



Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as deemed to be university under section 3 of UGC Act 1956, vide notification No.F.9-5/2000-U.3)

Ref: VAC02/BSC/ARTS/SPL/2022

SCHOOL OF BASIC SCIENCE

Permission Letter

Date: 02/11/2022

From

Dr.S.Ramki

Assistant Professor

Department of Mathematics and Statistics

School of Basic Sciences

BIHER

To

The HOD

Department of Mathematics

School of Basic Sciences

BIHER

Respected Sir

Sub – Permission to conduct value added courses - reg.

I wish to inform you that, as it is decided to conduct the value added courses to supplement the curriculum to make students better prepared to meet industry demands as well as develop their own interests and aptitudes. The eligibility of this course is open for UG students from department of Mathematics and Statistics in association with INDIRA GANDHI MEDICAL COLLEGE AND RESEARCH INSTITUTE, PONDICHERRY[IGMC & RI]. So please permit us to conduct the value added course on Aptitude and Reasoning from 12.12.2022 to 06.03.2023.

Thanking you.

HOD



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SCHOOL OF BASIC SCIENCE

Circular

Date: 07/11/2022

Sub: Organising Value added Course: PYTHON PROGRAMMING

With reference to the above mentioned subject, we bring it to your notice that School Of Basic Science, Faculty of Arts & Science, Bharath Institute of Higher Education & Research is organising “PYTHON PROGRAMMING”. The syllabus and registration form are enclosed below.

The candidates those who are interested to join must fill the registration form and submit to the HOD, on or before 12.12.2022. The Registration form received after the mentioned date shall not be entertained under any circumstances.

Head of the Department

Head of the Department
Department of Mathematics
Faculty of Arts & Science

BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act. 1956)
Chennai-600 073. INDIA.

Dean

Dean-Faculty of Arts & Science
Bharath Institute of Higher Education & Research
(Declared as Deemed to be University U/S 3 of UGC Act. 1956)
Chennai-600 073. INDIA

Encl: A copy of Syllabus & Registration form

Copy To:

1. All HODs
2. Office File / Notice Board



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SCHOOL OF BASIC SCIENCE

Students Registration List

Value Added Course: **PYTHON PROGRAMMING**

S.NO	REG.NO	NAME OF THE CANDIDATE
1	U20SA001	R. ADHITHYA
2	U20SA002	A. J. BALAJI
3	U20SA003	V. BALAJI
4	U20SA004	P. GUNALAN
5	U20SA005	S. HARISH
6	U20SA006	S. JAYASHREE
7	U20SA007	S. KARUPPUSAMY
8	U20SA008	P S LAVANTHI SUPRAJA
9	U20SA009	S. LOKESH MADHAVAN
10	U20SA010	K. R.MOHAN BABU
11	U20SA011	Y. PHILIP RAJ
12	U20SA012	S. PAVITHRAN
13	U20SA013	P. PRAKASHRAJ
14	U20SA014	PRITI SAHA
15	U20SA015	T. RAJKUMAR
16	U20SA016	K. RUBACHANDRAN
17	U20SA017	D. SANJAY
18	U20SA018	E. SANJAY
19	U20SA019	M. SANJAYKUMAR
20	U20SA020	K. SANKARANARAYANAN
21	U20SA021	R.SANTHOSH KUMAR
22	U20MA001	BHAVNA MEHRA
23	U20MA002	B. HARIPRIYA
24	U20MA003	J. MAHALAKSHIMI
25	U20MA004	K. A. PRAMILA RANI
26	U20MA005	T. PRASHANTHKUMAR
27	U20MA006	K. SANJAY
28	U20MA007	R. SARASWATHY
29	U20MA008	M. SHAHNAZ BEGUM
30	U20MA009	H. SHANOFAR
31	U20MA010	S. SIVA
32	U20MA011	M. MUNEES
33	P22SA001	AMUTHA M
34	P22SA002	ANNAM SOWMYA
35	P22SA003	AVINASH.B.J
36	P22SA004	CHRISTOPHER KINGSLY M
37	P22SA005	DEEPA B
38	P22SA006	DHARMARAJ . A

