GOVT. D.B. GIRLS' P.G. (AUTONOMOUS)COLLEGE

RAIPUR CHHATTISGARH

SYLLABUS

OF

ADD-ON CERTIFICATE

2020-21

Theory

Part A

No.	Title	Marks		Total
		Max.	Min.	
Paper-I	101- Computer Fundamentals & Office Automation	50	17	50
Paper-II	102 Programming With "C "& Introduction to OOPs	50	17	50

Practical

Part B

	Name of The Practical	Marks	
		Max.	Min.
Practical-I	103 Practical ((Computer Fundamentals & Office Automation) & Programming With "C "& Introduction to OOPs)	50	17

APPROVED BY THE BOARD OF STUDIES ON

NAME	IN THE CAPACITY OF	SIGNATURE
Dr. MADHU SHRIVASTAVA	CHAIRMAN	
Dr. SANJAY KUMAR	SUBJECT EXPERT (University Nominee)	
Shri . RAJU KHUNTTEY	SUBJECT EXPERT (Principal Nominee)	
Mrs. RASHMI SENGUPTA	MEMBER OF THE DEPARTMENT	
Mrs. KIRAN DEWANGAN	MEMBER OF THE DEPARTMENT	
Ku.	EX-STUDENT	

Signature of Chairman   Signature of Member(Subject)

ADD-ON (Certificate Course)
SESSION :**2020-21**
PAPER - I
101- Computer Fundamentals & Office Automation

Maximum Marks: 50   Number of Units : V
 Minimum Marks: 17

Unit I

Introduction to Computer
1. What is Computer? Block diagram of computer. CPU, I/O Devices and Memory (RAM & ROM). Secondary storage devices (Hard disk, Floppy, Magnetic tap etc.).
2. Computer generations, Types of Computer- Analog, Digital, Hybrid & general & special purpose computer. Classification of computer – Micro, Mini, Mainframe & Super computer.

Unit II

Computer Software & Application
1. What is Software? Type of Software. Introduction of System software & application s/w.Generation of languages, Languages Vs Package
2. Type of Operationg System- Single User & Multi User Operationg System.
3. Function of operating system. DOS software, Internal & External DOS Commands, DOS editor.
4. Window Concept , Multitasking , Desktop, start menu, task bar, My Computer, Accessories, Creating folders, files, Deleting, Hiding , Recycle Bin & Network Neighborhood.
5. Booting Process & File System Structure, Booting Sequences, File Creation and Deletion concept for File System.

Unit III

Office Software: Word-Processing, Spreadsheets
Word: Creating ,Editing & Preview Documents, Formatting ,Advanced Features, Using Thesaurus , Mail Merge, Table & Charts Handling Graphics.
Excel: Worksheet Basics, Creating, Opening & moving in worksheet, working with Formula & cell referencing, Absolute & Relative addressing, working with ranges, formatting of worksheet, Graphic & Charts, Database, Function and Macros.

Unit IV

MS-Access
Creating and working with databases: Designing databases, Working with database objects, Working with Access files, retrieval of records in a data base file, modification, insertion & deletion of records, Sorting and Indexing, Working with controls & charts.

Unit V

Introduction to Internet Application
Concept of Internet, Application of Internet, Services on Internet, World Wide Web (www), Web Browser, and Internet search Engines: Gopher, Yahoo etc., Surfing the Internet, Electronic mail (e- mail), Internet Security Fire Walls, Type of Firewalls.

Suggested Book:-
1. Fundamental of IT   : - Chaten Shrivastava
2. Computer Fundamental   : - P. Sinha
3. Computer Fundamental   : - B. Ram

Signature of Chairman   Signature of Member(Subject)

ADD-ON (Certificate Course)
SESSION : **2020-21**
PAPER - II
102 Programming With "C "& Introduction to OOPs

Maximum Marks: 50   Number of Units : V
 Minimum Marks: 17

Unit 1

 Introduction to "C ", Character set, Identifiers & Keywords, Variables,
Variable initialization, Constants, Characters, Strings, Qualifiers, Program
structure.

Unit 2

Control Structure: - If-Statement, If-else, Nested If statements, Select case,
Loops – For-loop, While-loop, Do-while loop, Nested loops, Break Statement,
Continue Statement, Go to Statement.

Unit 3

Function: - User define & library function, Function Parameter, Recursive
Function.
Array: -   Array, Array initialization, One dimensional Array, Two & Three
dimensional array, Array of Structure .
Pointer: - definition & Use of Pointer, Address Operator, Array of Pointers.

Unit 4

Structure & Union: - What is structure, declaring & using structure,
structure initialization, Structure within structure, Union , difference b/w Union &
Structure.

Unit 5

 Introduction of C++, OOPs Concepts, Objects, Class, Polymorphism, Inheritance,
 Function & Operator Overloading, Characteristics of Object Oriented Programming
 Language, benefits of OOPs

Suggested Books:-

1. Let us C   : - Yashwant Kanitkar
2. Programming with C   : - SchAum's Series (Tata McGraw Hill)
3. Programming with C   : - K.R. Venugopal, Sudeep, Prasad

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ADD-ON (Certificate Course)
SESSION : **2020-21**
PAPER - III
103- Practical

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Maximum Marks: 50   Minimum Marks: 17

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Distribution of Marks

Sessional	-	**10**
Practical	-	**30**
Viva	-	**10**

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Note - Syllabus of Practical Exam - "**Visual FoxPro & Power Point**" is as follows, also the contents of **101 & 102** should be included for practical.

Visual FoxPro

Preparing Database files, access & retrieval of records in a data base file, inserting & deleting of records. Programming preliminaries. Sorting & Indexing. Development of programs Looping, Branching, report making.

Power Point

Creating a presentation, Modifying Visual elements, adding objects, working with charts and worksheets, applying transitions, animation & linking, preparing handouts, presenting a slide show.

List of Practicals:

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Office Automation

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Ms-Word

Character Formatting
1. Create a word document and perform the following functions.
   a) Draw a table having seven columns and six rows & create a
   Calendar of any month.
   b) Center the text vertically and horizontally. Shade the
   row. Change the font size appropriate.
   c) Insert a row in the top of the table merge it and insert a picture in it.
2. Create a word document and type the text as shown below:
   $$C_2H_5OH+PCI=C_2H_5CI+POCI_3+HCL$$
   $$4H_3PO_3=3H_3PO4+PH_3$$
   $$PCI_3+CI_3=PCI_5$$
   $$A^2-B^2=(A+B)(A-B)$$

Bullets And Numbering
3. Create a word document and write text and format as shown below
   1. Own house
      ● 2400 square feet living area
      ● Car shed available
   2. Car

● Maruti omni van
● 2010 model

Table

4. Create the following table

Admission 2012-13

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

Mail-merge

5. Using mail merge create a data source file that contains information about the data.
 a)The file should contain the following information: name, address, phone no, city.
 b) Enter at least 10 records. Sort it alphabetically by name.
 c) Create a main document wishing them diwali or dussera.And Merge the documen

Formatting and Frames

 6. Prepare a letter as shown below.
    To,
        The Principal,
         ABC College, XYZ Nagar,
         Raipur (C.G)
  Sub: - Leave.
    Respected Sir,
              This is to bring to your kind notice, that due to reasons below, I am unable
  to attend the college.
  As such, I request you to kindly grant me leave for_____.

                                    Your Faithfully
                      Thanking you.
   Raipur;   Signature_ _ _ _ _ _ _ _ _ _ _
   Dated: Name_ _ _ _ _ _ _ _ _ _ _ _ _
                                    Designation_ _ _ _ _ _ _ _ _ _

Ms-Excel

7. Create an attendance sheet. Having following fields: Name, Roll no, Total Days
   of attendance, Present, Percentage Of attendance. (At least enter 10 records)
    a)Sort the data by name or roll no.
    b)Fill the total days of present, and then calculate the percentage by applying formula.
    c)Draw a pie chart based on total present attendance & percentage.

