i.	More than 65% but less than 75%	1 Marks
ii.	70% or more but less than 75%	2 Marks
iii.	75% or more but less than 80%	3 Marks
iv	80% or more but less than 85%	4 Marks
v.	85% and above	5 Marks

For M.COM IV Semester Project report marks are to be sent in following format:

Form No, C-10 FOIL/COUNTER FOIL

Pt. Ravishankar Shukla University,

RAIPUR - 492010 (C.G.)

_____ Examination 20

Practical Viva-Voce/Dessertation Examination in _____

Class _____(Subject)_____

Centre _____

Date on which Examination was held _____

No. of Candidates Examined _____ Maximum Marks _____

S.NO	Roll No.	Enrolment No.	Name of Candidate	Project Report (50)	Viva Voice (50)	Total Marks allotted	
						In Figures	In words

PGDCA (Semester-I)

PT. RAVISHANKAR SHUKLA UNIVERSITY, RAIPUR (C.G.)

POST GRADUATE DIPLOMA IN COMPUTER APPLICATION, 2022-2023
[DURATION – ONE YEAR – FULL TIME]

The duration of the course shall be one year consisting of two semesters. There shall be three theories and two practical courses in the each semester.

FIRST SEMESTER

PGDCA-101 : Fundamentals of Computers.
PGDCA-102 : Office Automation.
PGDCA-103 : Programming in C
PGDCA-104 : Practical based on PGDCA-102.
PGDCA-105 : Practical based on PGDCA-103.

PGDCA-104: Practical based on PGDCA-102

1. **Scheme of Examination: -**

Practical examination will be of 3 hours duration. The distribution of practical marks is as follows:

Program 1 (Word)	-	15
Program 2 (Excel)	-	15
Program 3 (Access)	-	15
Program 4 (Powerpoint/Publisher)	-	15
Viva-Voice	-	20
[Practical Copy + Internal Record]	-	20
Total	-	**100**

2 In every program there should be comment for each coded line or block of code.

3 Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.
4 All the following programs or a similar type of programs should be prepared.

List of Practical

MS- WORD

File New, Open, Save, Cut, Copy, Paste, Drag Drop, Bullets and Numbering, Undo, Redo, Find, Replace, Paragraph Formatting, Character Formatting and Page Formatting.

1. Open a document. Type the following text and perform the tasks as instructed below:-

Working with Word Processor

As already mentioned, a word processor is a package that processes textual matter and creates organized and flawless documents. In addition to it a word processor not only remote all the limitations of typewriter but also offers various useful features that cannot be even dreamt of with typewriter.
Also if same textual matter is to be reproduced with minor changes, retyping the only option in typewriters.
The word processing (and word processor) originated way back in 1964 when special typewriters. Magnetic Tape Selectric typewriters (MIST) were launched by IBM (International Business Machines).

(i) Insert the following text after the first paragraph

The main components of a word processing system are listed below:
a. Computer
b. Printer
c. A word processing software

(ii) Save the document as Word1.doc
(iii) Move the second paragraph to the end of the document. Using darg & drop.
(iv) Move the second paragraph in the end of the document using cut, paste operations.
(v) Undo the above actions.
(vi) Now use Redo actions
(vii) Go to the End of the document (in one step)
(viii) Go to the Beginning of document (in one step)
(ix) Insert page break before the third paragraph.
(x) Search the word "computer: in your document with options Match case, find whole words only.
(xi) Replace the word "typewriters" with "word processor"
(xii) Undo the above action
(xiii) Remove All page breaks from your document
(xiv) Change the magnification of your document to different percentages using zoom features.
(xv) Format the above written paragraphs and give the options as follows:

- Alignment justified
- Indentation: left 0.2 right:0.2
- Spacing: before 6 pt. after:6 pt.
- Special: first line by :0.4"
- Line spacing 1.5 lines.

(xvi) Set the default tab stop to 0.3"
(xvii) Set the margins to 1.25
(xviii) Format the page using

a. Left margin:0.5, right margin: 0.5
b. Top margin:1.5, bottom margin:0.5
c. Gutter Margin: 1indentation: left 0.2 right:0.2
d. Header Margin:0.5

(xix) Format the each occurrence of group of words 'Word Processor' as bold, italic, under line and small caps using find and replace with formatting options.

(xx) Align the heading to Center and make it bold, underlined and italicized.

File New, Open, Save, Find, Replace, Paragraph Formatting, Character Formatting and Page Formatting.

2. Type the text as show below and perform the tasks as directed:

Computers
COMPUTER is an electronic device that processes data and gives meaningful information. Computers are being used in almost all the fields today
EXPERT SYSTEMS
HUMAN THINKING AND ARTIFICAL INTELLIGENCE
Can computer think?
AI at work Today: Natural Language programs and Expert Systems
THE IMPACT OF COMPUTERS ON PEOPLE
The Positive Impact
The Potential Dangers
THE IMPACT OF COMPUTERS ON ORGANIZATIONS
The information Processing Industry
The Positive impact on Using Organizations
The Potential Dangers for Using Organizations

1. Search for the word 'Computer' in the entire document. All the occurrences of the given word are to be searched irrespective of the case.
2. In the above question note that word also searches 'computerization and 'computerisations'. Now make sure that this time Word searches only for the word 'computer' in the entire document.
3. Change the entire uppercase letter to lowercase.
4. Give a heading to the above written text 'COMPUTERS IN TODAY'S WORLD'
5. Centre aligns the Heading text Computer that appears in first line.
6. Apply outside border to entire document.
7. Apply outside border to the just heading text.
8. Change page setup according to the following specifications
   Top margin: 1.5", bottom margin: 1.5"
   Gutter: 1", left margin: 1.5"
   Right margin: 1"
   Page width: 7.5", page height: 6.5 "
   Orientation: portrait
9. Give a header 'Creations' and footer 'The school of computing'. The footer should also consist of page no's.
10. Give appropriate commands for giving different header and footers for first page and odd & even pages.
11. Save and close the document.

3. Write the following equations in MS-Word:
$4H_3PO_3=3H_3PO_4+PH_3$, $PCL_3+CL_2=PCL_5$, $(x+y)^2=x^2+y^2+2xy$

4. Write the following equations in MS-Word:
$C_2H_5OH+PCL_5=C_2H_5CL+POCl_3+HCL$, $A=\pi r^2$, $a \div b \neq 0$

5. Write the following in MS-Word:
1. Preheat the oven to 220°C.
2. Copyright ©
3. Registered ®
4. Trademark ™

6. Create the following table in MS-Word:

Name		Rahul	
Roll No.		101	
Subject	Max	Min	Obtain
Java	100	33	75
Multimedia	100	33	70

7. Create a document in MS-Word. Set the watermark as **Microsoft**. Also write the following text as formatted below:

easuring programming progress by lines of code is like measuring aircraft building progress by weight.
--Bill Gates

8. Create the following:

9. Create the following:

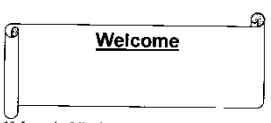
10. Create the following table in MS-Word:

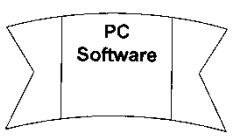
		Admission 2011-2012			
Course	OC	OB	MBC	SC/ST	Total
Computer Science	9	18	5	5	37
Commerce	14	25	6	5	50
Mathematics	12	20	4	4	40

11. Create Table as shown

Car		Price
Maruti	Omni Van	200000
	Maruti 800	242000
Tata	Sumo	390000
	Sierra	447000

12. Insert the following in MS-Word.





13. Insert the following in MS-Word.

14. Write the following in MS-Word.
- This is sentencecase.
- this is lowercase.
- THIS IS UPPERCASE.
- This Is Capitalise Each Word.
- tHIS IS tOGGLE cASE.

15. Create the following list in MS-Word:

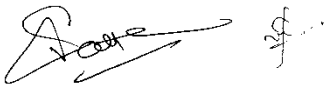
1. Actors
    1. Bruce Willis
    2. Gerard Butler
    3. Vin Diesel
2. Actress
    1. Julia Roberts
    2. Angelina Jolie
    3. Kate Winslet
    4. Cameron Diaz

16. Write the following in MS-Word:

1. Cricket Players
3. Batsman
    1. Sachin Tendulkar
    2. Rahul Dravid
    3. Virendra Sehwag
4. Bowler
    a. Kumble
    b. Zaheer Khan
    c. Balaji
5. Spinner
    a) Harbhajan
    b) Kumble
    c)Kartik

17. Write a letter to send invitation to your friend inviting on your birthday.

18. Create labels for your friends' address.



MS – EXCEL

1. Create the following worksheet and save the worksheet as wages.xls

PACE COMPUTERS (ATC CEDT), Govt. of India
Payroll for Employee (Temporary)

Today's date : Pay Rate :

Worker's Name	Hired On	days Worked	Gross Wages
Kushagra	3-Mar-07		
Pradeep	4-Mar-07		
Puneet	5-Mar-07		
Rajeev	6-Mar-07		

(I) Calculate days work and gross wages

2. Create the following worksheet and save the worksheet as wages.xls

Name Basic (monthly) (Rs.)	HRA(% of basic)	DA (Rs.)	Total Salary (1997)	Bonus (Rs)	Total Salary (1998)	% (Increase)
Shirome5000	10	450		1200		
Somya9000	15	800		200		
Tanya7000	12	900		1800		

- Calculate the total salary as sum of Basic salary, HRA ,DA, for each employee for 1997
- Calculate total salary for year 1998 as sum of salary of 1997 and bonus
- Calculate % increase in salary from 1997 to 1998

3. Create a worksheet as follows

Pace computer (ATC CEDT) Govt. Of India
Payroll for employee (Permanent)

Empcode	name	doj	salary	bonus	net salary
E001	Meenu	3-Mar-95	5000		
E002	Manoj	4-Mar-06	4000		
E003	Preeti	3-Mar-95	4800		
E004	Sumita	6-Mar-07	7500		

i. allow bonus 8000 to employee having service >2 year other vise allow bonus 3000
ii. find net salary as sum of bonus and salary

4. create the worksheet as follows

Roll No	Name					
101	Kushagra	95	99			
102	Ajay	92	95			
103	Vijay	70	69			
			Class Average			

i. find Total of two subject for each student
ii. find average of two subject for each student
iii. find class as average of average column
iv. find division of student as first, second, third, assume percentage of division of your own and maximum marks in each student as 100
v. Apply conditional formatting for division column, first division should be in bold, second division should be in italic and third division should be underline

MS – EXCEL

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Payroll for Employee (Temporary)

Today's date :

Pay Rate :

Worker's Name	Hired On	days Worked	Gross Wages
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Pradeep	4-Mar-07		
Puneet	5-Mar-07		
Rajeev	6-Mar-07		

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i. allow bonus 8000 to employee having service >2 year other vise allow bonus 3000
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103	Vijay	70	69			
			Class Average			

i. find Total of two subject for each student
ii. find average of two subject for each student
iii. find class as average of average column
iv. find division of student as first, second, third, assume percentage of division of your own and maximum marks in each student as 100
v. Apply conditional formatting for division column, first division should be in bold, second division should be in italic and third division should be underline

MS-Access

Q.1. Create the following table in MS-Access:

Field Name	Data Type	Description
ContactID	AutoNumber	Primary Key
ContactType	Text 50	Type of contact (Wholesale, dealer, other)
Name	Text 50	Contact's first name
Company	Text 50	The Contact's employer
Address	Text 50	Contact's address
City	Text 50	Contact's city
State	Text 50	Contact's state
ZipCode	Text 50	Contact's zip code
Phone	Text 50	Contact's phone
Fax	Text 50	Contact's fax
E-Mail	Text 100	Contact's e-mail address
WebSite	Text 100	Contact's Web address
LastSalesDate	Date/Time	The most recent date the contact purchased something
DiscountPercent	Number	The customary discount provided to the customer
Notes	Memo	Notes and observations regarding this customer
Active	Yes/No	Whether the customer is still buying or selling products

Q.2. Create the following tables in MS-Access with the refential integrity-foreign key:

1. tblProducts
Primary Key - ProductID

ProductID	Description	Category	Quantity	Cost	RetailPrice	Product Number	SalePrice	Taxable

2. tblSalesLineItems
Primary Key - SalesLineItemID

SalesLineItemID	InvoiceNumber	ProductID	ProductNumber	Quantity	Description	Price	Discount

3. tblSales
Primary Key – InvoiceNumber

InvoiceNumber	SaleDate	InvoiceDate	Buyer	PaymentMethod	TaxLocation	TaxRate

MS PowerPoint

Q 1 Create a PPT of Atleast 10 Slides with one slide for comparison, one slide displaying a chart with the table.
Q 2 Create a PPT presentation use rehearse timing for the slide show
Q 3 Create PPT presentation slide import sound and video clips.
Q 4 Create PPT presentation with hyperlinking.
Q 5 Create PPT presentation and apply themes and transitions.

MS Publisher

1. Create a **business card** for your business. Include the following information:
   a. Logo
   b. Company Name
   c. Your name and title (Eg. Owner, President, Manager)
   d. Address
   e. Phone
   f. Email
   g. Web address

2. Create a Greeting Card. Using the following
   a) Greeting of your choice
   b) Image on the front of the card
   c) Cost
   d) Made by
   e) Image on the inside folds of the card
   f) Image on the back of the card
3. create a Letterhead for your business. Be sure to include the following information:
   a. Logo
   b Company Name

c. Address
d. Phone
e. Email
f. Web address

4. Create a Flyer for the Open House. Be sure to include the following information:
   a. Logo
   b. Company Name
   c. Address
   d. Open House
   e. Date and Time of the Open House
   f. A little information about what your company does, if it isn't obvious
   g. Promise some kind of food (Eg. Cookies and punch, hors d'oeuvres, cake)
   h. Door prizes

5. Create a brochure that must :
   a) Modify a template to create a brochure
   b) Replace placeholder graphics with new
   c) Use a minimum of 2 graphics
   d) Replace text
   e) Appropriate use of text and graphics for a brochure
6. Create a Invitation Card
   a) Your Name
   b) The Event
   c) The Starting Time
   d) The Place
   e) What to Wear
   f) What to Bring

7. Create Award Certificate
   a) All relevant info
   b) An interesting graphic or picture
   c) It must be eye catching pleasing
   d) Originality and creativity

Keep in mind if you wish you use certificate paper or plain paper

8. Create Breakfast Product Advertisement

design an advertisement for a NEW and ORIGINAL breakfast product using Microsoft Publisher. This advertisement should be eye-catching, well balanced, and free of errors.

- 1 font only-You may use different sizes and colors
- 3 graphic maximum- Make sure they go with the theme of the ad
- Name the product using Word Art (watch your font choice!)
- Create a catchy slogan for the product and rotate using the custom rotate button
- Provide a short description of the product
- Create a coupon that includes a border, name of the product, amount saved, and expiration date.
- Include either a table or bullets somewhere in your design that lists some of the selling points of your product
- Must fit on one page only

9. Create a banner for a "Grand Opening", include the following:
   a) Border
   b) Business Name, Logo, Contact Information
   c) Date
   d) Incentive
   e) Unique Design

10. Create a Gift Certificate/ Gift Card for an existing business that is similar to your group business.
    a) Business Name, Logo, Contact Information
    b) Recipient Name
    c) Amount $
    d) Unique Design
    e) Any other important information

PGDCA-105 : Practical based on PGDCA-103

1 **Scheme of Practical Examination:-**
Practical examination will be of 3 hours duration. All programs should be with flowchart & algorithms. The distribution of practical marks is as follows and

Programme 1 (with flowchart & algorithms)	-	20
Programme 2 (with flowchart & algorithms)	-	20
Programme 3 (with flowchart & algorithms)	-	20
Viva-Voice	-	25
[Practical Copy + Internal Record]	-	15
Total	-	100

2 Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.
3 In every program there should be comment for each coded line or block of code.
4 All the programs or a similar type of programs should be prepared as per the practical list.

List of Practical

INPUT AND OUTPUT, FORMATTING

1. Write a program in which you declare variable of all data types supported by C language. Get input from user and print the value of each variable with alignment left, right and column width 10. For real numbers print their values with two digits right to the decimal.

