

Date: 23.09.2019

### **CIRCULAR**

Sub: Organising Value added Course: Plastic Working of Metallic Materials-reg.,

With reference to the above mentioned subject, we bring it to your notice that School of Basic Sciences, Bharath Institute of Higher Education & Research is organising Value added course "Plastic Working of Metallic Materials". The syllabus and registration form is enclosed below.

The candidates those who are interested to join must fill the registration form and submit to the Course Coordinator Dr. S. Anandhi, Department of Physics on or before 19.10.2019. The Registration form received after the mentioned date shall not be entertained under any circumstances.

Encl: A copy of Syllabus & Registration form

Copy To:

1.All HODs

2.Office File/ Notice Board

3. Course Coordinator

### Bharath Institute of Higher Education & Research School of Basic Sciences Lesson Plan

Va	lue Added Co	ourse: Plastic Working of Metallic Materials Cour	se Duration:30 H	Irs
S.No	Date	Торіс	Time	Hour
1	19/11/06	Introduction to Plastic Working of Metals	2.00-3.00p.m	1
2	19/11/07	Uniaxial Tension Test Analysis, Temperature effects in metal forming.	10.00-12.00p.m	1
3	19/11/08	Friction and Lubrication.	2.00-3.00p.m	1
4 5	19/11/11 19/11/12	Deformation zone + worked examples. Stresses at point & Theory of Plasticity.	10.00-12.00p.m	2
3	19/11/12	Slab Analysis. Slip Line Field Theory	2.00-4.00p.m	2
6	19/11/13	Upper Bound Theorem. Plasticity equations.	10.00-12.00p.m	2
7	19/11/14	Forging. Analysis of Forging. Forging Die Design consideration. Forging Load.	2.00-4.00p.m	2
8	19/11/15	Rolling of Metals. Analysis of Rolling.	10.00-12.00p.m	2
9	19/11/18	Strain rate in the deformation zone, Rolling mills, Prblem on rolling,	2.00-4.00p.m	1
10	19/11/19	Drawing of Rods, Wires and Tubes,	10.00-12.00p.m	
11	19/11/20	Analysis of Wire Drawing, Wire Drawing	2.00-4.00p.m	2
12	19/11/21	Tutorial Problems,	10.00-12.00p.m	2
13	19/11/22	Extrusion Process, Analysis of Extrusion.	2.00-4.00p.m	2
14	19/11/25	Introduction- Sheet deformation process,	10.00-12.00p.m	2
15	19/11/26	Deformation of sheet in plane stress	2.00-4.00p.m	2
16	19/11/27	Analysis of stamping, Instability in sheet metal forming,	10.00-12.00p.m	2
17	19/11/28	Deep drawing, Hydroforming	10.00-12.00p.m	2

### Bharath Institute of Higher Education & Research School of Basic Sciences Students Registration List

Value Added Course: Plastic Working of Metallic Materials

S.NO	REG.N0	NAME OF THE CANDIDATE	DEPARTMENT
1	U19PS001	RAJESH A	PHYSICS
2	U19PS002	NISHALINI R	PHYSICS
3	U19PS003	RAJA S .	PHYSICS
4	U19PS004	ANANDU S	PHYSICS
5	U19PS005	SAJITHA M	PHYSICS
6	U19PS006	KEERTHIKA P	PHYSICS
7	U19PS007	THARUN PRASATH D	PHYSICS
8	U19PS008	NISHANTHI R	PHYSICS
9	U19PS009	MATHAN KUMAR M	PHYSICS
10	U19PS010	ARAVIND A	PHYSICS
11	U19PS011	SHANMATHI M	PHYSICS
12	U19PS012	RANGARAMANUJAM N.S	PHYSICS
13	U19PS013	KALAIARASI R	PHYSICS
14	U19PS014	VIVEKANANDAN M	PHYSICS
15	U19PS015	RATHISH M	PHYSICS
16	U19PS016	JOHN PETER A	PHYSICS
17	U19PS017	MEENAKSHI G	PHYSICS
18	U19PS018	SURAJ RAJAN R	PHYSICS
19	U19PS019	SURIYA E	PHYSICS
20	U19PS020	MONISH KUMAR A	PHYSICS
21	U19PS021	SARAVANAN S	PHYSICS
22	U18PS008	SREE LAKSHMI PRIYAS	PHYSICS
23	U18PS009	NAMBIRAJAN S	PHYSICS
24	U18PS010	MOHAMED AZHARUDEEN M	PHYSICS
25	U18PS012	SANGEETHA V	PHYSICS
26	U18PS013	PURUSHOTHAMAN R	PHYSICS
27	U18PS014	KARUNYA G A	PHYSICS
28	U18PS015	KOKILA P	PHYSICS
29	U18PS017	ANTHA L	PHYSICS
30	U18PS018	SARANRAJ C	PHYSICS

### Bharath Institute of Higher Education & Research School of Basic Sciences

### Course TimeTable

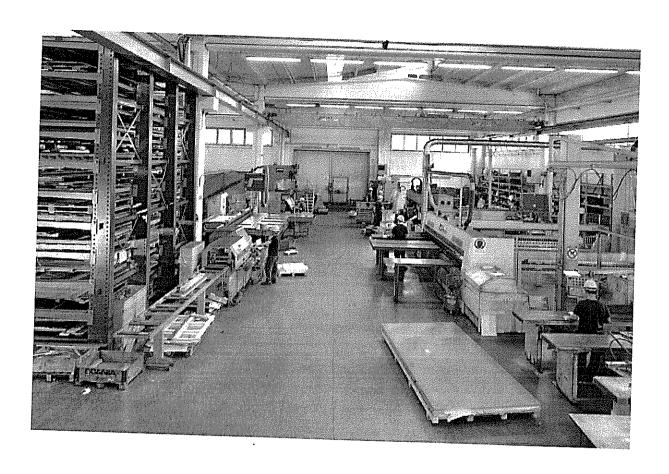
Value Added Course: Plastic Working of Metallic Materials

Course Duration:30 Hrs

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5	19/11/12	2.00-4.00p.m	2
6	19/11/13	10.00-12.00p.m	2
7	19/11/14	2.00-4.00p.m	2
8	19/11/15	10.00-12.00p.m	2
9	19/11/18	2.00-4.00p.m	1
10	19/11/19	10.00-12.00p.m	2
11	19/11/20	2.00-4.00p.m	2
12	19/11/21	10.00-12.00p.m	2
13	19/11/22	2.00-4.00p.m	2
14	19/11/25	10.00-12.00p.m	2
15	19/11/26	2.00-4.00p.m	2
16	19/11/27	10.00-12.00p.m	2
17	19/11/28 ·	10.00-12.00p.m	2

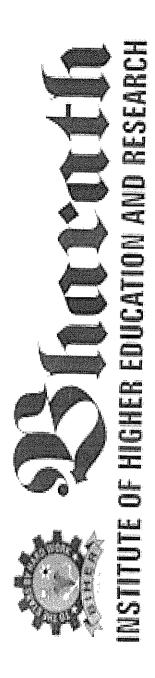


# Value Added Course: Plastic Working of Metallic Materials



# Resource Person Details

Dr.L.Rajesh Asst. Prof and Head, Department of Physics, Sri Sankara Arts & Science College, Kanchipuram



# School of Basic Sciences

# Certificate of participation

This is to certify that

Karunya G A

has participated in the Course on Plastic Working of Metallic Materials, conducted by the school of Basic Sciences, BIHER from June November 06, 2019 to November 28, 2019.

S. Arandha

Dr.S. Anandhi Course Co-ordinator

Or. E. Thirumal Convener

Dr. A. Muthukumaran Dean- Arts & Science



### Value Added Course

# Plastic Working of Metallic Materials

### **Syllabus**

Introduction to Plastic Working of Metals, Uniaxial Tension Test Analysis, Temperature effects in metal forming. Friction and Lubrication. Deformation zone + worked examples. Stresses at point & Theory of Plasticity. Slab Analysis. Slip Line Field Theory

Upper Bound Theorem. Plasticity equations. Forging. Analysis of Forging. Forging Die Design consideration. Forging Load. Rolling of Metals. Analysis of Rolling.

Strain rate in the deformation zone, Rolling mills, Prblem on rolling, Drawing of Rods, Wires and Tubes, Analysis of Wire Drawing, Wire Drawing: Tutorial Problems, Extrusion Process, Analysis of Extrusion.

Introduction- Sheet deformation process, Deformation of sheet in plane stress, Analysis of stamping,
.
Instability in sheet metal forming, Deep drawing, Hydroforming



### **Registration Form**

# Value Added Course: Plastic Working of Metallic Materials

Date: bu, [ [ ]

Name

: Keerthika. P

Reg.No.

:UMPSOOG

Date of Birth

: 16/11/2000

Gender

: Female

Department

: phycis

Year

2019

Contact No.

: 9445669307

Email ID: this graphy in Smail con

Course Applied For: plantic working of Metallic

Materials.



# Course Feedback form

# Value Added Course

# Course Title:Plastic Working of Metallic Materials

Date: 28.11.2019

Name: Leathira P RegNo: VIFPS 006 Department: physics

S.No	Particulars	1	2	3	4	5
	(1. Very Unsatisfied 2. Unsatisfied 3. Neutral 4. Satisfied	15. V	erv S	Satic	fied	1
1.	Ojectives of the course clear to you	7	, <u>, , , , , , , , , , , , , , , , , , </u>	, atis		
2.	Course contents met with your expectations			<del> </del>	├	./
3.	Lecture sequence was well planned			<del>                                     </del>	-	<del>-</del>
4.	Lectures were clear and easy to understand				_	<u> </u>
5.	Teaching aids were effective				<del>  _</del>	
6.	Instructors encourage interaction and were helpful	_		<del> </del>	<del>  -</del>	
7.	The level of the course			<del>                                     </del>	<del>                                     </del>	1/
	(1. Very poor 2. Poor 3. Average 4. Good 5.	Excell	enf)	L	L	
8.	Overall rating of the course:	1	2	3	1	5

Please give Suggestion for the improvement of the course: