

# Indian Institute of Engineering Science and Technology, Shibpur

## Bachelor of Technology

(Four Year Degree Course)

Under Five Year Dual Degree (B.Tech. - M.Tech.) Programme

Eighth Semester Examination, 2018

Metallurgy & Materials Engineering

Following is the statement of marks obtained by Debargha Paul, Examination Roll No. 51114016, Registration No. 51114016 of 2014-2015, in the Eighth Semester Examination, 2018, held in April, 2018.

Theoretical Paper's Code and Name	Subject Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
MT801		Materials Processing	3	100	65	B
MT802		Materials Characterisation	3	100	76	A
MT803		Design and Selection of Materials	3	100	64	B
MT821/1		Nano-Structured and Functionally Graded Materials (Elective II)	3	100	86	E
MT822/1		Fracture Mechanics and Failure Analysis (Elective III)	3	100	80	E

Sessional Paper's Code and Name

MT851	Materials Processing Lab.	2	50	42	E
MT852	Materials Characterisation Lab.	2	50	42	E
MT853	Project Thesis Part II	4	100	96	O
MT871	Project Thesis Part II Viva Voce	2	50	42	E
MT872	Comprehensive Viva Voce	3	100	90	O

Remark: Pass

CGPA upto Semester 8 : 8.5

Semester Total : 850 683

Summary statement of marks obtained by the candidate in all the semester examinations.

Semester	Full Marks	Marks Obtained	Semester	Full Marks	Marks Obtained	Aggregate
1st	650	527	5th	750	585	Grand Total 4970 out of 6200
2nd	650	481	6th	800	672	{ Sum of 100% of (1st sem+2nd sem+3rd sem+4th sem+5th sem+6th sem+7th sem+8th sem) }
3rd	850	673	7th	800	629	* First Class Honours: $\geq 75\%$ First Class: $\geq 65\%$
4th	850	720	8th	850	683	Remark Pass Second Class: $< 65\%$
						Class First Class with Honours

\* If the candidate has passed all subjects in the regular semester examinations and has not sought re-admission in any part.

This marksheet is issued on the basis of the exit option exercised by the student vide Board of Governors resolution no. 07.05 dated 25.04.2017.

Checked by

June 12, 2018

Deputy Controller of Examinations



# Indian Institute of Engineering Science and Technology, Shibpur

## Bachelor of Technology

(Four Year Degree Course)

Under Five Year Dual Degree (B.Tech. - M.Tech.) Programme

Seventh Semester Examination, 2017

Metallurgy & Materials Engineering

Following is the statement of marks obtained by Debargha Paul, Examination Roll No. 511114016, Registration No. 511114016 of 2014-2015, in the Seventh Semester Examination, 2017, held in December, 2017.

### Theoretical Paper's Code and Name

Subject Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
HU7801	Accounting and Financial Management	2	50	24	D
MT701	Joining of Materials	3	100	87	E
MT702	Degradation of Materials and their Prevention	3	100	73	A
MT703	Composites and Ceramic Materials	3	100	83	E
MT731/1	Selection of Engineering Materials (Elective II)	3	100	60	B

### Sessional Paper's Code and Name

MT751	Joining of Materials Lab.	3	100	90	O
MT752	Degradation of Materials and their Prevention Lab.	3	100	79	A
MT753	Composites and Ceramic Materials Lab.	3	100	91	O
MT754	Project & Thesis Part I	2	50	42	E

CGPA upto Semester 7 : 8.47

Semester Total : 800 629

Remark: Pass

### Percentage of Marks and Grade Table :

Percentage of Numerical Marks	Letter Grade	Grade	Grade Point
>=90 to 100	O	Outstanding	10
>=80 and <90	E	Excellent	9
>=70 and <80	A	Very Good	8
>=60 and <70	B	Good	7
>=50 and <60	C	Average	6
>=40 and <50 (Theory)	D	Pass	5
<40 (Theory)	F	Fail	0
<50 (Laboratory)	F	Fail	0
	I	Incomplete	----

Student rank is based on CGPA and not on total marks.

$$CGPA = \frac{\sum C_i G_i}{\sum C_i}$$

where  $C_i$  = credit in the  $i$ -th course and  $G_i$  is the grade point in the  $i$ -th course.

Checked by

*Sham*

January 15, 2018

*A Bhattacharyya*  
Controller of Examinations



# Indian Institute of Engineering Science and Technology, Shibpur

Five Year Dual Degree (B.Tech.-M.Tech.) Programme

Sixth Semester Examination, 2017

Metallurgy & Materials Engineering

Following is the statement of marks obtained by Debargha Paul, Examination Roll No. 511114016, Registration No. 511114016 of 2014-2015, in the Sixth Semester Examination, 2017, held in April, 2017.

Theoretical Paper's Code and Name

Subject Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
CH601	Polymer and Refractory Technology	3	100	90	O
MT601	Material Properties Evaluation	4	100	86	E
MT602	Metallurgy of Ferrous Alloys	4	100	76	A
MT603	Non-Ferrous Metallurgy	4	100	65	B
MT604	Powder Metallurgy	4	100	92	O

Sessional Paper's Code and Name

MT651	Material Properties Evaluation Lab.	2	100	91	O
MT652	Metallurgy of Ferrous Alloys Lab.	2	100	89	E
MT653	Communication Skill	1	50	46	O
MT671	Comprehensive Viva Voce I	1	50	37	A

Remark: Pass

CGPA upto Semester 6 : 8.47

Semester Total : 800 672

Percentage of Marks and Grade Table :

Percentage of Numerical Marks	Letter Grade	Grade	Grade Point
>=90 to 100	O	Outstanding	10
>=80 and <90	E	Excellent	9
>=70 and <80	A	Very Good	8
>=60 and <70	B	Good	7
>=50 and <60	C	Average	6
>=40 and <50 (Theory)	D	Pass	5
<40 (Theory)	F	Fail	0
<50 (Laboratory)	F	Fail	0
	I	Incomplete	----

$$CGPA = \frac{\sum C_i G_i}{\sum C_i}$$

where Ci=credit in the i-th course and Gi is the grade point in the i-th cou

Student rank is based on CGPA and not on total marks.

Checked by

*Shubm*

June 01, 2017

*M Bhattacharyya*

Controller of Examination



# Indian Institute of Engineering Science and Technology, Shibpur

Five Year Dual Degree (B.Tech.-M.Tech.) Programme

Fifth Semester Examination, 2016

Metallurgy & Materials Engineering

Following is the statement of marks obtained by Debargha Paul, Examination Roll No. 511114016, Registration No. 511114016 of 2014-2015, in the Fifth Semester Examination, 2016, held in December, 2016:

Theoretical Paper's Code and Name

Subject Code Subject Name

Subject Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
HU5601	Economics	3	50	36	A
MT501	Iron and Steel Making	4	100	80	E
MT502	X-Ray and Electron Diffraction	4	100	66	B
MT503	Metal Casting Technology	4	100	80	E
MT531/1	Heat Treatment Technology	3	100	77	A

Sessional Paper's Code and Name

MT551	Metal Casting Technology Lab	2	100	74	A
MT552	X-Ray and Electron Diffraction Lab	1	100	80	E
MT553	Heat Treatment Technology Lab	2	100	92	O

Remark: Pass

CGPA upto Semester 5 : 8.39

Semester Total : 750 585

Percentage of Marks and Grade Table :

Percentage of Numerical Marks	Letter Grade	Grade	Grade Point
>=90 to 100	O	Outstanding	9
>=80 and <90	E	Excellent	8
>=70 and <80	A	Very Good	7
>=60 and <70	B	Good	6
>=50 and <60	C	Average	5
>=40 and <50 (Theory)	D	Pass	4
<40 (Theory)	F	Fail	0
<50 (Laboratory)	F	Fail	0
	I	Incomplete	---

Student rank is based on CGPA and not on total marks.

$$CGPA = \frac{\sum C_i G_i}{\sum C_i}$$

where  $C_i$ =credit in the  $i$ -th course and  $G_i$  is the grade point in the  $i$ -th cou

Checked by

January 11, 2017

Mhattacharyya  
Controller of Examination



# Indian Institute of Engineering Science and Technology, Shibpur

Five Year Dual Degree (B.Tech.-M.Tech.) Programme

Fourth Semester Examination, 2016

Metallurgy & Materials Engineering

Following is the statement of marks obtained by Debargha Paul, Registration No. 511114016 of 2014-2015, in the Fourth Semester Examination, 2016, held in April, 2016.

**Theoretical Paper's Code and Name**

Subject Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
MT401	Phase Transformation	4	100	90	O
MT402	Principles of Extractive Metallurgy	4	100	70	A
MT403	Deformation Behaviour of Materials	4	100	87	E
MT404	Introduction to Materials Manufacturing	3	100	84	E
MT405	Instrumentation and Control	3	100	84	E

**Sessional Paper's Code and Name**

MT451	Phase Transformation Lab.	2	100	89	E
MT452	Extractive Metallurgy Lab.	2	100	86	E
MT453	Modelling and Simulation Lab.	2	100	88	E
MT471	Mini Project II	2	50	42	E

CGPA upto Semester 4 : 8.39

Semester Total : 850 720

Remark: Pass

**Percentage of Marks and Grade Table :**

Percentage of Numerical Marks	Letter Grade	Grade	Grade Point
>=90 to 100	O	Outstanding	10
>=80 and <90	E	Excellent	9
>=70 and <80	A	Very Good	8
>=60 and <70	B	Good	7
>=50 and <60	C	Average	6
>=40 and <50 (Theory)	D	Pass	5
<40 (Theory)	F	Fail	0
<50 (Laboratory)	F	Fail	0
	I	Incomplete	----

Student rank is based on CGPA and not on total marks.

$$CGPA = \frac{\sum C_i G_i}{\sum C_i}$$

where  $C_i$ =credit in the  $i$ -th course and  $G_i$  is the grade point in the  $i$ -th cou

Checked by

*Conan*

*M. Bhattacharyya*

Controller of Examination

June 21, 2016



# Indian Institute of Engineering Science and Technology, Shibpur

## Five Year Dual Degree (B.Tech.-M.Tech.) Programme

### Third Semester Examination, 2016

### Metallurgy & Materials Engineering

Following is the statement of marks obtained by **Debargha Paul**, Registration No. 511114016 of 2014-2015, in the Third Semester Examination, 2016, held in December, 2015.

#### Theoretical Paper's Code and Name

Subject Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
HU3401	Introduction to Management & Industrial Sociology	4	100	67	B
MA301	Mathematics III	4	100	75	A
MT301	Physics of Materials	4	100	64	B
MT302	Metallurgical Thermodynamics & Kinetics	4	100	79	A
MT303	Introduction to Physical Metallurgy	4	100	82	E

#### Sessional Paper's Code and Name

MT351	Physics of Materials Lab.	2	100	90	O
MT352	Met. Thermodynamics & Kinetics Lab.	2	100	92	O
MT353	Introduction to Physical Metallurgy Lab.	2	100	86	E
MT371	Mini Project I	2	50	38	A

Remark: **Pass**

**CGPA upto Semester 3 : 8.19**

**Semester Total : 850 673**

#### Percentage of Marks and Grade Table :

Percentage of Numerical Marks	Letter Grade	Grade	Grade Point
>=90 to 100	O	Outstanding	10
>=80 and <90	E	Excellent	9
>=70 and <80	A	Very Good	8
>=60 and <70	B	Good	7
>=50 and <60	C	Average	6
>=40 and <50 (Theory)	D	Pass	5
<40 (Theory)	F	Fail	0
<50 (Laboratory)	F	Fail	0
	I	Incomplete	----

Student rank is based on CGPA and not on total marks.

where  $C_i$  = credit in the  $i$ -th course and  $G_i$  is the grade point in the  $i$ -th cou

Checked by Akshoedh Dhar

December 22, 2015

M. Bhattacharyya  
Controller of Examination



# Indian Institute of Engineering Science and Technology, Shibpur

## Five Year Dual Degree (B.Tech. - M.Tech.) Programme

### Part I, Second Semester Examination, 2015

### Metallurgy & Materials Engineering

Following is the statement of marks obtained by Debargha Paul, Roll No. 511114016, Registration No. 511114016 of 2014-2015, in the Part I, Second Semester Examination, 2015, held in April, 2015.

#### Theoretical Papers' Code and Name

Paper Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
AM201	Engineering Mechanics	4	100	66	B
EE1201	Basic Electrical Engineering	3	100	75	A
HU1201	Professional Communication in English	3	50	33	B
MA201	Mathematics II	4	100	73	A
MENT1201	Manufacturing Technology	2	50	45	O
PH1201	Physics	4	100	67	B

#### Sessional/Laboratory Papers' Code and Name

Paper Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
EE1251	Basic Electrical Engineering Lab.	2	50	46	O
PH1251	Physics Lab.	2	50	38	A
WS1251	Workshop Practice	2	50	38	A

#### Additional Paper's Code and Name

Paper Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
SA291	* Additional Elective NCC/Physical Training II	0	50	20	

CGPA upto Semester 2 : 8.18

Semester Total : 650 481

Remarks : Pass

#### Percentage of Marks and Grade Table :

Percentage of Numerical Marks	Letter Grade	Grade Point	Grade
>= 90 to 100	O	10	Outstanding
>= 80 and < 90	E	9	Excellent
>= 70 and < 80	A	8	Very Good
>= 60 and < 70	B	7	Good
>= 50 and < 60	C	6	Average
>= 40 and < 50 (Theory only)	D	5	Pass
< 40 (Theory)	F	0	Fail
< 50 (Laboratory)	F	0	Fail

Student rank is based on CGPA and not on total marks.

$$CGPA = \frac{\sum C_i G_i}{\sum C_i}$$

where  $C_i$  = credit in the  $i$ -th course and  $G_i$  is the grade point in the  $i$ -th course.

\* Marks in excess of 25 shall be added to the aggregate.

Checked by

*(Signature)*

June 09, 2015

*(Signature)*

Controller of Examinations



# Indian Institute of Engineering Science and Technology, Shibpur

## Five Year Dual Degree (B.Tech. - M.Tech.) Programme

### Part I, First Semester Examination, 2015

### Metallurgy & Materials Engineering

Following is the statement of marks obtained by Debargha Paul, Roll No. 511114016, Registration No. 511114016 of 2014-2015, in the Part I, First Semester Examination, 2015, held in December, 2014.

#### Theoretical Papers' Code and Name

Paper Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
CE101	Environment & Ecology	2	50	35	A
CH1201	Chemistry	4	100	82	E
CS1201	Introduction to Computing	3	50	33	B
ET1201	Basic Electronics Engineering	3	100	86	E
MA101	Mathematics I	4	100	79	A

#### Sessional/Laboratory Papers' Code and Name

Paper Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
CH1251	Chemistry Lab.	2	50	41	E
CS1251	Computing Practice	3	50	48	O
DR1251	Engineering Drawing Practice I	2	100	63	B
ET1251	Basic Electronics Engineering Lab.	2	50	44	E

#### Additional Paper's Code and Name

Paper Code	Subject Name	Credit Hours	Full Marks	Marks Obtained	Letter Grade
SA191	* Additional Elective NCC/Physical Training I	0	50	41	

CGPA upto Semester 1 : 8.48

Semester Total : 650 527

Remarks : Pass

#### Percentage of Marks and Grade Table :

Percentage of Numerical Marks	Letter Grade	Grade Point	Grade
>= 90 to 100	O	10	Outstanding
>= 80 and < 90	E	9	Excellent
>= 70 and < 80	A	8	Very Good
>= 60 and < 70	B	7	Good
>= 50 and < 60	C	6	Average
>= 40 and < 50 (Theory only)	D	5	Pass
< 40 (Theory)	F	0	Fail
< 50 (Laboratory)	F	0	Fail

Student rank is based on CGPA and not on total marks.

\* Marks in excess of 25 shall be added to the aggregate.

Checked by Sandip

January 05, 2015

M. Shattacharya

Controller of Examinations