LOOPS, DECISIONS

2. Write program to print all combination of 1 2 3.
3. Write program to generate following pattern

a)
```
* * * * *
 * * * *
  * * *
   * *
    *
```

b)
```
1
2 3
4 5 6
7 8 9 10
```

c)
```
    *
   * *
  * * *
 * * * *
* * * * *
```

d)
```
      1
    2 1 2
  3 2 1 2 3
4 3 2 1 2 3 4
```

4. Write main function using switch .. case, if else and loops which when called asks pattern type, if user enters 11 then first pattern is generated using for loop. If user enters 12 then first pattern is generated using while loop. If user enters 13 then first pattern is generated using do-while loop. If user enters 21 then a second pattern is generated using for loop and so on.
5. Write program to display number 1 to 10 in octal, decimal and hexadecimal system.
6. Write program to display number from one number system to another number system. The program must ask for the number system in which you will input integer value then the program must ask the number system in which you will want output of the input number after that you have to input the number in specified number system and program will give the output according to number system for output you mentioned.
7. Write a program to perform following tasks using switch...case, loops, and conditional operator (as and when necessary).

   a) Find factorial of a number
   b) Print fibonacci series up to n terms and its sum.
   c) Print sin series up to n terms and its sum.
   d) Print exponential series up to n terms and its sum.
   e) Print prime numbers up n terms.
   f) Print whether a given year is leap or not

8. Write program no. 6 but use library function to perform above tasks.

ARRAY

9. Create a single program to perform following tasks using switch, if..else, loop and single dimension character array without using library function.

   a) To reverse the string.
   b) To count the number of characters in string.
   c) To copy the one string to other string;
   d) To find whether a given string is palindrome or not.
   e) To count no. of vowels, consonants in each word of a sentence and no. of punctuation in sentence.
   f) To arrange the alphabets of a string in ascending order.

10. Create a single program to perform following tasks using switch, if..else, loop and single dimension integer array:

    a) Sort the elements.

    c) Search for presence of particular value in array element using linear search.

    d) Search for presence of particular value in array element using binary search.

11. Write a program that read the afternoon day temperature for each day of the month and then report the month average temperature as well as the days on which hottest and coolest days occurred.

12. Create a single program to perform following tasks using switch, if..else, loop and double dimension integer array of size 3x3:

    a) Addition of two matrix.

    b) Subtraction of two matrix.

    c) Multiplication of two matrix.

    d) Inverse of matrix.

    e) Transpose of matrix.

    f) Sum of diagonal elements.

13. Create a single program to perform following tasks using switch, if..else, loop and double dimension character array of size 5x40:

    a) Sorting of string.

    b) Finding the largest string.

    c) Finding the smallest string.

    c) Searching for presence of a string in array.

FUNCTIONS

14. Write program using the function power (a, b) to calculate the value of a raised to b.

15. Write program to demonstrate difference between static and auto variable.

16. Write program to demonstrate difference between local and global variable.

17. Write a program to perform following tasks using switch…case, loops and function.

    a) Find factorial of a number

    b) Print Fibonacci series up to n terms and its sum.

    c) Print Sin series up to n terms and its sum.

    d) Print exponential series up to n terms and its sum.

18. Write a program to perform following tasks using switch …case, loops and **recursive** function.

    a) Find factorial of a number

    b) Print Fibonacci series up to n terms and its sum.

    c) Print Sin series up to n terms and its sum.

    d) Print exponential series up to n terms and its sum.

    e) Print natural series up to n terms and its sum

19. Write a function to accept 10 characters and display whether each input character is digit, uppercase letter or lower case letter.

Array & Function

20. Create a single program to perform following tasks using switch, if..else, loop, function and double dimension integer array of size 3x3:

    a) Addition of two matrix.

    b) Subtraction of two matrix.

    c) Multiplication of two matrix.

    d) Inverse of matrix.

    e) Transpose of matrix.

21. Create a single program to perform following tasks using switch, if..else, loop, user defined function and single dimension character array:

    a) To reverse the string.

    b) To count the number of characters in string.

    c) To copy the one string to other string;

    d) To find whether a given string is palindrome or not.

    e) To count no. of vowels, consonant in each word of a sentence and no. of punctuations in sentence.

22. Create a single program to perform following tasks using switch, if..else, loop, function and single dimension integer array:

    a) Sort the elements.

    b) Find largest element and smallest element.

    c) Search for presence of particular value in array element using linear search.

    d) Search for presence of particular value in array element using binary search.

23. Create a single program to perform following tasks using switch, if..else, loop, function and double dimension character array of size 5x40:

a) Sorting of string

b) Finding the largest string, lexicographically.

c) Finding the smallest string, lexicographically.

c) Searching for presence of string in array.

STRUCTURE & UNION

24. Create a structure Student having data members to store roll number, name of student, name of three subjects, max marks, min marks, obtained marks. Declare a structure variable of student. Provide facilities to input data in data members and display result of student.

25. Create a structure Date with data member's dd, mm, yy (to store date). Create another structure Employee with data members to hold name of employee, employee id and date of joining (date of joining will be hold by variable of structure Date which appears as data member in Employee Structure). Store data of an employee and print the same.

26. Create a structure Student having data members to store roll number, name of student, name of three subjects, max marks, min marks, obtained marks. Declare array of structure to hold data of 3 students. Provide facilities to display result of all students. Provide facility to display result of specific student whose roll number is given.

27. Write program to create structure complex having data members to store real and imaginary part. Provide following facilities:

    a) Add two complex nos. using structure variables.

    b) Subtract two complex nos. using structure variables.

    c) Multiply two complex nos. using structure variables.

    d) Divide two complex nos. structure variables.

Use structure as argument to function and function returning structure.

POINTER

28. Define union Emp having data members:-one integer, one float and one single dimension character array. Declare a union variable in main and test the union variable
29. Define an enum Days_of_Week members of which will be days of week. Declare an enum variable in main and test it.
30. Write a program of swapping two numbers and demonstrates call by value and call by reference.
31. Write program to sort strings using pointer exchange.
32. Write a program in c using pointer and function to receive a string and a character as argument and return the no. of occurrences of this character in the string.
33. Create a program having pointer to void to store address of integer variable then print value of integer variable using pointer to void. Perform the same operation for float variable.
34. Write program to find biggest number among three numbers using pointer and function.
35. Write program to Create a structure Employee having data members to store name of employee, employee id, salary. Use Pointer to structure to store data of employee and print the stored data-using pointer to structure.
36. Write program to Create a structure Employee having data members to store name of employee, employee id, salary. Use Pointer to structure to simulate dynamic array of structure store data of n employees and print the stored data of n employees using pointer to structure.
37. Write a program to sort a single dimension array of integers of n elements simulated by pointer to integer. Use function for sorting the dynamic array.
38. Write a program to sum elements of a double dimension array of integers of m rows and n columns simulated by pointer to pointer to integer. Use function for sum the elements of the dynamic array.
39. Write program to demonstrate difference between character array and pointer to character.
40. Write program to demonstrate difference between constant pointer and pointer to constant.
41. Write program to demonstrate pointer arithmetic.
42. write program to demonstrate function-returning pointer
43. Write program using self-referential pointer to structure to create and print the linked list. data structure.

FILE STREAMS

44. Write program to copy content of one file to other file removing extra space between words name of files should come from command line arguments.
45. Write program to create a file 'data' containing a series of integers and count all even numbers present in the file 'data'.
46. Write a program to count no of tabs, new lines, character and space of a file.
47. Write a program to read item number, rate and quantity from an inventory file and print the followings:
    1. Items having quantity > 5.
    2. Total cost of inventory.

PGDCA(Semester-II)

SCHEME OF TEACHING AND EXAMINATION
P.G.D.C.A. (Post Graduate Diploma in Computer Applications)

SECOND SEMESTER

Subject Code	SUBJECTS	Teaching Load Per Week			Examination Marks							
					Max. Marks				Min. Marks			
		L	T	P	Th	Ses	Pr	Total	Th	Ses	Pr	Total
PGDCA106	Programming in VB .Net	3	2	_	80	20	_	100	20	13	_	33
PGDCA107	Database Management Systems	3	2	_	80	20	_	100	20	13	_	33
PGDCA108	Internet and Web Technology	3	2	_	80	20	_	100	20	13	_	33
PGDCA109	Practical based on PGDCA106	_	_	3x2	_	_	100	100	_	_	40	40
PGDCA110	Practical based on PGDCA107 and PGDCA-108	_	_	3x2	_	_	100	100	_	_	40	40
	TOTAL	**9**	**6**	**12**	**240**	**60**	**200**	**500**	**60**	**39**	**80**	**179**

PGDCA-109: Practical based on PGDCA106

1. Scheme of Examination: -

Practical examination will be of 3 hours duration. The distribution of practical marks is as follows :

Program 1	-	20
Program 2	-	20
Program 3	-	20
Viva-Voice	-	20
[Practical Copy + Internal Record]	-	20
Total	-	**100**

2 In every program there should be comment for each coded line or block of code.

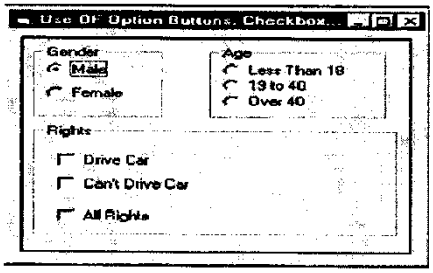
3 Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.

4 All the following programs or a similar type of programs should be prepared.

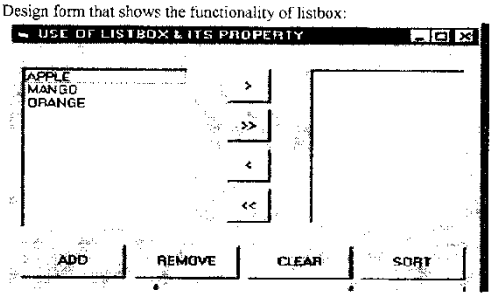
Practical List

1. Design the form that calculates Sum, Multiplication, Division and Subtraction of two numbers.
2. Design Simple calculator.
3. Design the form to input radius of a circle and find its circumference and area.
4. Design the form to input length in centimeter and convert it into meter.
5. Design the form to input temperature in Celsius and convert it into Fahrenheit.
6. Design the form to input Principal amount, Time, Rate and calculate Simple Interest and Compound Interest show result information in msgbox.
7. Design a form that shows following operation related to array.
   a) Sort array elements in ascending or descending order.
   b) To insert an element in an array
   c) To delete an element from an array at specified position.
   e) Print all unique elements in the array.
8. Design a form to check whether a number is PRIME or NOT, using input box and msgbox.
9. Design the form to show the result and percent of PGDCA.

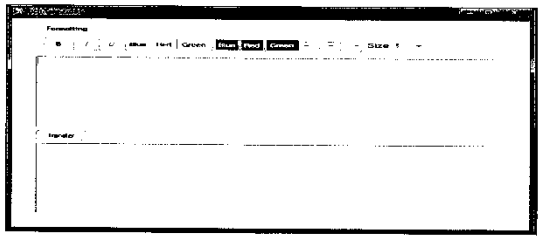
10. Design the following form. So when user clicks on Radio Button then select appropriate checkbox.



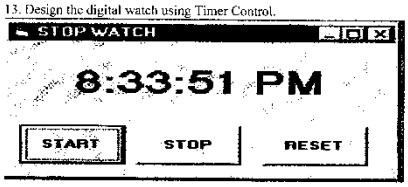
11. Design form that shows the functionality of listbox:



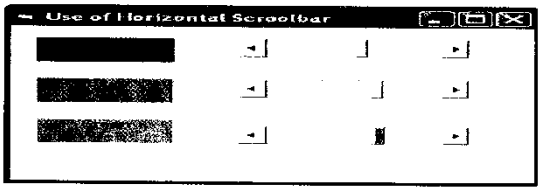
12. Design one form to create application like Rich text document using 1 Rich Textbox and different buttons. When user presses any of this command buttons then the selected content of Rich textbox Will be changed accordingly.



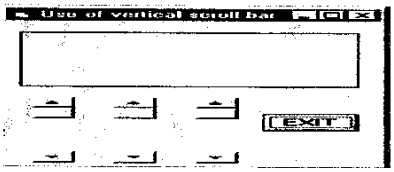
13. Design the digital watch using Timer Control.



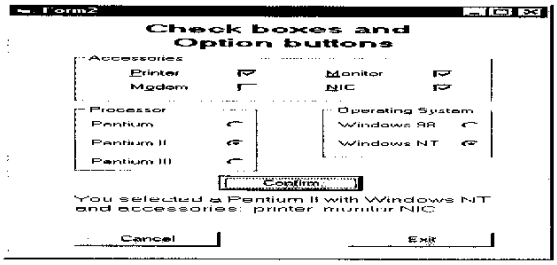
14. Design the following form using horizontal scrollbar. In this, when user click on particular scroll bar then back color of shape will be changed to Red, Green & Blue color



15. Design the following form using vertical scrollbar. In this, when user click on particular scroll bar then back color of shape will be changed to Red, Green & Blue color



16. Design the form with different controls.



17. WAP for Exception handling of throwing an exception when dividing by zero condition occurs during arithmetic operation.

18. WAP in vb.net such that throw a user define exception when Temperature is zero.

19. WAP to demonstrate handling of multiple exceptions generated in program.

20. Create following table

Student(id, name, course, DOB, address)

Write vb.net application to

Add records

view all the records

Delete the particular record

View all the student who are studying in course PGDCA using DataSet.

21. Write vb.net application to maintain loan database using connected scenario

Loan(id, cust_num, name, amount, no_of_inst, amt_inst, no_of_inst_over)

Print all the customer who has to pay only one installment.

Print the total amount to be repaid by all the customer

22. Write vb.net application which accesses the following table.

Product_master (pdt_no, description,profit percent, uni_measure, qty on hand, recorder_level, cost_price, sell_price)

Perform insert, delete, view and search for items whose cost price is less than sell price.

23. Write a vb.net application that perform insert, update and delete operations on Employee table & perform a navigation operation on employee records using disconnected scenario.

24. Create table STUDENT with the following columns and datatypes.
Sid Alphanumeric
Name Varchar(20)
DOB DateTime
AddrVarchar(20)
Contact Varchar(10)

1. Insert following records into the table:

Sid	S1	S2	S3
Name	OshoJuneja	NishantSahni	SanyaDua
DOB	28-jan-93	1-oct-92	30-jul-94
Addr	ABC	XYZ	PQR
Contact	9000000000	8000000000	7800000000

ii) Select records from table where age>22.[Use DOB for age calculation].
iii) Count the record in the table.
iv) Display records of the table order by DOB.
Perform using ADO.net in vb.net

25. Write a vb.net program to show data in data grid view.

Practical based on PGDCA107 and PGDCA-108

1. Scheme of Examination: -

Practical examination will be of 3 hours duration. The distribution of practical marks is as follows :

Program 1 (SQL)	-	15
Program 2 (SQL)	-	15
Program 3 (IITML)	-	15
Program 4 (HTML)	-	15
Viva-Voice	-	20
[Practical Copy + Internal Record]	-	20
Total	-	**100**

2 In every program there should be comment for each coded line or block of code.

3 Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.
4 All the following programs or a similar type of programs should be prepared.

HTML

Q.1. Write an HTML program to create the following table:

Class	Subject1	Subject2	Subject3
BCA I	Visual Basic	PC Software	Electronics
BCA II	C++	DBMS	English
BCA III	Java	Multimedia	CSA

Q.2. Write an HTML program to create the following lists:
(I) C

(II) C++

(III) Fortran

(IV) COBOL

Q.3. Write an HTML program to create the following lists:
1. Java
2. Visual Basic
3. BASIC
4. COBOL

Q.4. Write an HTML program to demonstrate hyperlinking between two web pages. Create a marquee and also insert an image in the page.
Q.5. Write an HTML program to create frames in HTML with 3 columns (Width = 30%, 30% , 40%).
Q.6. Write an HTML program to create a web page with a blue background and the following text:

New Delhi

New Delhi, the capital and the third largest city of India is a fusion of the ancient and the modern. The refrains of the Muslim dynasties with its architectural delights, give the majestic ambience of the bygone era.

Q.7. Write an HTML program to create the following table:

Admission

Course	OC	BC	MBC	SC/ST	TOTAL
Computer science	9	18	5	5	37
Commerce	14	25	6	5	50
Grand total					87

Q.8. Write an HTML program to create the following table:

Car Price List

Maruti		Tata		Ford	
Model	Price	Model	Price	Model	Price
Maruti 800	2 Lac	Sumo	2 Lac	Ikon	5 Lac
Omni	3 Lac	Scorpio	3 Lac	Gen	2 Lac

Q.9. Write an HTML program to create the following table:

Students Records

Name	Subject	Marks
Arun	Java	70
	C	80
Ashish	Java	75
	C	69

Q.10. Create an HTML document and embed a flash movie in it.

Q.11. Write the HTML coding to display the following table. Also insert an image in the web page.

Subject	Max	Min	Obtain
Java	100	33	75
Multimedia	100	33	70
Operating System	100	33	68
C++	100	33	73

Q.12. Write the HTML coding to display the following table:

Name			Rahul
Roll No.			101
Subject	Max	Min	Obtain
Java	100	33	75
Multimedia	100	33	70

Q.13. Write an HTML program to create a form as the following:

Enter Name:
Enter Roll No.:
Enter Age:
Enter DOB:

Q.14. Write an HTML program to create a web page with an image as background and the following text:

New Delhi

New Delhi, the capital and the third largest city of India is a fusion of the ancient and the modern. The refrains of the Muslim dynasties with its architectural delights, give the majestic ambience of the bygone era.

On the other side New Delhi, the imperial city built by British, reflect the fast paced present. The most fascinating of all is the character of Delhi which varies from the 13th present century mausoleum of the Lodi kings to ultra modern glass skyscrapers.

Q.15. Create the following HTML form.

USERNAME :
PASSWORD :

When user types characters in a password field, the browser displays asterisks or bullets instead of characters.

Submit Query

Done | My Computer | 100%

Q.16. Create the following HTML form.

FIRSTNAME :
LASTNAME :

GENDER :
Male ○ Female ○

SUBJECTS: Multimedia
Multimedia
Operating System
CSA

Submit Query

Q.17. Create the following HTML form.

Enter your name :
Enter your rollno :

Subjects :
☐ Java
☐ C
☐ Visual Basic
☐ C++

Class: BCA I
BCA I
BCA II
BCA III

Submit Query

Q.18. Write the HTML coding for the following equations:

$C_2H_5OH+PCL_5=C_2H_5CL+POCL_3+HCL$

$4H_3PO_2=3H_3PO_4+PH_3$

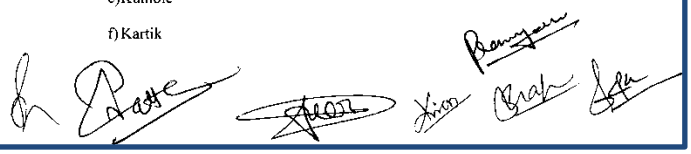
$PCL_3+CL_2=PCL_5$

Q.19. Write the HTML code to display the following:

1. Actors
    1. Bruce Willis
    2. Gerard Butler
    3. Vin Diesel
    4. Bradd Pitt
2. Actress
    1. Julia Roberts
    2. Angelina Jolie
    3. Kate Winslet
    4. Cameron Diaz

Q.20. Write the HTML code to display the following:

1. Cricket Players
    1. Batsman
        1. Sachin Tendulkar
        2. Rahul Dravid
        3. Virendra Sehwag
    2. Bowler
        d. Kumble
        e. Zaheer Khan
        f. Balaji
    3. Spinner
        d) Harbhajan
        e) Kumble
        f) Kartik



SQL

1. **Using the following database,**
   Colleges (cname, city, address, phone, afdate)
   Staffs (sid, sname, saddress, contacts)
   StaffJoins (sid, cname, dept, DOJ, post, salary)
   Teachings (sid, class, paperid, fsession, tsession)
   Subjects (paperid, subject, paperno, papername)
   Write SQL statements for the following –
   d. Create the above tables with the given specifications and constraints.
   e. Insert about 10 rows as are appropriate to solve the following queries.
   f. List the names of the teachers teaching computer subjects.
   g. List the names and cities of all staff working in your college.
   h. List the names and cities of all staff working in your college who earn more than 15,000

2. **Using the following database,**
   Colleges (cname, city, address, phone, afdate)
   Staffs (sid, sname, saddress, contacts)
   StaffJoins (sid, cname, dept, DOJ, post, salary)
   Teachings (sid, class, paperid, fsession, tsession)
   Subjects (paperid, subject, paperno, papername)
   Write SQL statements for the following –
   a. Find the staffs whose names start with 'M' or 'R' and ends with 'A' and/or 7 characters long.
   b. Find the staffs whose date of joining is 2005.
   c Modify the database so that staff N1 now works in C2 College.
   d. List the names of subjects, which T1 teaches in this session or all sessions.
   e. Find the classes that T1 do not teach at present session.

3. **Using the following database,**
   Colleges (cname, city, address, phone, afdate)
   Staffs (sid, sname, saddress, contacts)
   StaffJoins (sid, cname, dept, DOJ, post, salary)
   Teachings (sid, class, paperid, fsession, tsession)
   Subjects (paperid, subject, paperno, papername)
   Write SQL statements for the following –
   a. Find the colleges who have most number of staffs.
   b. Find the staffs that earn a higher salary who earn greater than average salary of their college.
   c. Find the colleges whose average salary is more than average salary of C2
   d. Find the college that has the smallest payroll.
   e. Find the colleges where the total salary is greater than the average salary of all colleges.

4. **Using the following database,**
   Colleges (cname, city, address, phone, afdate)
   Staffs (sid, sname, saddress, contacts)
   StaffJoins (sid, cname, dept, DOJ, post, salary)
   Teachings (sid, class, paperid, fsession, tsession)
   Subjects (paperid, subject, paperno, papername)
   Write SQL statements for the following –
   a. List maximum, average, minimum salary of each college
   b. List the names of the teachers, departments teaching in more than one department.
   c. Acquire details of staffs by name in a college or each college.
   d. Find the names of staff that earn more than each staff of C2 College.
   e. Give all principals a 10% rise in salary unless their salary becomes greater than 20,000 in such case give 5% rise.

5. **Using the following database,**
   Colleges (cname, city, address, phone, afdate)
   Staffs (sid, sname, saddress, contacts)
   StaffJoins (sid, cname, dept, DOJ, post, salary)
   Teachings (sid, class, paperid, fsession, tsession)
   Subjects (paperid, subject, paperno, papername)
   Write SQL statements for the following –
   a. Find all staff that do not work in same cities as the colleges they work.
   b. List names of employees in ascending order according to salary who are working in your college or all colleges.
   c Create a view having fields sname, cname, dept, DOJ, and post
   d Create a view consisting of cname, average salary and total salary of all staff in that college.
   e Select the colleges having highest and lowest average salary using above views.
   f List the staff names of a department using above views.

6. **Using the following database,**
   Enrollment (enrollno, name, gender, DOB, address, phone)
   Admission (admno, enrollno, course, yearsem, date, cname)
   Colleges (cname, city, address, phone, afdate)
   FeeStructure (course, yearsem, fee)
   Payment (billno, admno, amount, pdate, purpose)
   Write SQL statements for the following –
   a. Create the above tables with the given specifications and constraints.
   b. Insert about 10 rows as are appropriate to solve the following queries.
   c. Get full detail of all students who took admission this year class wise
   d. Get detail of students who took admission in Bhilai colleges.
   e. Calculate the total amount of fees collected in this session
      i) By your college ii) by each college iii) by all colleges

7. **Using the following database,**
   Enrollment (enrollno, name, gender, DOB, address, phone)
   Admission (admno, enrollno, course, yearsem, date, cname)
   Colleges (cname, city, address, phone, afdate)
   FeeStructure (course, yearsem, fee)
   Payment (billno, admno, amount, pdate, purpose)
   Write SQL statements for the following –
   a. List the students who have not payed full fee i) in your college ii) in all colleges
   b. List the number of admissions in your class in every year.
   c. List the students in the session who are not in the colleges in the same city as they live in.
   d. List the students in colleges in your city and also live in your city.
   e. Delete all the records of student who live in city Raipur

8. Subjects (paperid, subject, paper, papername)
   Test (paperid, date, time, max, min)
   Score (rollno, paperid, marks, attendence)
   Students (admno, rollno, class, yearsem)
   Write SQL statements for the following –
   a. Create the above tables with the given specifications and constraints.
   b. Insert about 10 rows as are appropriate to solve the following queries.
   c. List the students who were present in a paper of a subject.
   d. List all roll numbers who have passed in first division.
   e. List all students in BCA-II who have scored higher than average
      i) in your college ii) in every college

P.G. Diploma in Yoga Education and Philosophy

(Semester System)

P.G.Diploma in Yoga Education and Philosophy

Syllabus. (Effective from 2016-17 (Exam.2017.)

There shall be two theory papers and one Practical (Three parts) in each semester.

SEMESTER -I

Paper -1 Theoritical Yoga Vijnan **M.M.-50.**

Unit-I : Introductio to Yoga : The concept,meaning ,definition and tradition of Yoga, Guru-Shishya (types and meaning)

Unit-II : Basic texts of Yoga --Yoga Sutra(Samadhi and Sadhana Padas), Hathyoga Pradipika.

Unit-III : Kinds of yoga : Bhakti yoga ,Karma yoga, Mantra yoga and Raj yoga.

Unit-IV : Study of Ida,Pingala, Sushumna,Seven Chakras ,Five Koshas, and Five Pranas.

Unit-V : Contemporary Yogis --Shri Aurobindo,Satyananda and Shivananda.

Paper -2. Applied Yoga Vijnan. **M.M. 50.**

Unit-I : Meaning ,definition and importance of Yoga and Health in life. Theories of Health,Various exercises benefits of Yoga- asanas and their values vis-a-vis other systems.

Unit -2 : Practice of Yoga - Preparation . Food , Dress, Sequence , Climatic Changes daily routine Vratas for health,positive and negative factors.

Unit -3 : Life pattern and Yoga --Effects of yoga upon bodily functions,Role of yoga asanas in modern living.

Unit - 4 : Physiology- Constitution Nervous system , Respiratory system, Circulatory system and ESndocrine glands

Unit- 5 : Aspects of Mind (Topograficals and Dynamic) Id,Ego and Super Ego, Concious , Sub-concious and Un-concious . Yogic concept of mind and mental process.

Practicals

Practice Teaching (indoor) M.M. 50.

Asanas

Kriyas

PranayamasClass arrangement.

Meditation

Practical(1-6) M.M. 50.

1. Pawanmuktasana Part-1,2 &3
2. Asanas :,Relaxation,Pre-meditative,backward and forward bending, Spinal Cord Twisting and balancing, Asanas of Vajrasana group & Standing pose
3. Nadishodhan and Pranayamas : Sheetali Pranayama, Sheetakari Pranayama, Ujjayi Pranayama & Bhramari Pranayama.
4. Mudra : Hastmudra, Manmudra and Kayamudra.
5. Bandha : Moolbandha & Jalandhar Bandha.
6. Shawaasana.

Practical record : **M.M. 25**

Viva-Voce : **MM 25**

Total Marks 250.

SEMESTER-II.

Paper -I Yoga Philosophy. **Max.Marks :50**

Unit-I The subject matter of Yoga philosophy-
Samkhya: Prakriti,Purusha and Cosmology.
Vedanta :Brahman Soul and Maya.

Unit-II Different systems of philosophy :
Pancha Mahavrata -- Jainism.
Ashtang Marg -- Buddhism
Integral Yoiga -- Shri Aurobindo

Unit-III Yoga Sutra : Nature of Chitta, Chitta vrittis and Bhoomis

Unit-IV Kinds of Yoga : Hatha Yoga, Kundalini, Jnana,Laya.

Unit-V Psychosomatic disorders(meaning and types) their management through Yoga, Aging --Its problems and management through Yoga.

Paper II. Hatha Yoga. **M.M. - 50**

Unit-I Introduction to the HathPradipika and Gherand Samhita.

Unit-II Pranayama--Its meaning methods,kinds,Precaution and benifits.

Unit-III Shuddhi kriya--Shatkarma,its method and utility.

Unit-IV Bandha and Mudras --methods and benifits.

Unit-V Samadhi , Different systems of Meditation.

<u>Practicals.</u>

Practice Teaching (Indoor) M.M. - 50

Asanas, Kriyas, Pranayamas,
Class arrangement & Meditation.

Practicals (1-8) M.M.- 50

1. Balancing Asanas.
2. Asanas of Higher group.
3. Surya Namaskar.
4. Pranayama : Suryabheda Pranayama, Bhastrika Pranayama, Kapalabhati Pranayama & Moorchha Pranayama.
5. Bandha : Uddiyaan Bandha & Mahaabandha.
6. Mudra : Bandha Mudrayen & Aadhaar Mudrayen.
7. Shatkarma.
8. Dhaayana & Yoganidra.

Practical records M.M. 25

Viva-voce M.M. 25

Total Marks Semester -II --- 250

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Grand Total I & II Sem. ------ 500

B.Ed. Syllabus

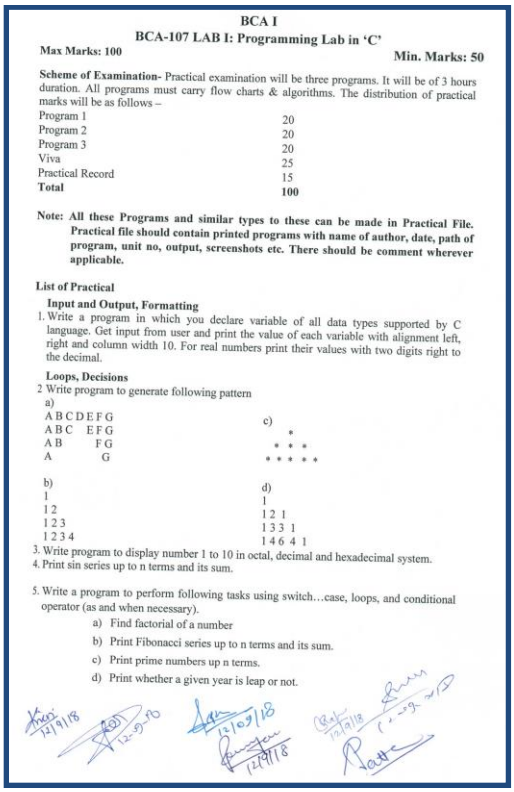
PT. RAVISHANKAR SHUKLA UNIVERSITY RAIPUR (C.G.)

B.Ed. SYLLABUS 2019-21

Paper No	PAPER NAME	EXTERNAL	INTERNAL
			THEORY/PRACTICAL
SEMESTER I			
	THEORY		
Paper I	Philosophical Perspectives of Education	80	20
Paper 2	Nai Talim: An Experiential Learning	80	20
Paper 3	Pedagogy Part I	80	20
	PRACTICUM		
	Preparation of Teaching Aids 01. Minimum 6 charts on school contain 02. Minimum 5 sets of Transparency to Transact school content 03. Minimum 2 Power Point Presentations to transact school content 04. Minimum one static model to aid school teaching content		50
	Community Activities 1. Village Survey 2. Awareness Rally/Program		50
SEMESTER II			
	THEORY		
Paper 4	Sociological Perspectives of Education	80	20
Paper 5	Learner and Learning Process	80	20
Paper 6	Elective I	80	20
Paper 7	Curriculum and Knowledge	80	20
	PRACTICUM Micro Teaching on Skills of Teaching Internship (Two weeks) School Experience a) Observation of School Documents b) Mentor's Report		50
SEMESTER III			
	THEORY		
Paper 8	Pedagogy Part II	80	20
Paper 9	Nai Talim: Skill Based Learning	80	20
	PRACTICUM		
	Internship (Eighteen Weeks)		100
	Reflective Diary & Supervisor's Assessment		50
SEMESTER IV			
	THEORY		
Paper 10	Gender, School and Society	80	20
Paper 11	Assessment in Learning	80	20
Paper 12	Elective II	80	20
	PRACTICUM		
	Training in Yoga and Sports & Games		50
	Psycho-Metric Assessment	50	
	Viva Voce on Teaching Experience	100	
	TOTAL	1110	240 + 350 = 590
	GRAND TOTAL	1700	

BCA-I

BCA-107	**Practical based on course 107(Programming Lab in 'C')**
BCA-108	**Practical based on course 108 (PC Software Lab)**
BCA-109	**Practical based on course 109(Web Technology Lab)**



BCA I

BCA-107 LAB I: Programming Lab in 'C'

Max Marks: 100 **Min. Marks: 50**

Scheme of Examination- Practical examination will be three programs. It will be of 3 hours duration. All programs must carry flow charts & algorithms. The distribution of practical marks will be as follows –

Program 1	20
Program 2	20
Program 3	20
Viva	25
Practical Record	15
Total	**100**

Note: All these Programs and similar types to these can be made in Practical File. Practical file should contain printed programs with name of author, date, path of program, unit no, output, screenshots etc. There should be comment wherever applicable.