 8. Create the following worksheet and save the worksheet as wage.xls

Name	Basic (monthly)	HRA (10% of	DA (17% of	Total Salary	Bonus (Rs)	Total Salary	% (Increase)

	(Rs)	Basic)	Basic)	(2009)		(2010)	
Aaaa	8000						
Bbbb	6200						
Cccc	5550						
Dddd	5000						

 (i) Calculate the Total salary as sum of Basic salary,HRA,DA for each employee for 2009.
 (ii) Calculate total salary for Year 2010 as sum of salary of 2009 and bonus.
 (iii) Calculate % increase in salary from 2009 to 2010

9. 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-10	7000		
E002	Manoj	4-Mar-98	4800		
E003	Preeti	6-Mar-09	8500		
E004	Sumia	8-Mar-06	6500		

(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.

10. Create an employee payroll datasheet. Having following fields: Name, Emp_ID,
        Basic salary, Hra, Da, Pf, Total Salary. (At least enter 10 records)
         Calculate Hra, Da, Pf and total salary for each employee:
         Hra- 20% of basic salary. Da- 28% of basic salary.
         Pf -10% of basic salary. Draw a column chart based on Emp_Name & Total
salary.
11. Create bar chart with given data
          2006   2007   2008
Tea   19   23   25
Coffee   22   24   22
Sugar   45   40   45
(i) Provide heading production detail.
(ii) Provide x axis title; lacks metric tone.
(iii) Provide y axis title; year.

12. Create a table with column heading as shown below and perform data
      Entry of records.

Zone	Department	Employee	Salary
West	Marketing	Mukesh	10500
East	Sales	Reena	20000
South	Marketing	Sunita	5500
North	Marketing	Anju	25000
South	Sales	Neeraj	8000
North	Sales	Ajay	8000
South	Marketing	Manisha	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.

Ms-Powerpoint

13. Create a power point presentation.

Select 6 slides get a picture and some text in it, copy the content of first slide in all slides . Apply different animation in all slides.

14. Create a power point presentation about any three courses available in a college.

15. Create a power point presentation on Computer fundamentals

(i) Hide one slide.

(ii) Add hyperlink to one of the slide.

Ms-Access

16.Create a spread sheet using these options in Ms-Access.

(i) Create table in design view.

17.Create a spread sheet using these options in Ms-Access.

(i) Create table by using wizard.

(ii) Create table by entering data.

18. Creating a table and perform these operations.

(i) Adding fields to the table and save the new table.

(ii) Changing the field order.

(iii) Sorting on a single field.

C & C++

INPUT/OUTPUT & OPERATORS /EXPRESSIONS

1.Write a Program to add, multiply, subtract and divide two numbers.

2.Write a program to swap the two numbers third variable.

3.Write a program to convert Temperature Fahrenheit to Centigrade.

4.Write a program to swap the two numbers without using third variable

5.Write a program to calculate the area and parameter of a circle.

6. Write a program to calculate the *simple interest and compound interest.*.

 BRANCHING

7.Write a Program to check whether a no is even or odd.

8.Write a Program to demonstrate the use of **break continue and goto.**

9.Write a program to find out the greatest variable amongst 3 variables.

10.Write a program to find out the smallest variable using ternary operator.

11.Write a program to check the given year is leap or not.

12.Write a Program to display division using *switch case.*

LOOPING

13.Write a Program to calculate the sum of all digits of a given number using while loop.

14.Write a program to generate the following pattern.

*	1	1 2 3
* *	1 2	1 2
* * *	1 2 3	1

15.Write a Program to display Fibonacci series.

16.Write a program to find out whether a number is prime no or not.

17. WAP to display a *table* of any number.

  ARRAYS

18.Write a Program to scan and print the array of size 5.

19.Write a Program to display table of any no using array.

20.Write a program to find out the greatest and smallest element in 1-D array

21.Write a program to addition and subtraction of two matrices.

22.Write a program for displaying Diagonal matrix.

String

23.Write a program to check the entered string is palindrome or not.

24.Write a program to find the number of vowels in any string.

Pointer

25.Write a Program to swap two numbers using pointers.

Function

26.Write a program to find out any number factorial using function.

27.Write a program to find out any number factorial using recursion.

28.Write a program to swap (interchange) the value using call by value and call by references .

Structure

29.Write a program to create record of student using structure.

C++

30.Write a C++ Program demonstrating *inline function.*

31.Write a program to find out whether number is even or odd using class.