39	P22SA007	GAJALAKSHMI K
40	P22SA008	JENISHA M
41	P22SA009	KOKILA.A
42	P22SA010	LAVANYA R
43	P22SA011	MADHUMITHA S
44	P22SA012	MARY SHAMITHA S
45	P22SA013	PAVITHRA P
46	P22SA014	PRAVIN JOHN DAVID.M
47	P22SA015	RANJITH. K
48	P22SA016	SATHEESH KUMAR.R
49	P22SA017	SHARLI GIFTA G
50	P22SA018	SRINIVASAN.B
51	P22SA019	VIGNESH S
52	P22SA020	VIGNESHKUMAR V
53	P22SA021	VISHWA.N
54	P22MA002	T N ANSHIDA
55	P22MA003	Y DINESH
56	P22MA004	DIVAKAR SAHA
57	P22MA005	S. KANIMOZHI
58	P22MA006	T KUMARI
59	P22MA007	L R SANJANA KUMARI
60	P22MA008	SANTHIYA.M
61	P22MA009	SENEHA
62	P22MA010	SHARLIN G
63	P22MA011	SHREYA NAIR
64	P22MA012	SUBHAJIT HAZRA
65	P22MA014	SUVETHA G V
66	U21SA001	HARISH NEELASAN N
67	U21SA002	SAKTHI NIRANJAN G
68	U21SA003	SHAKILA K
69	U21SA004	VENUGOPAL R
70	U21SA005	BHAARGAV ANAND
71	U21SA006	SATHISH KUMAR K
72	U21MA001	DEVISRI S
73	U21MA002	KIRTHIKA M
74	U21MA003	SHERLIN JENIFER J
75	U21MA004	AKALYA M
76	U21MA005	JOHN SAMUEL L



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SCHOOL OF BASIC SCIENCE

Department of Mathematics and Statistics

Registration Form

Value Added Course: Course on Python Programming

Date: 09.02.2022

Name : S. Pavithran
Register Number : U205A012
Date of Birth : 12-09-2002
Gender : Male
Department : Mathematics and Statistics
Pursuing Year : ~~2021~~ 2023
Mobile Contact : 6380173744
Email ID : Pavithran0946@gmail.com
Course Applied : Course on Python Programming

S. Pavithran
Signature



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SCHOOL OF BASIC SCIENCE

Department of Mathematics and Statistics

Registration Form

Value Added Course: Course on Python Programming

Date: 09.02.2022

Name : PAULRAJ M
Register Number : P215A020
Date of Birth : 25.07.1999
Gender : MALE
Department : MATHEMATICS AND STATISTICS
Pursuing Year : 2021-2023
Mobile Contact : 9790110234
Email ID : paulraj95554@gmail.com
Course Applied : PYTHON PROGRAMMING

Paulraj
Signature

SCHOOL OF BASIC SCIENCE

VALUE ADDED COURSE: PYTHON PROGRAMMING

Unit-1:

Python Programming: Running code in the interactive shell – Input, processing and output – editing, saving, and running a script - Syntax Errors. Basic elements of Python - Data types – String literals – Escape sequences – String concatenation – Variables and Assignment statements – Comments. Expressions – Mixed mode arithmetic and type conversion - Control statements - Iteration.

Unit-2:

Functions: Calling a function through arguments and return values – Scoping – Global variables – Math module – Main module – Program format and structure - Strings and text files: Manipulating files and directories, os and sys modules. Text files: Reading / Writing text and numbers from / to a file - Creating and reading a formatted file (csv or tab-separated).