List of Practical

Input and Output, Formatting

1. Write a program in which you declare variable of all data types supported by C language. Get input from user and print the value of each variable with alignment left, right and column width 10. For real numbers print their values with two digits right to the decimal.

Loops, Decisions

2 Write program to generate following pattern

a)

```
A B C D E F G
A B C   E F G
A B       F G
A           G
```

b)

```
1
1 2
1 2 3
1 2 3 4
```

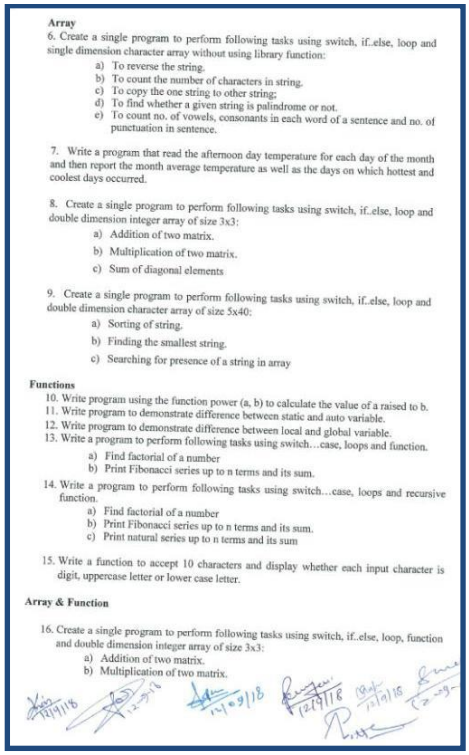
c)

```
      *
    * * *
  * * * * *
```

d)

```
1
1 2 1
1 3 3 1
1 4 6 4 1
```

3. Write program to display number 1 to 10 in octal, decimal and hexadecimal system.
4. Print sin series up to n terms and its sum.
5. Write a program to perform following tasks using switch…case, loops, and conditional operator (as and when necessary).
   a) Find factorial of a number
   b) Print Fibonacci series up to n terms and its sum.
   c) Print prime numbers up n terms.
   d) Print whether a given year is leap or not.



Array

6. Create a single program to perform following tasks using switch, if..else, loop and single dimension character array without using library function:
   a) To reverse the string.
   b) To count the number of characters in string.
   c) To copy the one string to other string;
   d) To find whether a given string is palindrome or not.
   e) To count no. of vowels, consonants in each word of a sentence and no. of punctuation in sentence.
7. Write a program that read the afternoon day temperature for each day of the month and then report the month average temperature as well as the days on which hottest and coolest days occurred.
8. Create a single program to perform following tasks using switch, if..else, loop and double dimension integer array of size 3x3:
   a) Addition of two matrix.
   b) Multiplication of two matrix.
   c) Sum of diagonal elements
9. Create a single program to perform following tasks using switch, if..else, loop and double dimension character array of size 5x40:
   a) Sorting of string.
   b) Finding the smallest string.
   c) Searching for presence of a string in array

Functions

10. Write program using the function power (a, b) to calculate the value of a raised to b.
11. Write program to demonstrate difference between static and auto variable.
12. Write program to demonstrate difference between local and global variable.
13. Write a program to perform following tasks using switch…case, loops and function.
    a) Find factorial of a number
    b) Print Fibonacci series up to n terms and its sum.
14. Write a program to perform following tasks using switch…case, loops and recursive function.
    a) Find factorial of a number
    b) Print Fibonacci series up to n terms and its sum.
    c) Print natural series up to n terms and its sum
15. Write a function to accept 10 characters and display whether each input character is digit, uppercase letter or lower case letter.

Array & Function

16. Create a single program to perform following tasks using switch, if..else, loop, function and double dimension integer array of size 3x3:
    a) Addition of two matrix.
    b) Multiplication of two matrix.

BCA I

BCA-108 LAB II: PC Software Lab

Max Marks: 100 **Min Marks: 50**

Scheme of Examination:

Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows:

Program 1	-	15
Program 2	-	15
Program3	-	15
Program4	-	15
Viva	-	25
Practical Record	-	15
Total	-	**100**

Note: All these Programs and similar types to these can be made in Practical File. Practical file should contain printed programs with name of author, date, path of program, unit no, output, screenshots etc. There should be comment wherever applicable.

MS-WORD

Q1. Open a document. Type the following text and perform the tasks as instructed below:

Working with Word Processor…

As already mentioned, a word processor is a package that processes textual matter and creates organized and flawless documents. In addition to it a word processor not only remote all the limitation of typewriter but also offers various useful features that cannot be even dreamt of with typewriter.

Also if same textual matter is to be reproduced with minor changes, retyping the only option in typewriters.

The word processing (and word processor) originated way back in 1964 when special typewriters. Magnetic tape Selectric typewrites (MIST) were launched by IBM (International Business Machines).

(i).Insert the following text after the first paragraph:

"The main components of a word processing system are listed below":

- Computer
- Printer
- A word processing software

(ii). Save the document as Word.doc?
(iii). Move the second paragraph to the end of the document by using drag and drop?
(iv). Move the second paragraph to the end of the document using cut, paste operation?
(v). Undo the above action?
(vi).Redo the above action?
(vii). Go to end of the document (in one step)?
(viii). Go to beginning of the document (in one step)?
(ix). Insert page break before the paragraph?

(x). Search the word "Computer" in your document with options 'Match Case', find whole words only?
(xi). Replace the word "Typewriter" with word "Processor" in your document?

(xii). Undo the above action?
(xiii). Remove all page breaks from your document?
(xiv). Change the magnification of your document to different percentage using zoom?
(xv). Write the above written paragraphs and give the options as follows:-

- Assignment Justified
- Indentation: Left 0.2
- Right 0.2
- Spacing: before 6 pt. and after 6 pt.
- Special : First line by 0.4"
- Line spacing 1.5 lines

(xvi). Set the default tab stop to 0.3"?
(xvii). Set the margins to 1.25?
(xviii). Format the page using?

1. Left margin:0.5, right margin:0.5
2. Top margin:1.5, bottom margin:0.5
3. Gutter margin: -
   - indentation: left 0.2, right:0.2
4. Header margin: 0.5.

(xix). Format the each occurrence of group of words "Word Processor" as bold, italic, underline and small caps using find and replace with formatting options?
(xx). Align the heading to center and make it bold, underlined and italicized.

Q2: Type the text as shown below and perform the tasks as directed:

Computers
Computer is an electronic device that processes and gives meaningful information.
Computers are being used in almost all the fields today
Expert systems:
Human thinking and artificial intelligence
Can computer think?
AI at work today: Natural Language program and Expert system.

The impact of computers on people:
The positive impact
The potential dangers

The impact of computers on organizations
The information processing industry
The positive impact on using organizations
The potential dangers for using organizations

(i). Search for the word 'computer' in the entire document. All the occurrences of the given word are to be searched irrespective of the case?
(ii). In the above question note that word also searches 'computerization' and 'computerizations'. Now make sure that this time Word searches only for the word 'computer in the entire document.

(iii). Change the entire uppercase letter to lowercase?
(iv). Give a heading to the above written text 'COMPUTERS IN TODAY'S WORLD'?
(v). Center aligns the heading text 'computer' that appears in first line.
(vi). Apply outside border to entire document.
(vii). Apply outside border to the just heading text.
(viii). Change page setup according to the following specifications

- 1Top margin 1.5", bottom margin: 1.5"
- Gutter: 1" left margin: 1.5"
- Right margin: 1"
- Page width: 7.5", page height: 6.5"
- Page width: 7.5", page height: 6.5"
- Orientation: portrait.

(ix). Give a header 'Creations' and footer 'The school of computing'. The footer should also consist of page no's?
(x). Give appropriate commands for giving different header and footers for first page and odd and even pages?
(xi). Save and close the document.

Q3. Type text and format the text as show below:

$4H_3PO_3=3H_3PO_4+PH_3$
$PCL_3+CL_2=PCL_5$
$(x+y)^2=x^2+y^2+2xy$

Q4. Write the following equation in MS-Word:

$C_2H_5OH+PCL_5=C_2H_5CL+POCL_3+HCL$
$A = \pi r^2$ $a \div b \neq 0$

Q5. Write the following in MS-Word:

- Preheat the oven to 220°C.
- Copyright ©
- Registered ®
- Trademark ™

Q.6. Create the following table in MS-Word:

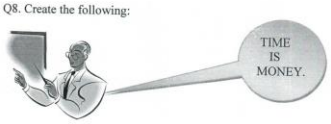
Name		Rahul	
Roll No.		101	
Subject	Max	Min	Obtain
Java	100	33	75
Multimedia	100	33	70

Q7. Create a document in MS-Word. Set the watermark as Microsoft. Also write the following text as formatted below:

Measuring programming progress by lines of codes is like measuring aircraft building progress by weight.

-------BILL GATES

Q8. Create the following:



Q9. Create the following:

Computer

Q10. Create the following table in MS-Word:-

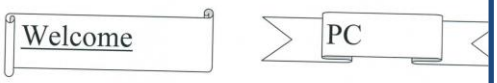
Admission 2005-06

Course	OC	BC	MBC	SC/ST	TOTAL
Computer science	9	18	5	5	37
Commerce	14	25	6	5	50
Mathematics	12	20	4	4	40

Q11. Create table as shown:-

	Car	Price
Maruti	Omni Van	200000
	Maruti 800	242000
Tata	Sumo	390000
	Sierra	447000

Q12. Insert the following in MS-Word.



Q13. Insert the following in MS-Word.

Q14. Write the following in MS-Word.

- This is sentence case.
- this is lowercase.
- THIS IS UPERCASE.
- This Is Capitalize Each Word.
- This IS Toggle cASE.

Q15. Create the following in MS-Word:

- Actors
  - Bruce Willis
  - Gerard Butler
  - Vin Diesel
- Actress
  - Julia Roberts
  - Angelina Jolie
  - Kate Winslet
  - Cameron Diaz

Q16. Write the following in MS-Word:

Cricket Players

A. Batsman

I. Sachin Tendulkar
II. Rahul Dravid
III. Virendra Sehwag

B. Bowler

a. Kumble
b. Zeheer Khan
b. Balaji

C. Spinner

a) Harbhajan
b) Kumble
c) Kartik

Q17. Write a letter to send invitation to your friend inviting on your birthday.

Q18. Create label for your friends address.

MS-Excel

1.Create the following worksheet and save the worksheet as wages.xls

PACE COMPUTERS (ATC CEDT), Govt. Of India

Payroll For Employee (Temporary)

Today's date 2-Mar-17

Pay Rate 900

Worker's Name	Hired On	days Worked	Gross Wages
Mahendra	3-Feb-17		
Anand	4-Feb-17		
Ashish	5-Feb-17		
Santosh	6-Feb-17		

(I) Calculate Days worked and gross wages.

2.Create the following worksheet and save the worksheet as wages.xls

Name	Basic (monthly) (Rs.)	HRA (% of Basic)	DA (Rs.)	Total Salary (2016)	Bonus (Rs.)	Total (Salary) (2017)	% Increase
Jaya	9300	20	1250		2300		
Padma	15600	22	1380		2700		
Jaanvi	18500	19	1436		3000		

(i) To calculate the total salary as sum of Basic salary, HRA, DA for each employee for year 2017.
(ii) Calculate total salary for year 2017 as sum of salary of 2016 and bonus.
(iii) Calculate % increase in salary from 2016 to 2017.

3.Create a worksheet as follows:

Pace Computer (ATC CEDT) Govt. Of India

Payroll for Employee (Permanent)

empcode	name	doj	salary	bonus	net salary
E001	Ayushi	3-Feb-16	17000		
E002	Sanjeet	4-Mar-15	19000		
E003	Jayant	3-Jan-17	18000		
E004	Aishwarya	6-Mar-15	17500		

(i) Allow bonus 12000 to employees having service > 2 years other wise allow bonus 7000.
(ii) Find net salary as sum of bonus and salary.

4. Create the worksheet as follows:

RollNo	Name	English	Maths	Total	Average	Division
101	Parul	95	99			
102	Prasad	92	95			
103	Neelkanth	70	69			
		Class Average				

(i) Find total of two subjects for each student.
(ii) Find average of two subject for each student.
(iii) Find class average as average of average column
(iv) Find division of student as first, second, third assume percentage of division of your own and maximum marks in each subject as 100
(v) Apply Conditional formatting for division column, first division should be in bold, second division should be in italic and third division should be in underline

5. Create macro in excels to make selected cell, bold italic, outside bordered and center across select.

6. Create bar chart with given data:

Content	2015	2016	2017
tea	19	23	25
coffee	22	24	22
sugar	45	40	45

(i) Provide heading production detail.
(ii) Provide z axis title;lacks metric tonne.
(iii) Provide x axis title year.

7. Create a table with column heading as shown below and using form perform data entry of records.

Zone	Department	Employee	Salary
West	Marketing	Mukesh	10500
East	Sales	Rahul	20000
South	Marketing	Suresh	5500
North	Marketing	Anju	25000
South	Sales	Neeraj	8000
North	Sales	Ajay	8000
South	Marketing	Mahesh	7500
West	Sales	Rajesh	4500

(i) Sort the data according to Zone then by Department.
(ii) Use Group and Outline feature to show & hide details.

8. Create a table with column heading as shown below and using form perform data entry of records.

Zone	Department	Employee	Salary
West	Marketing	Mukesh	10500
East	Sales	Rahul	20000
South	Marketing	Suresh	5500
North	Marketing	Anju	25000
South	Sales	Neeraj	8000
North	Sales	Ajay	8000
South	Marketing	Mahesh	7500
West	Sales	Rajesh	4500

(i) Use filter command to show records having zone: West.
(ii) Use filter command to show records having zone: West and salary less than 5000.
(iii) Use filter command to show records having salary greater than 10000.

9. Create Pivot table using Data of exercise 8.

10. Suppose a database exists in ms- access Your are required to import the data . How will You?

11. Create a table using table feature

Principle 1500
Rate 4%
Time 5

300	3	4	5
1%	45	60	75
2%	90	120	150
3%	135	180	225

12. Using goal seek feature find out the interest rate it must be to earn interest 500

Principle 1500
Rate 4%
Time 5

Interest 300

Q.13 Look at the following table where angle is given in degrees. Using various trigonometric functions available in excel, write steps to calculate angles in required formats.

Angle (Degrees)	Angle (Radians)	Sin	Cos	Tan	Cosec	Sec	Cot
0							
30							
45							
60							
90							

Q.14 Using Floor and Ceiling functions write steps to calculate
(a). nearest greatest height which is less than or equal to the given height
(b). nearest least height which is greater than or equal to given height

Height	Nearest Greatest age less than or equal to given height	Nearest least age greater than or equal to given height
15.6		
30.7		
-34.2		

Q.15 if age is given in months, break it in year and moths separately (as shown in example below).

AGE (In Months)	Age	
	Year	Month
25	2	1
35		
45		

Q.16 if you have cards of 3 different colors. In how many different ways you can arrange those cards. Which formula will you prefer to do so?

MS-POWERPOINT

Q1.Create a PPT of At least 10 slides with one slide for comparison, one slide displaying a chart with the table.
Q2. Create a PPT presentation use rehearse timing for the slide show.
Q3. Create a PPT presentation slide import sound and video clips.
Q4. Create PPT presentation with hyper linking.
Q5. Create PPT presentation and apply themes and transition.

MS-ACCESS

1. Create Following Tables in Access
a). tblProducts

Field Name	Data Type

ProductID	AutoNumber
ProductName	Text Field Size (50)
QuantityOnHand	Data type-Number Field Size-Integer
Cost	Data type-Number Field Size-Single
SalesPrice	Data type-Number Field Size-Single

Primary Key - ProductID

b). tblCustomer

Field Name	Data Type
CustomerID	AutoNumber
CustomerName	Text Field Size (40)
ContactNo	Text Field Size (10)

Primary Key - CustomerID

c). tblSales

Field Name	Data Type
SalesID	AutoNumber
CustomerId	Data type-Number Field Size-Integer
InvoiceNumber	Text Field Size (10)
InvoiceDate	Date

Primary Key - CustomerIdInvoiceNumber

d). tblSalesDetail

Field Name	Data Type
SalesDetailID	AutoNumber
SalesId	Data type-Number Field Size-Integer
ProductId	Data type-Number Field Size-Integer
Quantity	Data type-Number Field Size-Integer
SalesPrice	Data type-Number Field Size-Single

Primary Key SalesIdProductId

2. Set Relationship among tables.
3. Create Data entry Screen for products and customer table and enter below data in corresponding table.

