𝕭harath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
[Declared as Deemed - to - be - University under section 3 of UGC Act 1956]

NAAC

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai , T.N – 600 073.

Requisition Letter

From   Date: 08.04.2022

Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
The Dean Engineering,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value added course on "**Laptop Assembling and Disassembling**" -Reg

      With reference to above subject, I would like to bring to your kind notice that, our department interested to   organize value added course on "**Laptop Assembling and Disassembling**" in our campus premises on **15/04/2022**.

45 students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing : **9 am to 4.30 pm**

      Submitted to Principal for approval to organize this value added course.

HOD/CSE

DEAN ENGINEERING

HEAD OF DEPARTMENT
Department of Computer Science & Engg.,
Bharath Institute of Higher Education & Research
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Chennai-600 073. INDIA

CIRCULAR

11.04.2022

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on Laptop Assembling And Disassembling for the benefit of II, III and IV year students. This course is scheduled from 15.04.2022 for 30hours which includes theory and practical. The timings are 1:30 PM to 4:30 PM

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	Name of the Faculty	Designation
1	Dr.KP.Kaliyamurthie	Professor
2	Mrs.C.Anuradha	Assistant Professor

Head of Department

To

Copy to CSE

Copy to IT

CERTIFICATE COURSE ON LAPTOP ASSEMBLING AND DISASSEMBLING

Date of Introduction of the Course: 15-04-2022

COURSE SYLLABUS

1. **Computer Basics – Introduction and History**
   Introduction & Definition of Computer, Block Diagram of computer, Classification of computer, Characteristics of Computers, Types of Languages and language translators, History and Generation of computers, Memory, Computer Software, Types of Softwares.

2. **Components and its parts** - Identifying the Important Hardware Components of PC.i.e., CPU, Motherboard, RAM, HDD, ODD,SMPS, K/B, Mouse, Monitor, Functions of above said components.

3. **Tools and Equipment** - Tools and equipment like brush, screw driver, air blower, voltage tester and pliers required for servicing computer.

4. **Fundamentals of Electricity** - About AC and DC, How AC is converted into DC in a Computer.

5. **SMPS** - About SMPS, Types of SMPS, Power stored in UPS, Components and Circuits inside the SMPS Unit.

6. **UPS (Uninterrupted Power Supply)** - Types of UPS (Offline/Line Interactive & Online), Working Principle of each type of UPS. Connecting, Maintenance and Troubleshooting.

7. **Assembling and dissembling PCs** - Assembling and Disassembling a PC, Precautions to be taken while assembling the PC.

8. **Introduction to BIOS / CMOS Setup, POST (Power on Self-Test)** - Introduction to BIOS/CMOS Setup, POST (Power On Self-Test), Demonstration of BIOS/CMOS Configuration (Date, Time, Enable/Disable Devices), Dual BIOS Feature, BIOS/CMOS Setup, Booting Sequence/Boot Order.

9. **Introduction to Operating System** - Definition and types of Operating Systems - MSDOS, Windows 9x/XP/Vista/7/8, Linux, MAC OS, Android, Process of Booting the Operating System, Win XP/Win 7. Activation and Automatic Updating procedures.

10. **Partitioning** - Partitioning of Hard Drive - Primary, Extended, Logical partitions using Partition Tools.

11. **Installation of Drivers and Software** - Installation of Operating System - Win XP/Win 7, Activation and Automatic Updating procedures, Device Driver Installation, Task Manager, Windows Registry, Control Panel, MS Config Utility, Windows Startup Applications Management, Installation of Application Softwares, Tools, Utilities, Uninstalling Applications / Softwares.

12. **Mother Board** - Definition, Architecture, Compatibility with CPU's, Chipsets and Brands,what is Chipset, what is FSB, what is Bus, CPU Sockets, Interface Ports used to connect different Peripherals, I/O Ports (PS/2, Serial, Parallel, USB, VGA, HDMI, Audio, Ethernet, etc.) Identifying Expansion Slots (PCI, AGP etc.), Power Form Factor.