Unit-3:

String manipulations: Subscript operator – indexing - slicing a string. Strings and number system: Converting strings to numbers and vice versa - Binary, octal, hexadecimal numbers. Lists, tuples, and dictionaries: Basic list operators - Replacing, inserting, removing an element - Searching and sorting lists - Dictionary literals - adding and removing keys, accessing and replacing values - Traversing dictionaries.

Unit-4:

Design with functions:Hiding redundancy, complexity; arguments and return values; formal Vs actual arguments, named arguments. Program structure and design - Recursive functions –Abstract Data types and Classes – Inheritance – Multiple Inheritance - Static and Class Methods – Operator Overloading - Polymorphism - Handling Exceptions.

Unit-5:

Regular Expressions and Python – Plotting - Simple graphics and image processing: “Turtle” module - simple 2d drawing - colors, shapes - digital images, image file formats, image processing simple image manipulations with 'image' module - Applications in solving computational and statistical problems- User defined functions for Parametric and Non-parametric tests - Fitting of Distributions – Binary Logistic Regression.

Book for study:

Kenneth Lambert (2012), Fundamentals of Python: First Programs, Course Technology, USA.

Books for references:

1. Ceder, V. L (2010) The Quick Python Book, Second Edition, Manning Publication Co, Greenwich, USA.
2. Wes McKinney (2012), Python for Data Analysis, O'reilly, USA.
3. Alex Martelli (2006), Python in a Nutshell: A Desktop Quick Reference, O'reilly, USA.



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SCHOOL OF BASIC SCIENCE

Course Time Table

Value Added Course: PYTHON PROGRAMMING

Course Duration: 30 Hrs

S.No	Date	Time	Hour
1	12-12-2022	10.00-12.00 a.m	2
2	15-12-2022	2.00-4.00 p.m	2
3	19-12-2022	10.00-11.00 a.m	1
4	23-12-2022	2.00-4.00 p.m	1
5	27-12-2022	10.00-11.00 a.m	2
6	30-12-2022	2.00-4.00 p.m	1
7	02-01-2023	10.00-11.00 a.m	1
8	04-01-2023	2.00-4.00 p.m	2
9	09-01-2023	10.00-12.00 a.m	1
10	11-01-2023	2.00-3.00 p.m	1
11	16-01-2023	10.00-12.00 a.m	2
12	03-02-2023	2.00-3.00 p.m	1
13	08-02-2023	10.00-12.00 a.m	2
14	13-02-2023	2.00-4.00 p.m	2
15	17-02-2023	10.00-11.00 a.m	1
16	20-02-2023	10.00-12.00 a.m	2
17	23-02-2023	2.00-3.00 p.m	1
18	27-02-2023	10.00-11.00 a.m	1
19	03-03-2023	2.00-4.00 p.m	2
20	06-03-2023	10.00-12.00 a.m	2



SCHOOL OF BASIC SCIENCE

Lesson Plan

VAC: Course on PYTHON PROGRAMMING Course Duration:30 Hrs

S.No	Date	Topic	Time	Hrs
1	12-12-2022	Running code in the interactive shell – Input	10.00-12.00 a.m	2
2	15-12-2022	processing and output – editing, saving, and running a script - Syntax Errors	2.00-4.00 p.m	2
3	19-12-2022	Basic elements of Python - Data types – String literals – Escape sequences	10.00-11.00 a.m	1
4	23-12-2022	Expressions – Mixed mode arithmetic and type conversion - Control statements - Iteration.	2.00-4.00 p.m	1
5	27-12-2022	Functions: Calling a function through arguments and return values – Scoping – Global variables – Math module	10.00-11.00 a.m	2
6	30-12-2022	Main module – Program format and structure - Strings and text files	2.00-4.00 p.m	1
7	02-01-2023	Manipulating files and directories, os and sys modules	10.00-11.00 a.m	1
8	04-01-2023	Text files: Reading / Writing text and numbers from / to a file - Creating and reading a formatted file	2.00-4.00 p.m	2
9	09-01-2023	String manipulations: Subscript operator – indexing - slicing a string. Strings and number system	10.00-12.00 a.m	1
10	11-01-2023	Converting strings to numbers and vice versa - Binary, octal, hexadecimal numbers	2.00-3.00 p.m	1
11	16-01-2023	Lists, tuples, and dictionaries: Basic list operators - Replacing, inserting,	10.00-12.00 a.m	2
12	03-02-2023	adding and removing keys, accessing and replacing values - Traversing dictionaries.	2.00-3.00 p.m	1
13	08-02-2023	Design with functions:Hiding redundancy, complexity; arguments and return values; formal Vs actual arguments, named arguments	10.00-12.00 a.m	2
14	13-02-2023	Program structure and design - Recursive functions –Abstract	2.00-4.00 p.m	2
15	17-02-2023	Data types and Classes – Inheritance – Multiple Inheritance - Static and Class	10.00-11.00 a.m	1
16	20-02-2023	Methods – Operator Overloading - Polymorphism - Handling Exceptions	10.00-12.00 a.m	2
17	23-02-2023	Regular Expressions and Python – Plotting - Simple graphics and image processing:	2.00-3.00 p.m	1
18	27-02-2023	simple 2d drawing - colors, shapes - digital images, image file formats, image processing	10.00-11.00 a.m	1
19	03-03-2023	User defined functions for Parametric and Non-parametric tests	2.00-4.00 p.m	2
20	06-03-2023	- Fitting of Distributions – Binary Logistic Regression	10.00-12.00 a.m	2



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SCHOOL OF BASIC SCIENCE

Department of Mathematics and Statistics

Course Feedback form

Value Added Course : Course on Python Programming

Date: 06.02.2023

Course Title: Python Programming.

Name: S. Pavithran

Reg. No: UBA05A012

Department: Mathematics and Statistics

S.No	Particulars	1	2	3	4	5
(1. Very Unsatisfied 2. Unsatisfied 3. Neutral 4. Satisfied 5. Very Satisfied)						
1.	objectives of the course clear to you			✓		
2.	The course contents met with your expectations				✓	
3.	The lecture sequence was well planned					✓
4.	The lectures were clear and easy to understand					✓
5.	The teaching aids were effective					✓
6.	The instructors encourage interaction and were helpful				✓	
7.	The level of the course					✓
(1. Very poor 2. Poor 3. Average 4. Good 5. Excellent)						
8.	Overall rating of the course:	1	2	3	4	5
					✓	

Please give Suggestion for the improvement of the course:

Lab specialists could be improved.

S. Pavithran
Signature



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SCHOOL OF BASIC SCIENCE

Department of Mathematics and Statistics

Course Feedback form

Value Added Course : Course on Python Programming

Date: 06.03.2023

Course Title: PYTHON PROGRAMMING

Name: PAULRAJ M

Reg. No: P215A020

Department: MATHEMATICS AND STATISTICS

S.No	Particulars	1	2	3	4	5
(1. Very Unsatisfied 2. Unsatisfied 3. Neutral 4. Satisfied 5. Very Satisfied)						
1.	objectives of the course clear to you				✓	
2.	The course contents met with your expectations			✓		
3.	The lecture sequence was well planned				✓	
4.	The lectures were clear and easy to understand					✓
5.	The teaching aids were effective			✓		
6.	The instructors encourage interaction and were helpful				✓	
7.	The level of the course				✓	
(1. Very poor 2. Poor 3. Average 4. Good 5. Excellent)						
8.	Overall rating of the course:	1	2	3	4	5 ✓

Please give Suggestion for the improvement of the course:

Paulraj M
Signature



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SCHOOL OF BASIC SCIENCE
Department of Mathematics
VAC: PYTHON PROGRAMMING



Resource Person Details

Dr. N. Pukazhenth
Assistant Professor,
Department of Statistics,
Annamalai University,
Chidambaram.