Data for tblProduct

ProductName	QuantityOnHand	Cost	SalesPrice
1 TB Toshiba HDD	10	3600	3800
16 GB HP Pen Drive	20	450	500

Data for tblCustomer

CustomerName	ContactNo
Nagendra Dewangan	9827123456
Mahendra Soni	9827123657

4. Create a single combined Data entry screen for Sales & SalesDetail table using master detail concept and enter following 2 Records.
   CustomerName: Nagendra Dewangan
   Invoice Number: Sal/18/2

Invoice Date: 2-Mar-2017

ProductName	Quantity	SalesPrice
1 TB Toshiba HDD	5	3800
16 GB HP Pen Drive	3	500

CustomerName: Mahendra Soni
Invoice Number: Sal/19/2
Invoice Date: 3-Mar-2017

ProductName	Quantity	SalesPrice
1 TB Toshiba HDD	4	3800
16 GB HP Pen Drive	2	500

5. Create Sales Bill Report.
6. Validate data in tables as well as in data entry screen.

Flash

1. Create a Flash movie to create mask.
2. Create a Flash movie to create Fade In/Fade Out in four pictures.
3. Create a Flash movie to create the symbol of a wheel and scale and rotate it.
4. Create a flash movie to create growing circles.
5. Create hand writing in Flash.
6. Create a Flash movie of a moving car with rotating wheels.
7. Transform a circle into a square using shape tween.
8. Create a Flash movie to import text from MS-Word and apply different transformations.
9. Create a Flash movie to demonstrate onion skin markers.
10. Create a Flash movie to demonstrate motion guide.

BCA-I

BCA I

BCA-109 LAB III: Web Technology Lab

Max Marks: 100 **Min. Marks: 50**

Practical List

Scheme of Examination- Practical examination will be of three programs. It will be of 3 hours duration. The distribution of practical marks will be as follows –

Program 1 (HTML)	15
Program 2 (DHTML)	15
Program 3 (JavaScript)	15
Program 4 (PHP)	15
Viva	25
Practical Record	15
Total	**100**

Note: All these Programs and similar types to these can be made in Practical File. Practical file should contain printed programs with name of author, date, path of program, unit no, output, screenshots etc. There should be comment wherever applicable.

Internet

1. Creating Email account.
2. Configuring Web server for Local Computer.
3. Working with various search engines (Google, Yahoo, Bing, etc.)
4. Browsing up various websites (e.g. Railway Reservation, Airline Reservation, Cinema Ticket Booking, Bill payments etc.)
5. Online payment procedure (any one).

HTML

6. Write an HTML program to create the following table:

Class	Subject1	Subject2	Subject3
BCA I	Visual Basic	PC Software	Electronics
BCA II	C++	DBMS	English
BCA III	Java	Multimedia	CSA

7. Write an HTML program to create the following lists:
   - C
   - C++
   - FORTRAN
   - COBOL

8. Write an HTML program to create the following lists:
   1. Java
   2. Visual Basic
   3. BASIC

   4. COBOL

9. Write an HTML program to demonstrate hyperlinking between two web pages. Create a marquee and also insert an image in the page.

10. Create a Web Page which contains information about your favourite freedom fighters. Design the page with attractive background colour, text colour, image etc.
11. Write an HTML document to print your bio-data in a table format.
12. Write an HTML program to create the following table:

Car Price List

Maruti		Tata		Ford	
Model	Price	Model	Price	Model	Price
Maruti 800	2 Lac	Sumo	2 Lac	Ikon	5 Lac
Omni	3 Lac	Scorpio	3 Lac	Gen	2 Lac

13. Write an HTML program to create the following table:

Students Records

Name	Subject	Marks
Arun	Java	70
	C	80
Ashish	Java	75
	C	69

14. Create an HTML document and embed a flash movie in it.
15. With the Frameset Tag and Frame Tag Create the following Document:

Physics.html	Welcome.html	Maths.html
Chemistry.html		Computer.html
Biology.html	Heading.html	
Zoology.html		Acount.html

16. Write an HTML program to create a web page with an image as background and the following text:

New Delhi

New Delhi, the capital and the third largest city of India is a fusion of the ancient and the modern. The refrains of the Muslim dynasties with its architectural delights, give the majestic ambience of the bygone era.

On the other side New Delhi, the imperial city built by British, reflect the fast paced present. The most fascinating of all is the character of Delhi which varies from the 13th present century mausoleum of the Lodi kings to ultra modern glass skyscrapers.

17. Create the following HTML form.

18. Create the following HTML form.

19. Design a Web Page, Insert an image on to the web page such that image is of height 300 and width 300 pixels. The image should have an ALT text in it.
20. Design a Html page for the following
    1. Set an image as a link
    2. Open a link in a new browser window
    3. Jump to another part of a document (on the same page)
    4. How to link to a mail message with CC, BCC and Subject Entries
    5. Redirect a user to another URL after 5 seconds

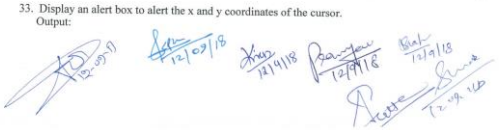
JAVASCRIPT

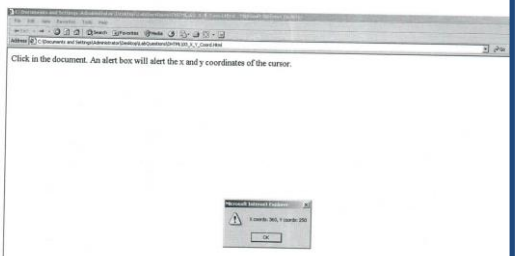
21. Create a script using for loop to prime n. between 1 and 50.
22. Write a script to get the largest value in an array.
23. Write a function to calculate the factorial of a number (a non-negative integer).
24. Write a script to demonstrate data validation.
25. Write a program to print date using JavaScript.
26. Write a program to Sum and Multiply two numbers using JavaScript.
27. Write a program to Show use of alert, confirm and prompt box.
28. Write a program to redirect, popup and print function in JavaScript.
29. Create validation Form in JavaScript.
30. Write a JavaScript program to change background color after 5 seconds of page load.

DHTML

31. Create a Web Page which shows the changes of header dynamically.
32. Create a Web page which explains the use of relative positioning.
    Output:

33. Display an alert box to alert the x and y coordinates of the cursor.
    Output:

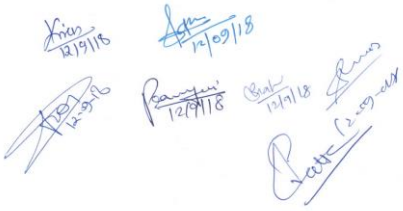




34. Design a Web page to, if the user right clicks on the document area an alert box should appear instead of short-cut menu.
35. Design a Web page to display a Digital Clock.

PHP

36. Create a script using for loop to add all the integers between 0 and 30 and display the total.
37. Create a script to construct the following pattern, using nested for loop exercises.
38. Write a PHP script to get the largest key in an array.
39. Write a function to calculate the factorial of a number (a non-negative integer).
40. Write a PHP script to check string for palindrome.



BCA-II

BCA-207	**Programming Lab in 'C++'**
BCA-208	**Database Management System Lab**
BCA-209	**Operating System Lab**

SCHEME OF EXAMINATION 2019-2020

BCA PART- II

Subject Code	Subject Paper	Theory Marks		Internal Marks		Teaching Load per Week		
						L	T	P
		Max. (A)	Min. (B)	Max. (C)	Min. (D)			
BCA201	Calculus and Differential Equations	80	27	20	8	4	2	-
BCA202	Database Management System	80	27	20	8	4	2	-
BCA203	Programming in 'C++'	80	27	20	8	4	2	-
BCA204	Computer Networks	80	27	20	8	4	2	-
BCA205	Operating Systems with Linux	80	27	20	8	4	2	-
BCA206	Foundation Course	80	27	20	8	4	2	-
BCA207	LAB IV: Programming Lab in 'C++'	100	50	40	16	-	-	3x2
BCA208	LAB V: Database Management System Lab	100	50	40	16	-	-	2x2
BCA209	LAB VI: Operating System Lab	100	50	20	8	-	-	1x2
TOTAL		780	312	220	88			
GRAND TOTAL	(PAPER + INTERNAL)	(A+C) 1000		(B+D) 400				

- Student will have to pass individually in all theory, practical and sessional.

PRACTICAL WORK

BCA-205(B) Shell Programming in Linux/Unix

Scheme of Examination:-

1. Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows

Programme 1	-	10
Programme 2	-	10
Viva	-	15
[Practical Copy + Internal Record]	-	15
Total	-	**50**

2. In every program there should be comment for each coded line or block of code
3. Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.
4. All the following programs or a similar type of programs should be prepared

List of Practical

1. Change your shell environment – path, home, ifs, mail, ps1, ps2, term, logname
   i) at commandline
   ii) at shell level
   iii) at login level
2. Change the wallpaper, screensaver in GNOME, KDE
3. Install Linux with following specifications – username, password, partitions for various directories such as /etc, /home, etc
4. Add a user and password, change the password
5. Add & remove a group
6. Create partitions on your disk.
7. Install and configure (i) printer (ii) scanner

Using vi editor do the following exercises

1. In a file
   - i) replace the words 'has' with 'has not '.
   - ii) Locate n^{th} character
   - iii) Sort lines 21 to 40
2. In a file copy/cut and paste following text-
   - i At i^{th} line, n lines to j^{th} line .
   - ii Yank a few words
   - iii Cut and paste n words to i^{th} position in I^{th} line
3. Open two files 'txtfile' and 'newfile' and copy/cut 5 lines from txtfile and paste them in newfile using vi editor.
4. Open 'txtfile' and copy/cut following and paste to the 'newfile'
   - i i^{th} to the last line in it
5. Create macro
   - i to paste your name at any position in the file.
   - ii to map the 1^{st} function key to search for "loop" and copy into the buffer 'a' all text following it up to but not including the string "end".
   - iii to remove all leading spaces in a file
   - iv to save and quit vi editor in input mode

Write commands

i. List all files that match a class.
ii. List all files that do not match a class.
iii. Change the file permissions
iv. Configure or set characteristics of your terminal. Describe any 3.
v. Display the lines in a file that contain a particular word.
vi. Append the contents of two files in a file JABC.
vii. Count the number of files in a directory.

Write shell programs

i. Display all the users currently logged in detail with column headers.
ii. List all files in current directory and save the list in a file ABC. Also save the contents of the files in ABC and display the contents in ABC in sorted order.
iii. Sort the contents of a file ABC and save it in OABC.
iv. Display all the users currently logged in detail with column headers.
v. To save current date & time, number of files & directories in the current directory and contents of all the files to a single file NFL.
vi. To input a number and test whether it is +ve, -ve or zero.
vii. To test whether a filename is a regular file or a directory or of other type.
viii. To list only the directories in current path.
ix. To print the greatest of three numbers.
x. To print 12 terms of Fibonacci series.
xi. To display all users currently logged in & also check a particular user every 30 seconds until he logs in.
xii. To save current date & time, number of files in the current directory and contents of all the files matching a pattern to a single file NPFL.
xiii. To display particular messages depending on the weekday.
xiv. To display common messages for following group of days-Monday & Wednesday, Tuesday & Thursday and Friday & Saturday and other day.
xv. To accept a string from the terminal and echo a suitable message if it doesn't have at least 9 characters.
xvi. Write a Shell Script to find the factorial of a number.
xvii. Write a Shell Script to swap two numbers using third variable.
xviii. Write a Shell Script to print prime numbers between 1 to 20.
xix. Write a Shell Script to greatest of three numbers.

xx. Write a Shell Script to sort the contents of a file XYZ and save it in BCAII
xxi. Write a Shell Script to display mathematical table of any number in the format E x :- 3*1=3.

PRACTICAL WORK
BCA-207 DBMS (Oracle, SQL)

1 Scheme of Examination:-
Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows

Programme 1 (Oracle)	-	10
Programme 2 (Oracle)	-	10
Viva (Oracle + project)	-	25
[Practical Copy + Practical Sessional]	-	15
Project Completeness	-	15
Project Report	-	15
Project Presentation	-	10
Total	-	**100**

2 In every program there should be comment for each coded line or block of code
3 practical files should contain printed programs with name of author, date, path of program, unit no. and printed output.
4 All the following programs or a similar type of programs should be prepared

List of Practical

1. Using the following database,
   Colleges (cname, city, address, phone, afdate)
   Staffs (sid, sname, saddress, contacts)
   StaffJoins (sid, cname, dept, DOJ, post, salary)
   Teachings (sid, class, paperid, fsession, tsession)
   Subjects (paperid, subject, papernо, papername)

Write SQL statements for the following –

a. Create the above tables with the given specifications and constraints.
b. Insert about 10 rows as are appropriate to solve the following queries.
c. List the names of the teachers teaching computer subjects.
d. List the names and cities of all staff working in your college.
e. List the names and cities of all staff working in your college who earn more than 15,000
f. Find the staffs whose names start with 'M' or 'R' and ends with 'A' and/or 7 characters long.
g. Find the staffs whose date of joining is 2005.
h. Modify the database so that staff N1 now works in C2 College.
i. List the names of subjects, which T1 teaches in this session or all sessions.
j. Find the classes that T1 do not teach at present session.
   a. Find the colleges who have most number of staffs.
   b. Find the staffs that earn a higher salary who earn greater than average salary of their college.
   c. Find the colleges whose average salary is more than average salary of C2
   d. Find the college that has the smallest payroll.
   e. Find the colleges where the total salary is greater than the average salary of all colleges.
   f. List maximum, average, minimum salary of each college

a. List the names of the teachers, departments teaching in more than one department.
b. Acquire details of staffs by name in a college or each college.
c. Find the names of staff that earn more than each staff of C2 College.
d. Give all principals a 10% rise in salary unless their salary becomes greater than 20,000 in such case give 5% rise.
e. Find all staff that do not work in same cities as the colleges they work.
f. List names of employees in ascending order according to salary who are working in your college or all colleges.
   a. Create a view having fields sname, cname, dept, DOJ, and post
   b. Create a view consisting of cname, average salary and total salary of all staff in that college.
   c. Select the colleges having highest and lowest average salary using above views.
   d. List the staff names of a department using above views.

2. Create the following database,

Enrollment (enrollno, name, gender, DOB, address, phone)
Admission (admno, enrollno, course, yearsem, date, cname)
Colleges (cname, city, address, phone, afdate)
FeeStructure (course, yearsem, fee)
Payment (billno, admno, amount, pdate, purpose)

a. Create the above tables with the given specifications and constraints.
b. Insert about 10 rows as are appropriate to solve the following queries.
c. Get full detail of all students who took admission this year class wise
d. Get detail of students who took admission in Bhilai colleges.
e. Calculate the total amount of fees collected in this session
   i) By your college ii) by each college iii) by all colleges
   a. List the students who have not payed full fee
      i) in your college ii) in all colleges
   b. List the number of admissions in your class in every year.
   c. List the students in the session who are not in the colleges in the same city as they live in.
   d. List the students in colleges in your city and also live in your city.

3. Create the following database,

Subjects (paperid, subject, paper, papername)
Test (paperid, date, time, max, min)
Score (rollno, paperid, marks, attendence)
Students (admno, rollno, class, yearsem)

   a. Create the above tables with the given specifications and constraints.
   b. Insert about 10 rows as are appropriate to solve the following queries.
   c. List the students who were present in a paper of a subject.
   d. List all roll numbers who have passed in first division.
   e. List all students in BCA-II who have scored higher than average
      i) in your college ii) in every college
   f. List the highest score, average and minimum score in BCA-II i) in your college ii) in every college

4. Using the following database

Colleges (cname, city, address, phone, afdate)
Staffs (sid, sname, saddress, contacts)
StaffJoins (sid, cname, dept, DOJ, post, salary)
Teachings (sid, class, paperid, fsession, tsession)
Subjects (paperid, subject, paperno, papername)

Write SQL statements for the following –

a. Create the above tables with the given specifications and constraints.
b. Insert about 10 rows as are appropriate to solve the following queries.
c. List the names of the teachers teaching computer subjects.
d. List the names and cities of all staff working in your college.
e. List the names and cities of all staff working in your college who earn more than 15,000

5. Using the following database

Colleges (cname, city, address, phone, afdate)
Staffs (sid, sname, saddress, contacts)
StaffJoins (sid, cname, dept, DOJ, post, salary)
Teachings (sid, class, paperid, fsession, tsession)
Subjects (paperid, subject, paperno, papername)

   a. Find the staffs whose names start with 'M' or 'R' and ends with 'A' and/or 7 characters long.
   b. Find the staffs whose date of joining is 2005.
   c. Modify the database so that staff N1 now works in C2 college.
   d. List the names of subjects which T1 teaches in this session or all sessions.

6. Using the following database

Colleges (cname, city, address, phone, afdate)
Staffs (sid, sname, saddress, contacts)
StaffJoins (sid, cname, dept, DOJ, post, salary)
Teachings (sid, class, paperid, fsession, tsession)
Subjects (paperid, subject, paperno, papername)

   a. Find the classes that T1 do not teach at present session.
   b. Find the college who have most number of staffs.
   c. Find the staffs who earn a higher salary who earn greater than average salary of their college.
   d. Find the colleges whose average salary is more than average salary of C2
   e. Find the college that has the smallest payroll.
   f. Find the colleges where the total salary is greater than the average salary of all colleges.
   g. List maximum, average, minimum salary of each college

7. Using the following database

Colleges (cname, city, address, phone, afdate)
Staffs (sid, sname, saddress, contacts)
StaffJoins (sid, cname, dept, DOJ, post, salary)
Teachings (sid, class, paperid, fsession, tsession)
Subjects (paperid, subject, paperno, papername)

   a. Find the classes that T1 do not teach at present session.
   b. List the names of the teachers, departments teaching in more than one departments.
   c. Acquire details of staffs by name in a college or each college.
   d. Find the names of staff who earn more than each staff of C2 college.
   e. Give all principals a 10% rise in salary unless their salary becomes greater than 20,000 in such case give 5% rise.
   f. Find all staff who donot work in same cities as the colleges they work.
   g. List names of employees in ascending order according to salary who are working in your college or all colleges.

8. Using the following database

Colleges (cname, city, address, phone, afdate)

Staffs (sid, sname, saddress, contacts)
StaffJoins (sid, cname, dept, DOJ, post, salary)
Teachings (sid, class, paperid, fsession, tsession)
Subjects (paperid, subject, paperno, papername)

a. Find the classes that T1 do not teach at present session.
b. Create a view having fields sname, cname, dept, DOJ, and post
c. Create a view consisting of cname, average salary and total salary of all staff in that college.
d. Select the colleges having highest and lowest average salary using above views.
e. List the staff names of a department using above views.

9. Enrollment (enrollno, name, gender, DOB, address, phone)
Admission (admno, enrollno, course, yearsem, date, cname)
Colleges (cname, city, address, phone, afdate)
FeeStructure (course, yearsem, fee)
Payment (billno, admno, amount, pdate, purpose)
a. Create the above tables with the given specifications and constraints.
b. Insert about 10 rows as are appropriate to solve the following queries.
c. Get full detail of all students who took admission this year classwise
d. Get detail of students who took admission in Bhilai colleges.
e. Calculate the total amount of fees collected in this session
i) by your college ii) by each college iii) by all colleges

10. Enrollment (enrollno, name, gender, DOB, address, phone)
Admission (admno, enrollno, course, yearsem, date, cname)
Colleges (cname, city, address, phone, afdate)
FeeStructure (course, yearsem, fee)
Payment (billno, admno, amount, pdate, purpose)
a. List the students who have not payed full fee
i) in your college ii) in all colleges
b. List the number of admissions in your class in every year.
c. List the students in the session who are not in the colleges in the same city as they live in.
d. List the students in colleges in your city and also live in your city.

11. Subjects (paperid, subject, paper, papername)
Test (paperid, date, time, max, min)
Score (rollno, paperid, marks, attendence)
Students (admno, rollno, class, yearsem)
a. Create the above tables with the given specifications and constraints.
b. Insert about 10 rows as are appropriate to solve the following queries.
c. List the students who were present in a paper of a subject.
d. List all roll numbers who have passed in first division.
e. List all students in MCA-II who have scored higher than average
i) in your college ii) in every college
f. List the highest score, average and minimum score in MCA-II
i) in your college ii) in every college

The Project should be done by individual student. Format of the student project report on completion of the project.

- Cover page as per format
- Certificate of Approval
- Certificate of project guide/Center Manager

where the resultant of addition of first two matrixes is stored. In similar way create functions for matrix subtraction and multiplication.

6. Create a single program to perform following tasks without using library functions:
a) To reverse the string accepted as argument.
b) To count the number of characters in string passed as argument in form of character array.
c) To copy the one string to other string; passed as arguments in form of source character array and destination character array without using library function.
d) To count no. of vowels, consonants in each word of a sentence passed as argument in form of character array.

Class, Object, Array of object, Object Using Array

7. Create a class Student having data members to store roll number, name of student, name of three subjects, max marks, min marks, obtained marks. Declare an object of class student. Provide facilities to input data in data members and display result of student.

8. Create a class Student having data members to store roll number, name of student, name of three subjects, max marks, min marks, obtained marks. Declare array of object to hold data of 3 students. Provide facilities to display result of all students. Provide also facility to display result of specific student whose roll number is given.

9. Create a class Sarray having an array of integers having 5 elements as data member provide following facilities:
a) Constructor to get number in array elements. b) Sort the elements. c) Find largest element
b) Search for presence of particular value in array element.

Static member function

10. Create a class Simple with static member functions for following tasks:
a) To find factorial by recursive member function.
b) To check whether a no. is prime or not.
c) To generate Fibonacci series up to requested terms.

Object as argument to function, function returning object

11. Write program-using class having class name Darray. Darray has pointer to pointer to integer as data member to implement double dimension dynamic array and provide following facilities:
a) Constructor to input values in array elements.
b) Input member function to get input in array element
c) Output member function to print element value
d) Add member function to perform matrix addition using objects.
e) Subtract member function to perform matrix subtraction using objects.
f) Multiply member function to perform matrix multiplication using objects

12. Write program to create class complex having data members to store real and imaginary part. Provide following facilities:
a) Add two complex no. using objects. b) Subtract two complexes no. using objects.
c) Multiply two complexes no. using objects. d) Divide two complex no. using objects.

Friend Function

13. Create class Polar having data members radius and angle. It contains member functions for taking input in data members and member function for displaying value of data members. Class Polar contains declaration of friend function add which accepts two objects of class Polar and returns object of class Polar after addition. Test the class using main function and objects of class Polar.

14. Write program to create class distance having data members feet and inch (A single object will store distance in form such as 5 feet 3 inch). It contains member functions for taking input in data members and member function for displaying value of data

members. Class Distance contains declaration of friend function add which accepts two objects of class Distance and returns object of class Distance after addition. Class Distance contains declaration of another friend function Subtract that accepts two objects of class Distance and returns object of class Distance after subtraction. Test the class using main function and objects of class Distance.

15. Write a program to create class Mother having data member to store salary of Mother, create another class Father having data member to store salary of Father. Write a friend function, which accepts objects of class Mother, and Father and prints Sum of Salary of Mother and Father objects.

Friend Class

16. Write a program to create class Mother having data member to store salary of Mother, create another class Father having data member to store salary of Father. Declare class Father to be friend class of Mother. Write a member function in Father, which accepts object of class Mother and prints Sum of Salary of Mother and Father Objects. Create member function in each class to get input in data member and to display the value of data member.

Static Data Member

17. Create a class Counter having a static data member, which keeps track of no. of objects created of type Counter. One static member function must be created to increase value of static data member as the object is created. One static member function must be created to decrease value of static data member as the object is destroyed. One static member function must be created to display the current value of static data member. Use main function to test the class Counter.

STRUCTURE AND CLASS

18. Define structure student. Structure student has data members for storing name, rollno, name of three subjects and marks. Write member function to store and print data.

COPY CONSTRUCTOR, CONSTRUCTOR OVERLOADING, THIS POINTER, CONSTRUCTOR WITH DEFAULT ARGUMENT.

19. Write program to create a class Polar which has data member radius and angle, define overloaded constructor to initialize object and copy constructor to initialize one object by another existing object keep name of parameter of parameterized constructor same as data members. Test function of the program in main function.

20. Write program to create a class Polar which has data member radius and angle, use constructor with default arguments to avoid constructor overloading and copy constructor to initialize one object by another existing object keep name of parameter of parameterized constructor same as data members. Test functioning of the program in main function

FUNCTION OVERLOAD, REFERENCE VARIABLE, PARAMETER PASSING BY ADDRESS, STATIC FUNCTION

21. Write a class having name Calculate that uses static overloaded function to calculate area of circle, area of rectangle and area of triangle.

22. Write a class ArraySort that uses static overloaded function to sort an array of floats, an array of integers.

23. Write a program using class, which uses static overloaded function to swap two integers, two floats methods use reference variable.

24. Write a program using class, which uses static overloaded function to swap two integers; two floats methods use parameter passing by address.

STRING, POINTER, AND OPERATOR OVERLOADING

25. Create class String having pointer to character as data member and provide following Facilities:

a) Constructor for initialization and memory allocation.
b) Destructor for memory release.
c) Overloaded operators + to add two string object.

d) Overloaded operator = to assign one string object to other string object.
e) Overloaded operator = = to compare whether the two string objects are equal or not.
f) Overloaded operator < to compare whether first-string object is less than second-string object.
g) Overloaded operator > to compare whether first-string object is greater than second-string object or not.
h) Overloaded operator <= to compare whether first string object is less than or equal to second string object or not
i) Overloaded operator >= to compare whether first string object is greater than or equal to second string object.
j) Overloaded operator != to compare whether first string object is not equal to second string object or not.
k) Overloaded insertion and extraction operators for input in data member and display out put of data members.

26. Create a class Matrix having data member double dimension array of floats of size 3x3. Provide following facilities:

a) Overloaded extraction operator for data input.
b) Overloaded insertion operator for data output.
c) Overloaded operator + for adding two matrix using objects.
d) Overloaded operator – for subtracting two using matrix objects.
e) Overloaded operator * for multiplying two using matrix objects.

OPERATOR OVERLOADING WITH FRIEND FUNCTION

27. Create a class Polar having radius and angle as data members. Provide following facilities:

a) Overloaded insertion and extraction operators for data input and display.
b) Overloaded constructor for initialization of data members.
c) Overloaded operator + to add two polar co-ordinates using objects of class Polar.

28. Create class DegreeCelsius having a single data member to hold value of temperature in degree Celsius. Provide following facilities:

a) Overloaded operator ++ which will increase value of data member by 1 (consider postfix and prefix operator overloading).
b) Overloaded operator -- which will decrease value of data member by 1 (consider postfix and prefix operator overloading).
c) Overloaded insertion and extraction operators for input in data member and display value of data member.

OPERATOR OVERLOADING AND DATA TYPE CONVERSION

29. Create a class Polar that contains data member radius and angle. Create another class Cartesian in the same program and provide following facilities:

a) It should be possible to assign object of polar class to object of Cartesian class.
b) It should be possible to assign object of Cartesian class to object of polar class.

30. Create a class Fahrenheit that contains a data member to hold temperature in Fahrenheit. Create another class Celsius that contains a data member to hold temperature in Degree Celsius; in the same program and provide following facilities:

a) It should be possible to assign object of Fahrenheit class to object of Celsius class.
b) It should be possible to assign object of Celsius class to object of Fahrenheit class.

c) It should be possible to compare objects of class Fahrenheit and Celsius to find out which object contains higher temperature.

VOID POINTER, POINTER AND POINTER TO OBJECT

31. Create a program having pointer to void to store address of integer variable then print value of integer variable using pointer to void. Perform the same operation for float variable.

32. Write program to find biggest number among three numbers using pointer and function.

33. Write swapping program to demonstrate call by value, call by address and call by reference in a single program.

34. Write program to Create a class Employee having data members to store name of employee, employee id, salary. Provide member function for data input, output. Use Pointer to object to simulate array of object to store information of 3 employees and test the program in function main.

INLINE FUNCTION.

35. Write a program using inline function to calculate area of circle.

36. Write a program using inline function to find minimum of two functions. The inline function should take two arguments and should return the minimum value.

FUNCTION TEMPLATE

36. Write a program using function template to sort an array of floats, an array of integers.

37. Write a program using function template to swap two integers, two floats methods use reference variable.

TEMPLATE CLASS

37. Write a program using class template to simulate stacks of integer and stacks of float.

38. Write a program using class template to simulate linked-list of integer and linked list of floats.

INHERITANCE

39. Create a class account that stores customer name, account number and type of account. From this derive the classes cur_acct and sav_acct to make them more specific to their requirements. Include necessary member functions in order to achieve the following tasks:

a) Accept deposit from customer.
b) Display the balance
c) Computer and deposit interest.
d) Permit withdrawal and update the balance.
e) Check for the minimum balance, impose penalty, necessary and update the balance.

40. Create a class circle with data member radius; provide member function to calculate area. Derive a class sphere from class circle; provide member function to calculate volume. Derive class cylinder from class sphere with additional data member for height and member function to calculate volume.

41. Consider an example of declaring the examination result. Design three classes:- student, exam and result. The student class has data members such as that representing roll number, name of student. Create the class exam, which contains data members representing name of subject, minimum marks, maximum marks, obtained marks for three subjects. Derive class result from both student and exam classes. Test the result class in main function.

VIRTUAL AND PURE VIRTUAL FUNCTION

42. Create a base class shape having two data members with two-member function getdata (pure virtual function) and printarea (not pure virtual function). Derive classes triangle and rectangle from class shape and redefine member function printarea in both classes triangle and rectangle and test the functioning of classes using pointer to base class objects and normal objects.

12/9/18 12/9/18 12/9/18 12/9/18 12-9-2018

PRACTICAL WORK
BCA-209 - LAB VI: Operating System Lab

Scheme of Examination:-

1. Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows

Program 1	-	20
Program 2	-	20
Program 3	-	20
Viva	-	25
[Practical Copy + Internal Record]	-	15
Total	-	**100**

2. In every program there should be comment for each coded line or block of code
3. Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.
4. All the following programs or a similar type of programs should be prepared

List of Practical

1. Change your shell environment – path, home, ifs, mail, ps1, ps2, term, logname
   i) at commandline
   ii) at shell level
   iii) at login level
2. Change the wallpaper, screensaver in GNOME, KDE
3. Install Linux with following specifications – username, password, partitions for various directories such as /etc, /home, etc
4. Add a user and password, change the password
5. Add & remove a group
6. Create partitions on your disk.
7. Install and configure (i) printer (ii) scanner

Using vi editor do the following exercises

1. In a file
   i) replace the words 'has' with 'has not '.
   ii) Locate n^{th} character
   iii) Sort lines 21 to 40
2. In a file copy/cut and paste following text-
   i At i^{th} line, n lines to j^{th} line .
   ii Yank a few words
   iii Cut and paste n words to i^{th} position in I^{th} line
2. Open two files 'txtfile' and 'newfile' and copy/cut 5 lines from txtfile and paste them in newfile using vi editor.
3. Open 'txtfile' and copy/cut following and paste to the 'newfile'
   i i^{th} to the last line in it
5. Create macro
   ii to paste your name at any position in the file.
   iii to map the 1^{st} function key to search for "loop" and copy into the buffer 'a' all text following it up to but not including the string "end".
   iv to remove all leading spaces in a file
   v to save and quit vi editor in input mode

Write commands

i. List all files that match a class.

27/4/19 27/4/19 27/4/19 27/4/19 27-4-19

ii. List all files that do not match a class.
iii. Change the file permissions
iv. Configure or set characteristics of your terminal. Describe any 3.
v. Display the lines in a file that contain a particular word.
vi. Append the contents of two files in a file JABC.
vii. Count the number of files in a directory.

Write shell programs

i. Display all the users currently logged in detail with column headers.
ii. List all files in current directory and save the list in a file ABC. Also save the contents of the files in ABC and display the contents in ABC in sorted order.
iii. Sort the contents of a file ABC and save it in OABC.
iv. Display all the users currently logged in detail with column headers.
v. To save current date & time, number of files & directories in the current directory and contents of all the files to a single file NFL.
vi. To input a number and test whether it is +ve, -ve or zero.
vii. To test whether a filename is a regular file or a directory or of other type.
viii. To list only the directories in current path.
ix. To print the greatest of three numbers.
x. To print 12 terms of Fibonacci series.
xi. To display all users currently logged in & also check a particular user every 30 seconds until he logs in.
xii. To save current date & time, number of files in the current directory and contents of all the files matching a pattern to a single file NPFL.
xiii. To display particular messages depending on the weekday.
xiv. To display common messages for following group of days-Monday & Wednesday, Tuesday & Thursday and Friday & Saturday and other day.
xv. To accept a string from the terminal and echo a suitable message if it doesn't have at least 9 characters.
xvi. Write a Shell Script to find the factorial of a number.
xvii. Write a Shell Script to swap two numbers using third variable.
xviii. Write a Shell Script to print prime numbers between 1 to 20.
xix. Write a Shell Script to greatest of three numbers.
xx. Write a Shell Script to sort the contents of a file XYZ and save it in BCAII
xxi. Write a Shell Script to display mathematical table of any number in the format E x :-3*1=3.

BCA-III

BCA-307	**Programming Lab in Java**
BCA-308	**Dot Net Technology Lab**
BCA-309	**Project**

SCHEME OF EXAMINATION 2020-2021
BCA PART- III

Subject Code	Subject Paper	Theory Marks		Internal Marks		Teaching Load per Week		
		Max. (A)	Min. (B)	Max. (C)	Min. (D)	L	T	P
BCA301	Statistical Analysis	80	27	20	8	4	2	-
BCA302	Programming in Java	80	27	20	8	4	2	-
BCA303	Dot Net Technology	80	27	20	8	4	2	-
BCA304	Software Engineering	80	27	20	8	4	2	-
BCA305	Data Structure	80	27	20	8	4	2	-
BCA306	Computer System Architecture	80	27	20	8	4	2	-
BCA307	LAB VII: Programming Lab in Java	100	50	40	16	-	-	3x2
BCA308	LAB VIII: Dot Net Technology Lab	100	50	40	16	-	-	2x2
BCA309	Project	100	50	20	8	-	-	1x2
TOTAL		780	312	220	88			
GRAND TOTAL	(PAPER + INTERNAL)	(A+C) 1000		(B+D) 400				

- ***Student will have to pass individually in all theory, practical and sessional***

PRACTICAL WORK BCA-307 Programming Lab in Java

1. **Scheme of Examination:-** Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows:

Programme 1	-20
Programme 2	-20
Programme 3	-20
Viva	-20
Practical Copy + Internal Record	-20
Total	**-100**

2. In every program there should be comment for each coded line or block of code
3. Practical file should contain printed programs with name of author, date, path of program, unit no. and printed output.
4. All the following programs or a similar type of programs should be prepared

List of Practical

1. WAP that implements the Concept of Encapsulation.
2. WAP to demonstrate concept of function overloading of Polymorphism.
3. WAP to demonstrate concept of construction overloading of Polymorphism.
4. WAP the use boolean data type and print the Prime number Series up to 50.
5. WAP to print first 10 number of the following Series using Do-While Loops 0, 1, 1, 2, 3, 5, 8, 11…
6. WAP to check the given number is Armstrong or not.
7. WAP to find the factorial of any given number.
8. WAP to sort the element of One Dimensional Array in Ascending order.
9. WAP for matrix multiplication using input/output Stream.
10. WAP for matrix addition using input/output stream class.
11. WAP for matrix transposes using input/output stream class.
12. WAP to add the elements of Vector as arguments of main method (Run time) and rearrange them, and copy it into an Array.
13. WAP to check that the given String is palindrome or not.
14. WAP to arrange the String in alphabetical order.
15. WAP for StringBuffer class which perform the all methods of that class.
16. WAP to calculate Simple Interest using the Wrapper Class.
17. WAP to calculate Area of various geometrical figures using the abstract class.
18. WAP where Single class implements more than one interfaces and with help of interface reference variable user call the methods.
19. WAP that use the multiple catch statements within the try-catch mechanism.
20. WAP where user will create a self-Exception using the "throw" keyword.
21. WAP for multithread using the isAlive(), join() and synchronized() methods of Thread class.
22. WAP to create a package using command and one package will import another package.
23. WAP for JDBC to insert the values into the existing table by using prepared Statement.
24. WAP for JDBC to display the records from the existing table.
25. WAP for demonstration of switch statement, continue and break.

BCA308- LAB VII: Dot Net Technology Lab

1. Scheme of Examination :-

Practical Examination will be of 3 hours duration. The distribution of practical marks is as follows:

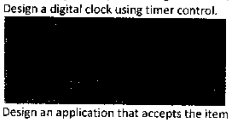
Program1	-	**20**
Program2	-	**20**
Program3	-	**20**
Viva-20		
[Practical Record + Internal Record]	-	**20**
	Total	**-100**

List of Practical

1. Write a program to find maximum between three numbers.
2. Write a program to check whether a number is negative, positive or zero.
3. Write a program to check whether a year is leap year or not.
4. Write a program to check whether a character is alphabet or not.
5. Write a program to find all roots of a quadratic equation
6. Design an application to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:
   Percentage >= 90% : Grade A
   Percentage >= 80% : Grade B
   Percentage >= 70% : Grade C
   Percentage >= 60% : Grade D
   Percentage >= 40% : Grade E
   Percentage < 40% : Grade F

7. Design an application to input basic salary of an employee and calculate its Gross salary according to following:
   Basic Salary <= 10000 : HRA = 20%, DA = 80%
   Basic Salary <= 20000 : HRA = 25%, DA = 90%
   Basic Salary > 20000 : HRA = 30%, DA = 95%
8. Design an application to input electricity unit charges and calculate total electricity bill according to the given condition:
   For first 50 units Rs. 0.50/unit
   For next 100 units Rs. 0.75/unit
   For next 100 units Rs. 1.20/unit
   For unit above 250 Rs. 1.50/unit
   An additional surcharge of 20% is added to the bill
9. Write a program to convert decimal to binary number system using bitwise operator.
10. Write a program to swap two numbers using bitwise operator
11. Write a program to create Simple Calculator using select case.
12. Write a program to find sum of all natural numbers between 1 to n
13. Write a program to find first and last digit of any number
14. Write a program to enter any number and print its reverse.

15. Write a program to enter any number and check whether the number is palindrome or not.
16. Write a program to check whether a number is Armstrong number or not.
17. Write a program to print Fibonacci series up to n terms.
18. Write a program to print Pascal triangle upto n rows.
19. Write a program to print all negative elements in an array.
20. Design a digital clock using timer control.



21. Design an application that accepts the item name from the user and add it to a listbox and combobox.

22. Create an application that offers various food items to select from check boxes and a mode of payment using radio button. It then display the total amount payable.

23. Create an application to implement the working of Context menu on textbox.

24. WAP to illustrate all functionalities of listbox and combobox.

25. WAP using checknoxes for the following font effects.

- Bold
- Italic
- Underline
- Increase Font size
- Decrease Font size
- Font Color

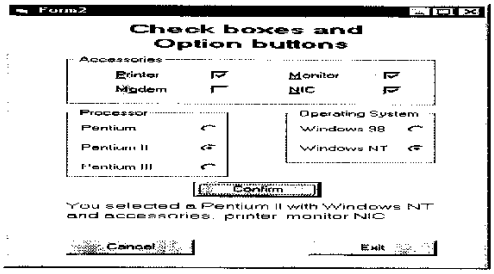
25. WAP for temperature conversion using radiobutton.

26. WAP to launch a rocket using Picturebox and Timer control.

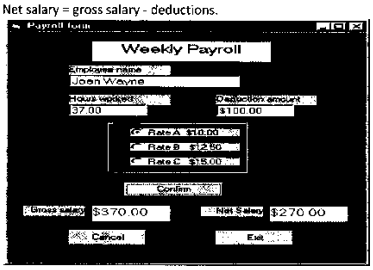
27. WAP to change the back color of any control using scrollbox.

28. WAP to search an element for one dimensional array.

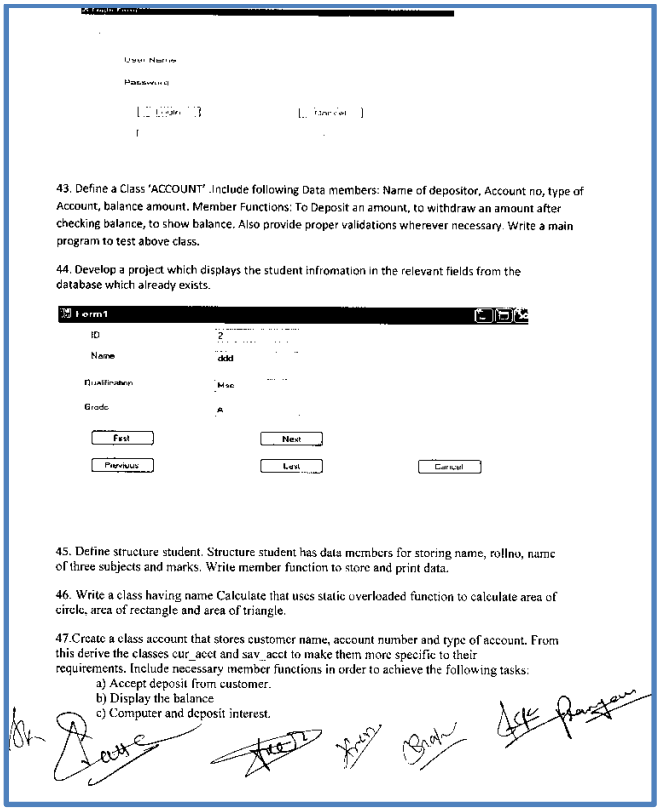
29. Design a menu such that it contain submenu such as Addition, Subtraction, Scalar Multiplication, Multiplication, Transpose of two metrics.
30. WAP to find greatest among three given number using user define procedures.
31. WAP to calculate factorial of a number using user define procedure.
32. WAP to check whether given number is neon or not using user define function.
33. WAP to check whether a given number is Niven or not using procedure.
34. WAP to check whether a given number is duck number or not.
35. WAP to check whether a given number is spy number or not.
36. WAP to check whether a given number .
37. Design the following application using radiobutton and checkbox :



38. Design an application to Create the Payroll form shown below. Number of hours must be entered as well as the appropriate rate.
Gross salary = rate * hours.
Net salary = gross salary - deductions.



39. Develop an application which is similar to notepad using menus.



43. Define a Class 'ACCOUNT' .Include following Data members: Name of depositor, Account no, type of Account, balance amount. Member Functions: To Deposit an amount, to withdraw an amount after checking balance, to show balance. Also provide proper validations wherever necessary. Write a main program to test above class.

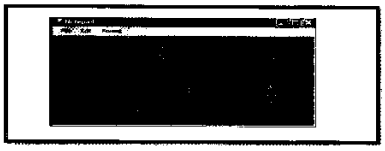
44. Develop a project which displays the student infromation in the relevant fields from the database which already exists.

45. Define structure student. Structure student has data members for storing name, rollno, name of three subjects and marks. Write member function to store and print data.

46. Write a class having name Calculate that uses static overloaded function to calculate area of circle, area of rectangle and area of triangle.

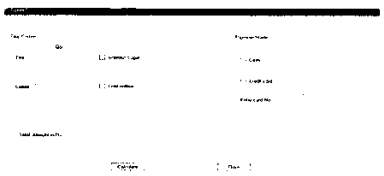
47.Create a class account that stores customer name, account number and type of account. From this derive the classes cur_acct and sav_acct to make them more specific to their requirements. Include necessary member functions in order to achieve the following tasks:

a) Accept deposit from customer.
b) Display the balance
c) Computer and deposit interest.



40. Develop an application for facilitating purchasing order

41. Develop an application for billing system in coffee shop



42. Develop an application which is similar to login form

d) Permit withdrawal and update the balance.
e) Check for the minimum balance, impose penalty, necessary and update the balance.

48. Create a class circle with data member radius; provide member function to calculate area. Derive a class sphere from class circle; provide member function to calculate volume. Derive class cylinder from class sphere with additional data member for height and member function to calculate volume.

49. Consider an example of declaring the examination result. Design three classes:- student, exam and result. The student class has data members such as that representing roll number, name of student. Create the class exam, which contains data members representing name of subject, minimum marks, maximum marks, obtained marks for three subjects. Derive class result from both student and exam classes. Test the result class in main function.

50. WAP that implements the Concept of Encapsulation.

51. WAP to demonstrate concept of Polymorphism (function Overloading and constructor Overloading).

52. Create a class Student having data members to store roll number, name of student, name of three subjects, max marks, min marks, obtained marks. Declare an object of class student. Provide facilities to input data in data members and display result of student.

53. Create a class Student having data members to store roll number, name of student, name of three subjects, max marks, min marks, obtained marks. Declare array of object to hold data of 3 students. Provide facilities to display result of all students. Provide also facility to display result of specific student whose roll number is given.

54. Create a class array having an array of integers having 5 elements as data member provide following facilities:
a) Constructor to get number in array elements.
b) Sort the elements.
c) Find largest element
d) Search for presence of particular value in array element.

55. WAP to display records of a table using dataadapter and code for buttons to move at first record, next record, previous record, last record in the table.

56. Create a table for employee and write a program using **Dataset** to add, delete, edit & navigate records.

57. WAP to access a database using **ADO.net &** display a key column in the combo box or list box when an item is selected in it, its corresponding records is shown in **Datagridcontrol.**

- Synopsis of the project
- Main Report
  - ✓ Objectives & Scope of the project
  - ✓ Theoretical Background of Project
  - ✓ Definition of problem
  - ✓ System Analysis & Design
  - ✓ System Planning (PERT Chart)
  - ✓ Methodology adopted, system Implementation & Detail of Hardware & Software used
  - ✓ System maintenance & Evaluation
  - ✓ Cost and benefit Analysis
  - ✓ Detailed Life Cycle of the project
    - o ERD,DFD
    - o Input and Output Screen Design
    - o Process involved
    - o Methodology used for testing
    - o Test Report, Printout of the code sheet
  - ✓ User/Operational Manual- including security aspects, access rights, back up, Controls etc.
  - ✓ Conclusion
  - ✓ References
  - ✓ Soft copy of the project on CD

Formats of various certificates and formatting styles are as:

1. **Project report Cover Format**:

A

Project Report

On

Title of the Project Report

(Times New Roman.Italic, Font Size=24)

Submitted in partial fulfillment of the requirements for the award of degree

Bachelor of Computer Application

From

Pt.Ravishankar Shukla University Raipur (C.G.)

(Bookman Old Style, 16 Point, Center)

Year : xxxx

Logo of college

Guide

(Guide Name)

Submitted by:

(Student's Name)

Roll No:

Submitted to

(College Name)

Pt.Ravishankar Shukla University Raipur (C.G.)

2. Certificate of Approval by Head of the Department in letter head

CERTIFICATE OF APPROVAL

This is to certify that the Project work entitled " _____ " is carried out by Mr/Ms/Mrs _____ , a student of BCA – III year at **(College Name)** is hereby approved as a credible work in the discipline of Computer Science & Information Technology for the award of degree of **Bachelor of Computer Application** during the year _____ **from Pt. Ravishankar Shukla University, Raipur (CG).**

(Head Name)

4. **Certificate from the Guide in letter head**

CERTIFICATE

This is to certify that the Project work entitled " _____ " Submitted to the **(College Name)** by Mr/Ms/Mrs _____ Roll No_____, in partial fulfillment for the requirements relating to nature and standard of the award of **Bachelor of Computer Application** degree by **, Pt. Ravishankar Shukla University, Raipur (CG)** for the academic year 20___ - 20___ .

This project work has been carried out under my guidance.

(Guide Name)

5. Certificate of the Company or Organisation from where the Project is done from the Project Manager or Project guide.

6. Certificate of evaluation in the department letter head

CERTIFICATE OF EVALUATION

This is to certify that the Project work entitled " _____ " is carried out by Mr/Ms/Mrs _____ , a student of BCA – III year at **(College Name),** after proper evaluation and examination, is hereby approved as a credible work in the discipline of Computer Science & Information Technology and is done in a satisfactory manner for its acceptance as a requisite for the award of degree of **Bachelor of Computer Application** during the year _____ from **Pt. Ravishankar Shukla University, Raipur (CG).**

Internal Examiner **External Examiner**

7. Declaration of Student / Self Certificate

DECLARATION

This to certify that the project report entitled "_____", which is submitted by me in the partial fulfillment for the award of the degree of **Bachelor of Computer Application, (College Name),** comprises the original work carried out by me.

I further declare that the work reported in this project has not been submitted and will not be submitted, either in part or in full for the award of any other degree or diploma in this Institute or any other Institute or University.

Place :

Date :

(Name)

(Roll No)

Pt. Ravishankar Shukla University Raipur (CG)

Proposed Marking Scheme for BBA Course
Academic Session 2015-16
Course Content of BBA

SEMESTER ONE	Internal Marks	Sem. Exam Marks	Total Marks
101. English	10	90	100
102. Computer Application	10	90	100
103. Business Mathematics	10	90	100
104. Principles of Management	10	90	100
105. Financial Accounting	10	90	100
SEMESTER TWO			
106. Hindi	10	90	100
107. Business Economics	10	90	100
108. Business Statistics	10	90	100
109. Cost Accounting	10	90	100
110. Environmental Studies	10	90	100
SEMESTER THREE			
111.Managerial Economics	10	90	100
112.Business Communication	10	90	100
113.Business Laws	10	90	100
114.Business and Environment	10	90	100
115.Management Information System (MIS)	10	90	100
SEMESTER FOUR			
116.Organisational Behaviour	10	90	100
117.Marketing Management	10	90	100
118.HRM	10	90	100
119.Financial Management	10	90	100
120.Production Management	10	90	100
121 Comprehensive Viva	10	90	100
SEMESTER FIVE			
122.Marketing Research	10	90	100
123.Quantitative Techniques	10	90	100
124.Sales and Advertisement Management	10	90	100
125.Investment Management	10	90	100
126.Material Management	10	90	100
SEMESTER SIX			
127.Business Policy and Strategy	10	90	100
128.Enterprenuership and Small Business Management	10	90	100
129.Business Taxation	10	90	100
130. Business Ethics and Social Responsibility	10	90	100
131. Project Report and Viva –Voce	10	90	100

Semester-VI

Project Report and Viva –Voce (131)

Research report has to be an empirical work. It is to be started from the beginning of the six semester under the guidance of faculties of the college. The topics of the research project is to be finalised with the consultation of the faculty guide. The project will be evaluated both by internal of the college and external which is to be decided by the university.

Marks Allotment for BBA Course:

Out of 10 marks allocated for internal assessment for each paper:

i. 3 marks are to be assigned for class test
ii. 3 marks are to be assigned for assignment/seminar presentation
iii. 4 marks are to be assigned for attendance.
iv. The marks for attendance shall be as follows:

i.	More than 65% but less than 75%	1 Marks
ii.	70% or more but less than 75%	2 Marks
iii.	75% or more but less than 80%	3 Marks
iv	80% or more but less than 85%	4 Marks

For BBA VI Semester Project report marks are to be sent in following format:

Form No. C-10 FOIL/COUNTER FOIL

Pt. Ravishankar Shukla University,

RAIPUR - 492010 (C.G.)

_____ Examination 20

Practical Viva-Voce/Dessertation Examination in _____

Class _____ (Subject) _____

Centre _____

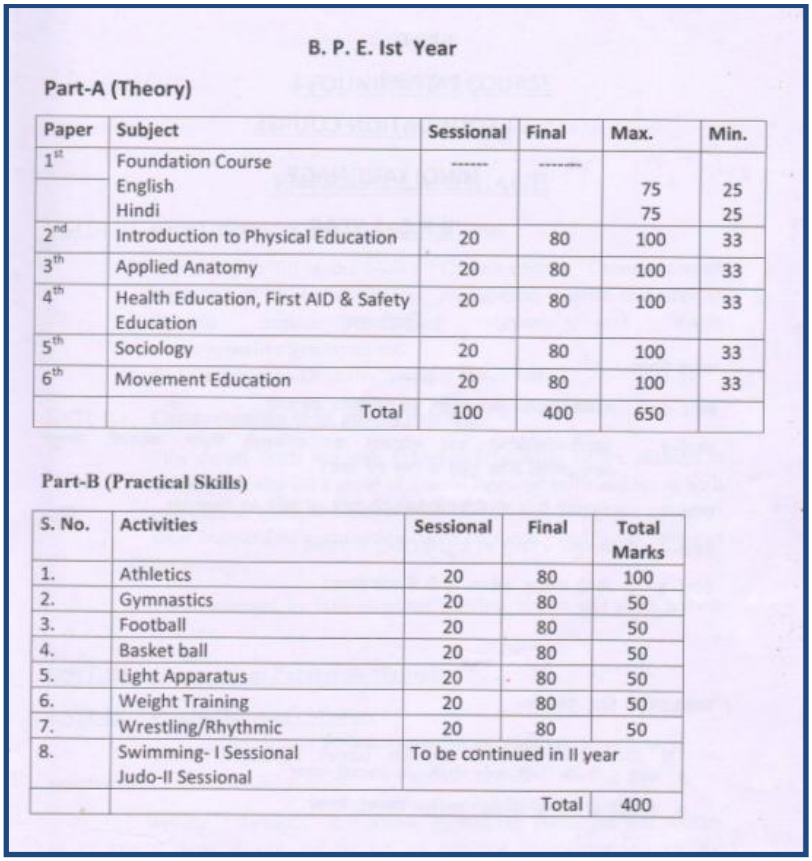
Date on which Examination was held _____

No. of Candidates Examined _____ Maximum Marks _____

S.NO	Roll No.	Enrolment No.	Name of Candidate	Project Report (90)	Total Marks allotted	
					In Figures	In words

H.O.D.
Commerce and Management Dept.
St.Vincent Pallotti College,Raipur

B.P.E 1st Year



B. P. E. Ist Year

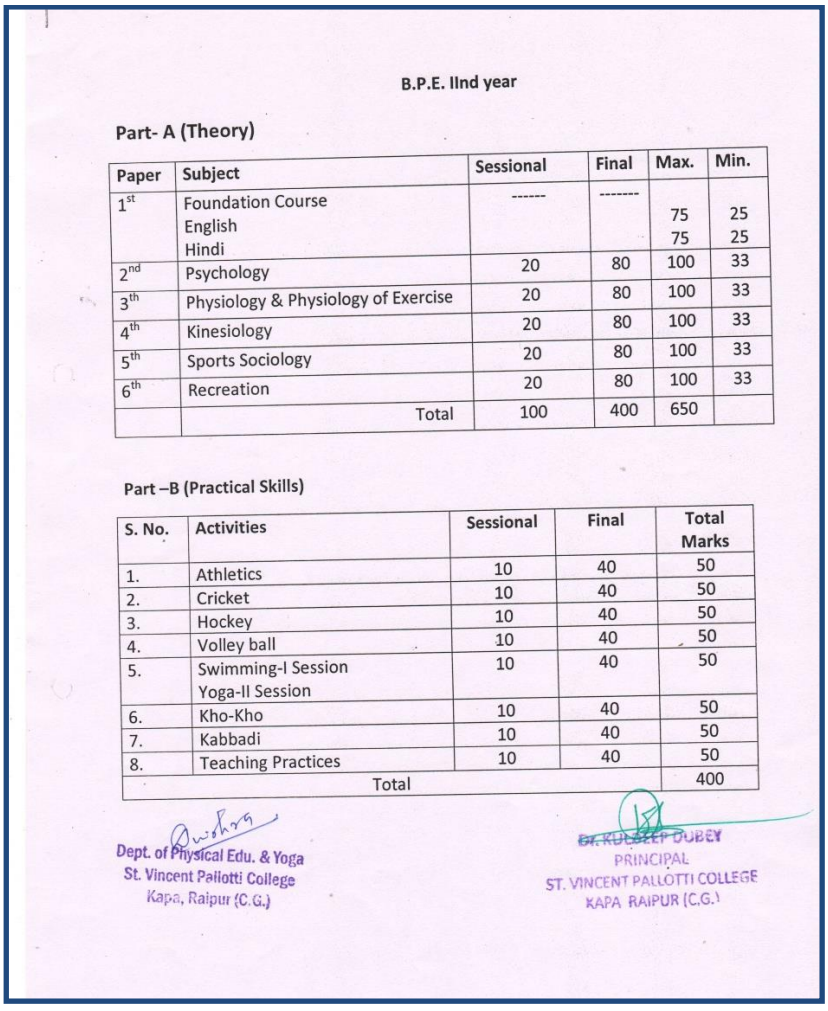
Part-A (Theory)

Paper	Subject	Sessional	Final	Max.	Min.
1st	Foundation Course	------	-------		
	English			75	25
	Hindi			75	25
2nd	Introduction to Physical Education	20	80	100	33
3th	Applied Anatomy	20	80	100	33
4th	Health Education, First AID & Safety Education	20	80	100	33
5th	Sociology	20	80	100	33
6th	Movement Education	20	80	100	33
	Total	100	400	650	

Part-B (Practical Skills)

S. No.	Activities	Sessional	Final	Total Marks
1.	Athletics	20	80	100
2.	Gymnastics	20	80	50
3.	Football	20	80	50
4.	Basket ball	20	80	50
5.	Light Apparatus	20	80	50
6.	Weight Training	20	80	50
7.	Wrestling/Rhythmic	20	80	50
8.	Swimming- I Sessional Judo-II Sessional	To be continued in II year		
			Total	400

BPE II Year



B.P.E. IInd year

Part- A (Theory)

Paper	Subject	Sessional	Final	Max.	Min.
1st	Foundation Course	------	-------		
	English			75	25
	Hindi			75	25
2nd	Psychology	20	80	100	33
3th	Physiology & Physiology of Exercise	20	80	100	33
4th	Kinesiology	20	80	100	33
5th	Sports Sociology	20	80	100	33
6th	Recreation	20	80	100	33
	Total	100	400	650	

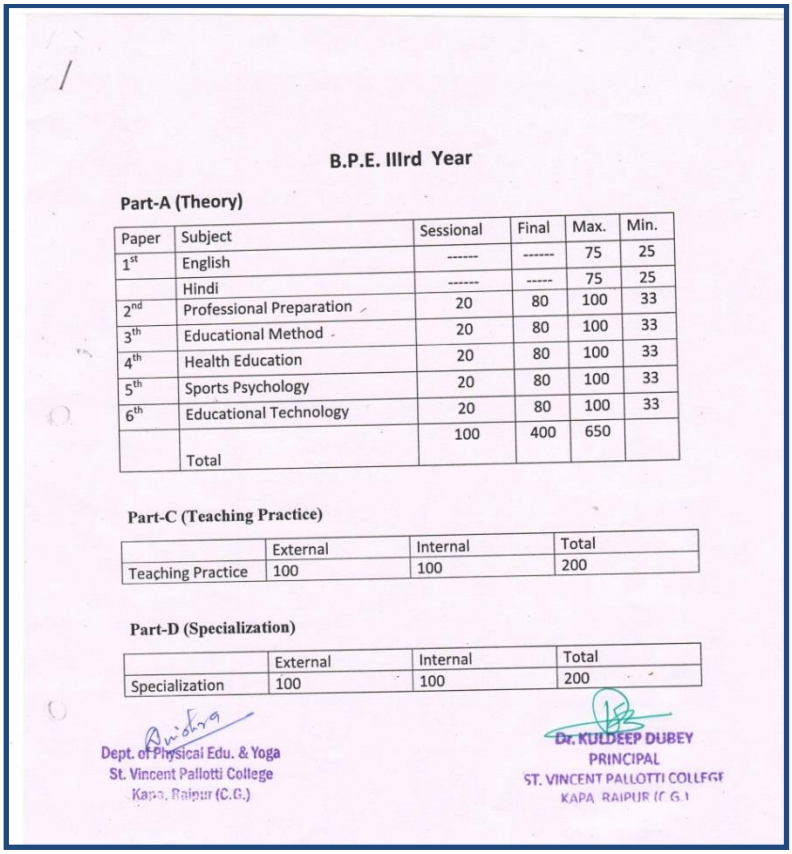
Part –B (Practical Skills)

S. No.	Activities	Sessional	Final	Total Marks
1.	Athletics	10	40	50
2.	Cricket	10	40	50
3.	Hockey	10	40	50
4.	Volley ball	10	40	50
5.	Swimming-I Session Yoga-II Session	10	40	50
6.	Kho-Kho	10	40	50
7.	Kabbadi	10	40	50
8.	Teaching Practices	10	40	50
Total				400

Dept. of Physical Edu. & Yoga
St. Vincent Pallotti College
Kapa, Raipur (C.G.)

DR. KULDEEP DUBEY
PRINCIPAL
ST. VINCENT PALLOTTI COLLEGE
KAPA RAIPUR (C.G.)

BPE III Year



B.P.E. IIIrd Year

Part-A (Theory)

Paper	Subject	Sessional	Final	Max.	Min.
1st	English	------	------	75	25
	Hindi	------	-----	75	25
2nd	Professional Preparation	20	80	100	33
3th	Educational Method	20	80	100	33
4th	Health Education	20	80	100	33
5th	Sports Psychology	20	80	100	33
6th	Educational Technology	20	80	100	33
	Total	100	400	650	

Part-C (Teaching Practice)

	External	Internal	Total
Teaching Practice	100	100	200

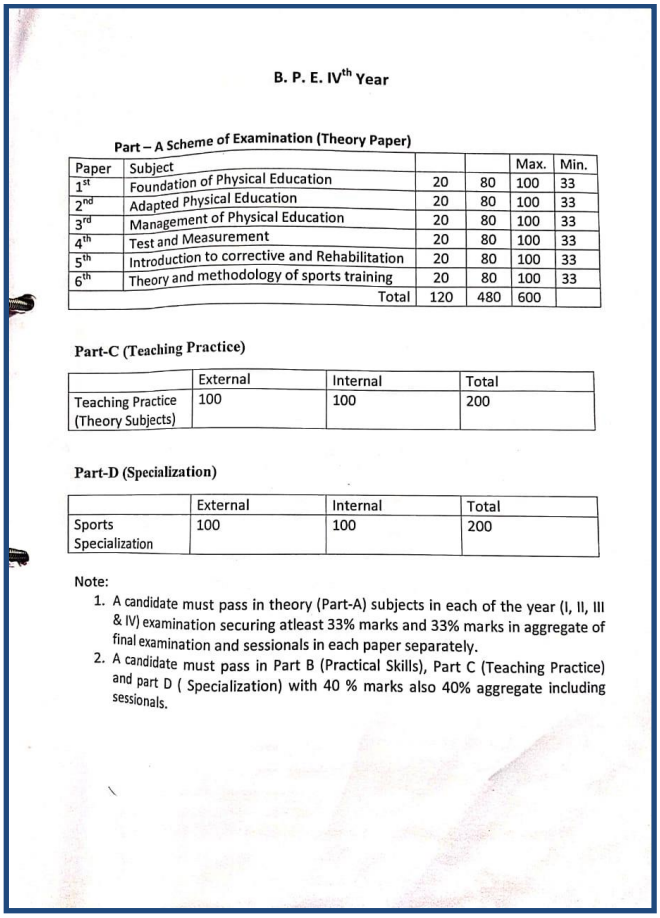
Part-D (Specialization)

	External	Internal	Total
Specialization	100	100	200

Dept. of Physical Edu. & Yoga
St. Vincent Pallotti College
Kapa, Raipur (C.G.)

Dr. KULDEEP DUBEY
PRINCIPAL
ST. VINCENT PALLOTTI COLLEGE
KAPA, RAIPUR (C.G.)

BPE IV Year



B. P. E. IV th Year

Part – A Scheme of Examination (Theory Paper)

Paper	Subject			Max.	Min.
1st	Foundation of Physical Education	20	80	100	33
2nd	Adapted Physical Education	20	80	100	33
3rd	Management of Physical Education	20	80	100	33
4th	Test and Measurement	20	80	100	33
5th	Introduction to corrective and Rehabilitation	20	80	100	33
6th	Theory and methodology of sports training	20	80	100	33
	Total	120	480	600	

Part-C (Teaching Practice)

	External	Internal	Total
Teaching Practice (Theory Subjects)	100	100	200

Part-D (Specialization)

	External	Internal	Total
Sports Specialization	100	100	200

Note:

1. A candidate must pass in theory (Part-A) subjects in each of the year (I, II, III & IV) examination securing atleast 33% marks and 33% marks in aggregate of final examination and sessionals in each paper separately.
2. A candidate must pass in Part B (Practical Skills), Part C (Teaching Practice) and part D (Specialization) with 40 % marks also 40% aggregate including sessionals.