13. **CPU** - Definition, Architecture, Speed, Types of CPU (XT and AT technologies) 32/64 Bit, Types processor technologies like Clock speed, Bus speed, Cache memory, Threading technologies, core technologies, IRQ & DMA Technologies Brands (Intel/AMD), CPU Series - x86, Pentium Series (4004,8008, 8085, 8086, 8088,80286,80386,80486,P1,P2,P3,P4),

14. **RAM / ROM** - Introduction to RAM, ROM, Cache Memory, Buffer Memory, Virtual Memory, Timeline (EDO, NON-EDO, SD, RD, DDR, DDR2, DDR3), Hybrid MemoryComparing and Installing RAM, Memory Module Form Factor.

15. **Hard Disk Drive** - Introduction to HDD, Types of HDD, Functioning of HDD, Interface Types (IDE or PATA, SATA, SCSI, SSD, PATA), Data storage technique (Tracks, Sectors, Cylinders,Cluster MBR, FAT Area, DIR Area, Zero Track,).

COURSE OBJECTIVES

In this course we plan to give students an overview of basic concepts and terminology related to Laptop Assembling AndDisassembling and an in-depth study into its enabling technologies to design and implement hardware. The main **objective** of this course is to introduce PC maintenance, upgrading, ... a system to help them determine the cause of a problem and how to **repair** it. ... Optical storage technologies to date; **Laptops** and their Technologies.Ourstudents will develop the skills needed to become a practitioner or carry out research projects in this domain.

Specifically, the course has the following objectives:

Students will learn

1. 1. Installation of all the Softwares with cope with different operating system.

2. Develop computer system configuration

3. Conduct diagnostics - testing and inspection

4. Have Knowledge of hardware components and latest development in the field

5. Conduct repair and maintenance of PC's Carry out installation of operating system and applications and have knowledge of Networking and system connectivity.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

CERTIFICATE COURSE ON LAPTOP ASSEMBLING AND DISASSEMBLING

Date of Introduction of the Course: 15-04-2022
The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN&AN).

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	15-04-2022(AN)	**1. Computer Basics – Introduction and History** Introduction & Definition of Computer, Block Diagram of computer, Classification of computer, Characteristics of Computers, Types of Languages and language translators, History and Generation of computers, Memory, Computer Software, Types of Softwares.
3,4	21-04-2022(AN)	**2. Components and its parts** - Identifying the Important Hardware Components ofPC. i.e., CPU, Motherboard, RAM, HDD, ODD,SMPS, K/B, Mouse, Monitor, Functions of above said components.
5,6	22-04-2022(FN)	**3 Tools and Equipment** - Tools and equipment like brush, screw driver, air blower, voltage tester and pliers required for servicing computer
7,8	22-04-2022(AN)	**4. Fundamentals of Electricity** - About AC and DC, How AC is converted into DC in a Computer.
9,10	28-04-2022(AN)	**5. SMPS** - About SMPS, Types of SMPS, Power stored in UPS, Components and Circuits inside the SMPS Unit.
11,12	29-04-2022(FN)	**6. UPS (Uninterrupted Power Supply)** - Types of UPS (Offline/Line Interactive & Online), Working Principle of each type of UPS. Connecting, Maintenance and Troubleshooting.
13,14	29-04-2022(AN)	**7 Assembling and dissembling PCs** - Assembling and Disassembling a PC, Precautions to be taken while assembling the PC
15,16	05-05-2022(AN)	**8 Introduction to BIOS / CMOS Setup, POST (Power on Self-Test)** - Introduction to BIOS/CMOS Setup, POST (Power On Self-Test), Demonstration of BIOS/CMOS Configuration (Date, Time, Enable/Disable Devices), Dual BIOS Feature, BIOS/CMOS Setup, Booting Sequence/Boot Order.

17,18	06-05-2022(FN)	9.Introduction to Operating System - Definition and types of Operating Systems - MSDOS, Windows 9x/XP/Vista/7/8, Linux, MAC OS, Android, Process of Booting the Operating System, Win XP/Win 7. Activation and Automatic Updating procedures.
19,20	06-05-2022(AN)	10.Partitioning- Partitioning of Hard Drive - Primary, Extended, Logical partitions using Partition Tools.
21,22	12-05-2022(AN)	11.Installation of Drivers and Software - Installation of Operating System - Win XP/Win 7, Activation and Automatic Updating procedures, Device Driver Installation, Task Manager, Windows Registry, Control Panel, MS Config Utility, Windows Startup Applications Management, Installation of Application Softwares , Tools, Utilities, Uninstalling Applications / Softwares.
23,24	13-05-2022(FN) 13-05-2022(AN)	12.Mother Board - Definition, Architecture, Compatibility with CPU's, Chipsets and Brands,what is Chipset, what is FSB, what is Bus, CPU Sockets, Interface Ports used to connect different Peripherals, I/O Ports (PS/2, Serial, Parallel, USB, VGA, HDMI, Audio, Ethernet, etc.) Identifying Expansion Slots (PCI, AGP etc.), Power Form Factor.
25,26	19-05-2022(AN) 20-05-2022(FN)	13.CPU - Definition, Architecture, Speed, Types of CPU (XT and AT technologies) 32/64 Bit, Types processor technologies like Clock speed, Bus speed, Cache memory, Threading technologies, core technologies, IRQ & DMA Technologies Brands (Intel/AMD), CPU Series - x86, Pentium Series (4004,8008, 8085, 8086, 8088,80286,80386,80486, P1, P2, P3, P4),
27,28	20-05-2022(AN) 26-05-2022(AN)	14.RAM / ROM - Introduction to RAM, ROM, Cache Memory, Buffer Memory, Virtual Memory, Timeline (EDO, NON-EDO, SD, RD, DDR, DDR2, DDR3), Hybrid Memory Comparing and Installing RAM, Memory Module Form Factor
29,30	27-05-2022(FN)	15.Hard Disk Drive - Introduction to HDD, Types of HDD, Functioning of HDD, Interface Types (IDE or PATA, SATA, SCSI, SSD, PATA), Data storage technique (Tracks, Sectors, Cylinders, Cluster MBR, FAT Area, DIR Area, Zero Track,).

COURSE COORDINATOR   HEAD OF THE DEPARTMENT

CERTIFICATE COURSE ON LAPTOP ASSEMBLING AND DISASSEMBLING
Date of Introduction of the Course: 15-04-2022
School of Computing
Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U14CS004	ABDUL RAZVI .M.K
2	U14CS015	ANKITA
3	U14CS023	ASIF NAZIR WANI
4	U14CS048	DIVYA RUPINI.B
5	U14CS085	LAKSHMI PRIYA.A
6	U14CS106	MUGANTH.R.
7	U14CS229	INDHU GOPALAKRISHNAN
8	U14CS705	SHABEEK ABUTHAHIR.S
9	U14CS114	NANDALA SWETHA
10	U14CS129	PIYALI CHAKRABORTHY.M
11	U14CS137	RAHUL HAWAIBAM
12	U14CS151	RAVIPATI SUBBARAYUDU
13	U14CS175	SHUBHAM
14	U14CS188	SUSINDHAR .P
15	U14CS202	VEMULA ANWAR
16	U15CS093	KM AYUSHI JAISWAL
17	U15CS094	KOLUKULURI ADITHYA RAGHAV VARMA
18	U15CS095	KONATALA PUSHPA
19	U15CS096	KONDURU PREM KUMAR
20	U15CS097	KONGARA KIRAN KUMAR
21	U15CS098	KOPPA SEKHAR SAI VISWAM
22	U15CS099	KOTHAPALLI ARYAN VARMA
23	U15CS100	KOTIPALLI SRI SAI SURYA PRASANTH
24	U15CS154	PERAM ANTONY

HEAD OF DEPARTMENT
Department of Computer Science & Engg.,
Bharath Institute of Higher Education & Research
(Declared as Deemed to be University u/s 3 of UGC Act 1956)
Chennai-600 073, INDIA

25	U15CS155	PERAM VENKATA KRISHNA REDDY
26	U15CS156	PERURI V S V KRISHNA MOHAN
27	U15CS157	POORVISHA M
28	U15CS159	PRADEEP YADAV
29	U15CS160	PRASAD ABHISHEK KUMAR
30	U15CS161	PRASHANT PATHAK
31	U15CS162	PRATHI VENKAT RANJITH KUMAR
32	U15CS164	PUJALA NARENDRA BABU
33	U15CS165	PULAGAM SAI PRATHAP REDDY
34	U15CS166	PULIMUNI HIMAJA
35	U15CS167	PULUKURI SASIDHAR
36	U15CS168	PUPPALLA SANDEEP KUMAR
37	U15CS169	PUTLURI ANURADHA
38	U15CS214	VEERELLA RUPAS CHOWDARY
39	U15CS215	VEESA SUDDEP
40	U15CS216	VEMSETTY ARUN SAHADEV
41	U15CS217	VERISETTY SUBBARAO
42	U15CS218	VETCHA VENKATA KRISHNA TEJA
43	U15CS219	VISNESH.B
44	U15CS220	VIGNESH KUMAR R.J
45	U15CS221	VIGNESHWARAN.M

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON LAPTOP ASSEMBLING AND DISASSEMBLING

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Science Engg.,
Bharath Institute of Higher Education & Research
(Declared as Deemed to be University u/S 3 of UGC Act, 1956)
Chennai-600 073, INDIA

Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE OF PARTICIPATION

This certificate is presented to

BHARATHI.V

For actively participating in the value added course "Laptop Assembling And Disassembling" Conducted by School of Computing, BIHER from 15.04.2022 to 27.05.2022

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year			*2022*					
Term			*Even Sem*					
Course Number								
Course Title			*Laptop Assembling and Dis assembling*					
Number of Credits								
Type of Course	Regular			Elective		Add-on	✓	

I.	Information on the Respondent: (Tick (√) Appropriately)

1.	Percentage of classes attended								
	0-20		20-40		40-60	✓	60-80		80-100

2.	Number of hours per week spent on the course (Other than lecture hours)								
	0-2		2-4		4-6	✓	6-8		8-10

3.	Preparation for the course by the student:	
	(i)	Have done part of this course earlier	yes
	(ii)	Has adequate prior exposure to the prerequisites	yes
	(iii)	Had to pickup relevant additional topics through concurrent study	yes
	(iv)	Have no exposure to the background material	yes

4.	The expectations for taking the course by the student are:	
	(a)	Enhance by skill base in the area of specializations	yes
	(b)	Get exposed to a relevant subject	yes
	(c)	Curiosity	yes
	(d)	Better Employment Opportunity	yes
	(e)	Complete Course requirements	yes
	(f)	To Improve CGPA	

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture			✓		
2.	Comment of the Subject			✓		
3.	Clarity of expression			✓		
4.	Level of preparation			✓		
5.	Level of interaction			✓		
6.	Accessibility outside the class			✓		
7.	Others (please specify			✓		

A: Excellent		B: Very Good		C: Good	✓	D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year				2022						
Term				Even sem						
Course Number										
Course Title				Laptop assembling and Disassembling						
Number of Credits										
Type of Course	Regular			Elective			Add-on			

I.	Information on the Respondent: (Tick (√) Appropriately)

1.	Percentage of classes attended									
	0-20		20-40		40-60	✓	60-80		80-100	

2.	Number of hours per week spent on the course (Other than lecture hours)									
	0-2		2-4		4-6		6-8		8-10	

3.	Preparation for the course by the student:		
	(i)	Have done part of this course earlier	Yes
	(ii)	Has adequate prior exposure to the prerequisites	Yes
	(iii)	Had to pickup relevant additional topics through concurrent study	Yes
	(iv)	Have no exposure to the background material	Yes

4.	The expectations for taking the course by the student are:		
	(a)	Enhance by skill base in the area of specializations	Yes
	(b)	Get exposed to a relevant subject	Yes
	(c)	Curiosity	Yes
	(d)	Better Employment Opportunity	Yes
	(e)	Complete Course requirements	Yes
	(f)	To Improve CGPA	

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture			✓		
2.	Comment of the Subject			✓		
3.	Clarity of expression			✓		
4.	Level of preparation			✓		
5.	Level of interaction			✓		
6.	Accessibility outside the class			✓		
7.	Others (please specify					

A: Excellent		B: Very Good		C: Good	✓	D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT