



राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर भारत

NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR INDIA

शैक्षणिक अनुभाग
Academic Section

Mahatma Gandhi Avenue, Durgapur - 713209

TRANSCRIPT

Date : June 19, 2019

NAME : ANGELA PAUL						INSTITUTE ROLL NO. : 15/BT/14					
BRANCH : BIOTECHNOLOGY						INSTITUTE REGISTRATION NO. : 20150348					
Course of study : 4 YEAR (8 - SEMESTER) B.Tech. Programme											
FIRST SEMESTER			SECOND SEMESTER			THIRD SEMESTER			FOURTH SEMESTER		
2015-2016			2015-2016			2016-2017			2016-2017		
SUBJECT CODE	CREDIT UNIT	GRADE	SUBJECT CODE	CREDIT UNIT	GRADE	SUBJECT CODE	CREDIT UNIT	GRADE	SUBJECT CODE	CREDIT UNIT	GRADE
HS01	3	B	MA02	4	B	BT301	4	EX	BT401	3	B
MA01	3	A	HS02	3	A	BT302	3	A	BT402	4	B
PH01	3	B	CS01	3	B	BT351	2	A	BT403	3	EX
EM01	3	B	EC01	3	EX	BT352	2	B	BT404	3	EX
ES01	2	B	EE01	3	A	CH331	3	A	BT451	2	A
CY01	3	A	CS51	2	A	CS331	3	B	BT452	2	A
EG51	3	EX	EC51	1	EX	CS381	2	A	CH431	3	A
PH51	1	B	EE51	1	A	MA331	3	A	CH481	2	B
CY51	1	A	EM51	2	A						
WS51	2	A	WS52	2	A						
EA51	1	A	EA52	1	A						
TGP = 216 SGPA = 8.64			TGP = 222 SGPA = 8.88			TGP = 197 SGPA = 8.95			TGP = 195 SGPA = 8.86		
CGPA = 8.64			CGPA = 8.76			CGPA = 8.82			CGPA = 8.83		
FIFTH SEMESTER			SIXTH SEMESTER			SEVENTH SEMESTER			EIGHTH SEMESTER		
2017-2018			2017-2018			2018-2019			2018-2019		
SUBJECT CODE	CREDIT UNIT	GRADE	SUBJECT CODE	CREDIT UNIT	GRADE	SUBJECT CODE	CREDIT UNIT	GRADE	SUBJECT CODE	CREDIT UNIT	GRADE
BT501	4	C	BT601	4	B	BT701	4	A	BT813	3	B
BT502	3	C	BT602	3	EX	BT702	3	A	BT820	3	EX
BT503	3	EX	CH631	3	B	BT710	3	EX	XE842	3	EX
CH531	3	B	CS631	3	A	BT719	3	EX	BT851	2	A
HS540	3	EX	MS631	3	A	BT751	2	EX	BT852	2	B
BT551	2	A	BT651	2	B	BT752	2	A	BT853	1	EX
BT552	2	B	CS681	2	EX	BT753	1	EX	BT854	6	A
CH581	2	C	HS681	2	C	BT754	3	B	BT855	2	B
						BT755	1	EX			
TGP = 181 SGPA = 8.23			TGP = 190 SGPA = 8.64			TGP = 205 SGPA = 9.32			TGP = 198 SGPA = 9.00		
CGPA = 8.72			CGPA = 8.70			CGPA = 8.79			CGPA = 8.81		

TGP = Total Grade Point ; SGPA = Semester Grade Point Average ; CGPA = Cumulative Grade Point Average

(See reverse for the explanation of the Grading and Evaluation system)

SESSION OF COMPLETION OF THE COURSE : 2018-2019

S. Biswas
Checked by

DEAN (Academic)
Dean (Academic)
National Institute of Technology
Durgapur - 713209, India

7 - SCALE GRADE SYSTEM

(Full Marks of Theory/ Sessional /Laboratory Course = 100)

Range of marks scored	Performance	Grade awarded	Grade point per credit unit	Remarks
90 and above	Excellent	Ex	10	Pass marks for laboratory/sessional is 50 and there is no 'P' grade for it. Score less than 50 in laboratory/sessional and score less than 40 in theory course is awarded 'F'.
Between 80 & 89	Very good	A	9	
Between 70 & 79	Good	B	8	
Between 60 & 69	Fair	C	7	
Between 50 & 59	Average	D	6	
Between 40 & 49	Pass	P	5	
Below 40	Fail	F	0	

S - Satisfactory

U - Unsatisfactory

Grade point per course = Credit unit of the course x Corresponding Grade point per credit unit.

TGP = Summation of Grade points earned in all courses in the semester.

SGPA = TGP/Total credit unit of the semester.

CGPA = Cumulative Grade Point/ Cumulative credit unit of all the courses up to the current semester.

MAXIMUM POSSIBLE SGPA AND CGPA IS 10.00

The students awarded 'F' in particular course(s) are eligible for the supplementary backlog examination in that / those course(s). The TGP, SGPA, and CGPA shown in that case is tentative and the amended TGP, SGPA, and CGPA in supplementary examination are indicated in Supplementary Grade Card.

Classes awarded based on the final CGPA:

Distinction : CGPA $\geq$ 8.00, provide all the courses passed in regular examinations.

First Class : CGPA $\geq$ 6.50

Second Class : CGPA $<$ 6.50

No distinction is awarded in Post Graduate Programmes.

Equivalent percent mark:

For Semester Examination : Equivalent % marks = (SGPA — 0.5) x 10

For Final CGPA : Over all equivalent % marks = (CGPA — 0.5) x 10

Medium of Instruction and evaluation is English.

COURSES DONE- DEPARTMENT OF BIOTECHNOLOGY

FIRST SEMESTER:

<u>SUBJECT NAME</u>	<u>SUBJECT CODE</u>
MATHEMATICS-I	MA01
ENGLISH	HS01
ENGINEERING PHYSICS	PH01
ENGINEERING MECHANICS	EM01
ENVIRONMENTAL STUDIES	ES01
ENGINEERING CHEMISTRY	CY01
ENGINEERING GRAPHICS	EG51
PHYSICS LABORATORY	PH51
CHEMISTRY LABORATORY	CY51
WORKSHOP PRACTICE-1	WS51
CO-CURRICULAR ACTIVITIES	EA51

SECOND SEMESTER:

<u>SUBJECT NAME</u>	<u>SUBJECT CODE</u>
MATHEMATICS-II	MA02
ENGINEERING ECONOMICS & ACCOUNTANCY	HS02
INTRODUCTION TO COMPUTING	CS01
BASIC ELECTRONICS	EC01
ELECTRICAL TECHNOLOGY	EE01
COMPUTING LABORATORY	CS51
BASIC ELECTRONICS LABORATORY	EC51
ELECTRICAL TECHNOLOGY LABORATORY	EE51
GRAPHICAL ANALYSIS USING CAD	EM51
WORKSHOP PRACTICE-2	WS52
CO-CURRICULAR ACTIVITIES	EA52

THIRD SEMESTER:

<u>SUBJECT NAME</u>	<u>SUBJECT CODE</u>
MICROBIOLOGY	BT301
BIOCHEMICAL ANALYSIS & INSTRUMENTATION	BT302
MICROBIOLOGY LABORATORY	BT351
PROCESS CALCULATIONS	CH331
PROGRAMMING DATA STRUCTURES	CS331
PROGRAMMING DATA STRUCTURES LABORATORY	CS381
BIOCHEMICAL ANALYSIS & INSTRUMENTATION LABORATORY	BT352
MATHEMATICS- III	MA331



FOURTH SEMESTER:

SUBJECT NAME	SUBJECT CODE
STRUCTURE OF MACROMOLECULES	BT401
BIOCHEMISTRY	BT402
CELL BIOLOGY	BT403
MOLECULAR BIOLOGY & r-DNA TECHNOLOGY	BT404
MOLECULAR BIOLOGY & r-DNA TECHNOLOGY LABORATORY	BT452
BIOCHEMISTRY LABORATORY	BT451
UNIT OPERATIONS OF CHEMICAL ENGINEERING-I	CH431
UNIT OPERATIONS OF CHEMICAL ENGINEERING-I LABORATORY	CH481

FIFTH SEMESTER:

SUBJECT NAME	SUBJECT CODE
IMMUNOLOGY	BT501
THERMODYNAMICS & BIOCHEMICAL REACTION ENGINEERING	BT502
INDUSTRIAL MICROBIOLOGY & ENZYME TECHNOLOGY	BT503
UNIT OPERATIONS OF CHEMICAL ENGINEERING-II	CH531
INTERNATIONAL ECONOMICS & FINANCIAL MANAGEMENT	HS540
FERMENTATION TECHNOLOGY	BT551
IMMUNOLOGY LABORATORY	BT552
UNIT OPERATIONS OF CHEMICAL ENGINEERING-II LABORATORY	CH481

SIXTH SEMESTER:

SUBJECT NAME	SUBJECT CODE
BIOREACTOR DESIGN & ANALYSIS	BT601
GENETICS & BIOSTATISTICS	BT602
PROCESS CONTROL & INSTRUMENTATION	CH631
DATABASE MANAGEMENT SYSTEM	CS631
PRINCIPLES OF MANAGEMENT	MS631
BIOPROCESS ENGINEERING LABORATORY	BT651
DATABASE MANAGEMENT SYSTEM LABORATORY	CS681
PROFESSIONAL COMMUNICATION	HS681

SEVENTH SEMESTER:

SUBJECT NAME	SUBJECT CODE
PLANT BIOTECHNOLOGY	BT701
BIOINFORMATICS	BT702
BIOSEPARATION TECHNOLOGY	BT710
BIOPHARMACEUTICAL PROCESS DESIGN	BT719
BIOINFORMATICS LABORATORY	BT751
PLANT BIOTECHNOLOGY LABORATORY	BT752
SEMINAR-I	BT753
PROJECT WORK	BT754
VOCATIONAL TRAINING/ SUMMER INTERNSHIP	BT755



EIGHTH SEMESTER:

<u>SUBJECT NAME</u>	<u>SUBJECT CODE</u>
HUMAN GENOMICS	BT813
ENVIRONMENTAL MICROBIOME	BT820
VALUE AND ETHICS FOR ENGINEERS	XE842
ANIMAL BIOTECHNOLOGY LABORATORY	BT852
DOWNSTREAM PROCESSING & WASTEWATER TREATMENT LABORATORY	BT851
PROJECT WORK II	BT854
SEMINAR-II	BT853
VIVA VOCE	BT855

