



# Bharath

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

**BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH**

Date: 01-06-2017

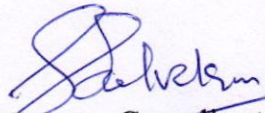
**SCHOOL OF BIOENGINEERING**


## CIRCULAR

### Notification for Value added courses offered by the School of Bioengineering

The Department of Industrial Biotechnology, School of Bioengineering, is scheduled to offer a Value added Course on Instant Foods from 07/07/2017 for a period of 3 weeks. Interested students can approach Dr. S. Selvakumar, Associate Professor and Course Coordinator, Department of Industrial Biotechnology for registration and for further details on or before 20<sup>th</sup> June 2017.

**Eligibility-II, III and IV B-Tech IBT, GE and BME**

  
Course Coordinator

  
HOD



Copy to:

Vice Chancellor

Pro Vice Chancellor

Additional Registrar

Deans

CoE

Heads of Departments

**BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH**

**SCHOOL OF BIO-ENGINEERING**

**DEPARTMENT OF INDUSTRIAL BIOTECHNOLOGY**

**INSTANT FOODS**

**2017-2018**

**COURSE CO-ORDINATOR DETAILS**

**Faculty Name: Dr.S.Selvakumar, AssociateProfessor, Department of Industrial  
Biotechnology**

**Email ID: selvakumarmss@gmail.com**

**Mobile number: 9840917984**

**BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH**  
**SCHOOL OF BIO-ENGINEERING**  
**DEPARTMENT OF INDUSTRIAL BIOTECHNOLOGY**  
**VALUE ADDED COURSE SYLLABUS**  
**2017-2018**

**INSTANT FOODS**

**Module 1**

Introduction to food packaging, Importance, definition and function of food packaging, Form-Fill-Seal packaging machines, types of packaging materials, Glass (construction of jars and bottles, optical, thermal and mechanical properties of glass), Metal (types of base metal sheets, construction of metal cans, lacquering), Plastics- substituted olefins, tetrafluoro ethylene, PET, polyamides, polyesters.

**Module 2**

Environmental factors and food stability: Effect of oxygen and light, Light Protection characteristics of packages, permeability to gases and vapors, methods of measuring permeability, permeability to fixed gases, permeability to humidified gases, flow through pin holes, cracks and imperfect seals, permeability of multilayer materials. Packaging tests: tensile strength, compression, bursting, tear and impact test for packages. Integrity testing of packages, cushioning effect on packaged foods.

**Module 3**

Deterioration of packaged foods, shelf life calculation for packaged foods. Aseptic packaging techniques, aseptic systems Tetrapack, Bag-in-Box), integrity testing of aseptic packages

**SCHOOL OF BIO-ENGINEERING  
DEPARTMENT OF INDUSTRIAL BIOTECHNOLOGY  
VALUE ADDED COURSE  
INSTANT FOODS (2017-2018)**

Session	Topic	Date	Duration (Hr)	Resource person
Session I	Introduction to food packaging	07.07.2017	3	Dr.L.Jeyanthi Rebecca
Session II	Plastics- substituted olefins, tetrafluoro ethylene, PET, polyamides, polyesters.	08.07.2017	3	Dr.S.selvakumar
Session III	Types of packaging materials	08.07.2017	4	Dr.S.Sharmila
Session IV	Environmental factors and food stability	14.07.2017	3	Dr.S.Anbuselvi
Session V	Packaging tests	15.07.2017	3	Ms.Merina paul Das
Session VI	Integrity testing of packages	15.07.2017	4	Dr.Ram Krishna Rao
Session VII	Deterioration of packaged foods	21.07.2017	3	Ms.D.Sharmila
Session VIII	Shelf life calculation for packaged foods	22.07.2017	3	Ms. R.Kamalambigeswari
Session IX	Aseptic packaging techniques	22.07.2017	4	Ms.E.Kowsalya

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**VALUE ADDED COURSE**  
**INSTANT FOODS (2017-2018)**  
**Students Name List**

S.NO	REG.NO	NAME OF THE STUDENT
1	U14BT007	BARNALI SARKAR
2	U14BT008	DARPAN BARIK
3	U14BT014	KAJAL KUMARI
4	U14BT022	RAHILA PARVEEN.S
5	U14BT023	RENUKA.M
6	U14BT024	SAMPAD SHIL
7	U14BT025	SANDEEP KUMAR SIRDAR
8	U14BT031	MADHAN KUMAR.U
9	U14BT032	JUPAKA SINDHUJA
10	U14BT033	B.SAI KIRAN
11	U14BT034	M.DINESH
12	U14BT035	B.SHRIVATSAN
13	U14BT036	SHAIK SADIK
14	U15BT008	MURALIRAM T
15	U15BT009	PRITAM SASMAL
16	U15BT011	SELVA JANANI S
17	U15BT013	VAIRAMOORTHY M
18	U15BT014	VIJAYA LAKSHMI N
19	U16BT003	SANKAR SINGH.T
20	U16BT004	BALAJI
21	U16BT005	KADAR JASSIM MMS
22	U16BT013	VULLI KEERTHANA
23	U16BT014	PUVIYARASI S
24	U16BR013	GAYATHRI DEVI A
25	U16BR014	GETCYAL DEVAKIRUBAI M
26	U16BR015	PRAVEEN SUNDAR C S
27	U16BR016	MUTHUMEENAKSHI B
28	U16BR017	GOWTHAM S P
29	U16BR018	B REDDY RAGHAVA DEEPAK
30	U15BR004	GANGA N
31	U15BR005	GOPINATHKUMAR R S
32	U15BR006	I SUNETHA
33	U14BR017	RAHUL P
34	U14BR018	RAMKI S
35	U14BR019	RENJU R K

36	U14BR020	RUDRA MISHRA A
37	U14BR021	SATHIK SHAJAHAN I
38	U14BR025	SUGITHA E
39	U14BR028	VASUNDRA H P
40	U14BR030	SYED MOHAMED KHALEEL
41	U16BM057	UPPUHOLLA ROHITH
42	U16BM058	ARIDEEP SIDDHANTA
43	U16BM059	NAGA JAGADESH REDDY
44	U16BM060	DIVI DIVYA SREE
45	U16BM062	DIVYA KERKETTA
46	U15BM032	MONISRI V
47	U15BM033	MUCHAKAYALA HARSHA VARDHAN
48	U15BM034	MURUGANANDHAM S
49	U15BM035	N NIVETHA
50	U15BM036	NANDHINI T
51	U15BM037	NANDYLA SRIGIRI AMANI
52	U14BM018	KETHINENI DIVYA
53	U14BM020	MAHENDIRAN.A
54	U14BM021	MAHENDRAN.S
55	U14BM022	MAHFOOZ AAMIL D.S
56	U14BM023	MALGARI SHANTHI SWAROOP
57	U14BM052	VANDHANA.M
58	U14BM059	NINU.P.S.
59	U14BM060	SIVA
60	U14BM701	KATHIRESAN

## VALUE ADDED COURSE

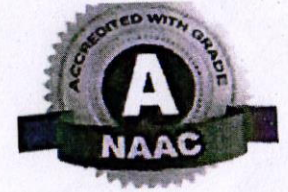
### INSTANT FOODS





# Bharath

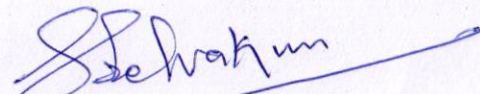
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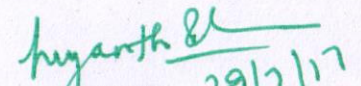


SCHOOL OF BIO-ENGINEERING  
VALUE ADDED COURSE ON

*Certificate of Participation*

This is to certify that Mr /Ms BARNALI SARKAR (U14BT007) has attended three weeks value added course on “**Instant Foods**” conducted by Department of Industrial Biotechnology at Bharath Institute of Higher Education and Research, Chennai (TN), India from 07-07-2017 to 28-07-2017

  
Coordinator

  
HOD 29/7/17