



Transcript of Academic Record of **SUDHANSHU KUMAR** Roll Number: **13135086**  
**Bachelor of Technology in MECHANICAL ENGINEERING**

| B.Tech. Part I  |                                 |                    |                | B.Tech. Part II   |                                    |                    |                | B.Tech. Part III   |                                |                    |                | B.Tech. Part IV  |   |                    |                |
|---|---------------------------------|--------------------|----------------|---|------------------------------------|--------------------|----------------|--|--------------------------------|--------------------|----------------|--|---|--------------------|----------------|
| SESSION: 2013-2014  |                                 | SESSION: 2014-2015 |                | SESSION: 2015-2016  |                                    | SESSION: 2016-2017 |                | SESSION: 2016-2017   |                                | SESSION: 2016-2017 |                | SESSION: 2016-2017   |   | SESSION: 2016-2017 |                |
| Course Code & Name  |                                 | Credits            | Grade Obtained | Course Code & Name  |                                    | Credits            | Grade Obtained | Course Code & Name   |                                | Credits            | Grade Obtained | Course Code & Name   |   | Credits            | Grade Obtained |
| <b>SEMESTER - 1</b>   |                                 |                    |                | <b>SEMESTER - 3</b>   |                                    |                    |                | <b>SEMESTER - 5</b>  |                                |                    |                | <b>SEMESTER - 7</b>  |   |                    |                |
| <i>Theory:</i>  |                                 |                    |                | <i>Theory:</i>  |                                    |                    |                | <i>Theory:</i>   |                                |                    |                | <i>Theory:</i>   |   |                    |                |
| AM-1102   | Mathematics                     | 9                  | C              | ME-2101   | Materials Science                  | 12                 | B-             | ME-3101  | Manufacturing Engineering II   | 9                  | C              | ME-4101  | Industrial Management                     | 12                 | A              |
| AP-1102   | Physics                         | 9                  | C              | ME-2102   | Strength of Materials              | 12                 | C              | ME-3102  | System Dynamics and Control    | 9                  | A              | ME-4102  | Computer Aided Design                     | 9                  | B              |
| AC-1102   | Chemistry                       | 9                  | B              | ME-2103   | Kinematics of Machines             | 9                  | A-             | ME-3103  | Mechanics of Deformable Solids | 12                 | B-             | ME-4103  | Manufacturing Systems                     | 12                 | B              |
| ME-1102   | Thermodynamics                  | 9                  | C              | ME-2104   | Mechanical Measurements            | 9                  | C              | ME-3104  | Fluid Mechanics                | 12                 | A-             | ME-4104  | Turbomachines                             | 9                  | B-             |
| ES-1101   | Environmental Studies           | 8                  | C              | EE-2106A  | Electrical Engineering Mathematics | 9                  | B              | ME-3105  | Machine Design II              | 9                  | B              | ME-4113  | Computer Integrated Manufacturing systems | 9                  | A-             |
| PC-1101   | Professional Communication      | 6                  | C              | AM-2106A  |                                    |                    |                |  |                                |                    |                |  |   |                    |                |
| <i>Practical:</i>   |                                 |                    |                | <i>Practical:</i>   |                                    |                    |                | <i>Practical:</i>  |                                |                    |                | <i>Practical:</i>  |   |                    |                |
| AP-1302   | Physics Laboratory              | 3                  | B              | ME-2301   | Machine Drawing/CAD                | 3                  | A-             | ME-3301  | Mechanical Engineering Lab     | 3                  | A-             | ME-4301  | Computer Aided Design Lab                 | 3                  | B              |
| AC-1301   | Chemistry Laboratory            | 3                  | B              |   | Practical                          |                    |                | ME-3302  | Machine Design Practical       | 3                  | B              | ME-4302  | Project Work                              | 3                  | A-             |
| ME-1303   | Workshop Practice               | 3                  | A              | ME-2302   | Machine Shop Practice              | 3                  | A-             | ME-3303  | Practical Training             | 2                  | A-             | ME-4303  | Seminar and Group Discussion              | 3                  | B              |
|   |                                 |                    |                |   |                                    |                    |                |  |                                |                    |                | ME-4304  | Practical Project Training                | 2                  | A-             |
| Total Credits   |                                 | 59                 |                | Total Credits   |                                    | 66                 |                | Total Credits  |                                | 59                 |                | Total Credits  |   | 62                 |                |
| Sum of (Credits x Grade Points) obtained in First Semester  |                                 | 396                |                | Sum of (Credits x Grade Points) obtained in Third Semester  |                                    | 489                |                | Sum of (Credits x Grade Points) obtained in Fifth Semester |                                | 477                |                | Sum of (Credits x Grade Points) obtained in Seventh Semester |   | 525                |                |
| First Semester Performance Index (SPI)                      |                                 | 6.71               |                | Third Semester Performance Index (SPI)                      |                                    | 7.41               |                | Fifth Semester Performance Index (SPI)                     |                                | 8.08               |                | Seventh Semester Performance Index (SPI)                     |   | 8.47               |                |
| First Semester Course Passed                                |                                 |                    |                | Third Semester Course Passed                                |                                    |                    |                | Fifth Semester Course Passed                               |                                |                    |                | Seventh Semester Course Passed                               |   |                    |                |
| <b>SEMESTER - 2</b>   |                                 |                    |                | <b>SEMESTER - 4</b>   |                                    |                    |                | <b>SEMESTER - 6</b>  |                                |                    |                | <b>SEMESTER - 8</b>  |   |                    |                |
| <i>Theory:</i>  |                                 |                    |                | <i>Theory:</i>  |                                    |                    |                | <i>Theory:</i>   |                                |                    |                | <i>Theory:</i>   |   |                    |                |
| AM-1201   | Mathematics                     | 9                  | B-             | ME-2201   | Applied Thermodynamics             | 12                 | B              | ME-3201  | Machine Design-III             | 9                  | C              | ME-4201  | Tool Design                               | 9                  | B              |
| AP-1201   | Physics                         | 9                  | A-             | ME-2202   | Machine Design-I                   | 9                  | C              | ME-3202  | Vibrations                     | 9                  | A-             | ME-4202  | Fracture mechanics                        | 9                  | C              |
| AC-1201   | Chemistry                       | 9                  | C              | ME-2203   | Manufacturing Engineering-I        | 12                 | B              | ME-3203  | Heat & Mass Transfer           | 12                 | B              | ME-4203  | Refrigeration and Air Conditioning        | 9                  | A-             |
| ME-1201   | Engineering Mechanics           | 9                  | B-             | ME-2204   | Dynamics of Machines               | 9                  | B              | ME-3204  | I.C Engines                    | 12                 | B              | ME-4205  | Automobile Engg.                          | 9                  | A              |
| AM-1203   | Computer Programming & Graphics | 11                 | C              | EC-2206A  | Electronics and Instrumentation    | 9                  | A              | ME-3205  | Mechatronics                   | 9                  | A-             |  |   |                    |                |
|   |                                 |                    |                | AM-2206A  | Numerical Method                   | 9                  | B-             | HU-3205  | Industrial Sociology           | 9                  | A-             |  |   |                    |                |
| <i>Practical:</i>   |                                 |                    |                | <i>Practical:</i>   |                                    |                    |                | <i>Practical:</i>  |                                |                    |                | <i>Practical:</i>  |   |                    |                |
| AP-1401   | Physics Laboratory              | 3                  | A              | ME-2401   | Machine Design Practical           | 3                  | B-             | ME-3401  | Mechanical Engg. Laboratory    | 3                  | B              | ME-4402  | Comprehensive Viva-Voce                   | 2                  | A              |
| AM-1401   | Computer Laboratory             | 2                  | B-             | ME-2402   | Mechanical Engineering Lab         | 3                  | B              | ME-3402  | Machine Design Laboratory      | 3                  | B-             | ME-4403  | Computational Mechanics Lab               | 3                  | A              |
| ME-1401   | Engineering Drawing             | 4                  | B-             | EE-2406A  | Electrical Engineering Lab         | 3                  | A-             | ME-3403  | Project                        | 3                  | B-             |  |   |                    |                |
| ME-1402   | Workshop Practice               | 3                  | A-             | EC-2406A  | Electronics & Instrumentation Lab  | 1                  | A-             |  |                                |                    |                |  |   |                    |                |
| Total Credits   |                                 | 59                 |                | Total Credits   |                                    | 70                 |                | Total Credits  |                                | 69                 |                | Total Credits  |   | 41                 |                |
| Sum of (Credits x Grade Points) obtained in Second Semester |                                 | 426                |                | Sum of (Credits x Grade Points) obtained in Fourth Semester |                                    | 552                |                | Sum of (Credits x Grade Points) obtained in Sixth Semester |                                | 555                |                | Sum of (Credits x Grade Points) obtained in Eighth Semester  |   | 347                |                |
| Second Semester Performance Index (SPI)                     |                                 | 7.22               |                | Fourth Semester Performance Index (SPI)                     |                                    | 7.89               |                | Sixth Semester Performance Index (SPI)                     |                                | 8.04               |                | Eighth Semester Performance Index (SPI)                      |   | 8.46               |                |
| Second Semester and B.Tech. Part I Course Passed            |                                 |                    |                | Fourth Semester and B.Tech. Part II Course Passed           |                                    |                    |                | Sixth Semester and B.Tech. Part III Course Passed          |                                |                    |                | Eighth Semester and B.Tech. Part IV Course Passed            |   |                    |                |

**Cumulative Performance Index (CPI): 7.77**

**Bachelor of Technology (B.Tech.) in MECHANICAL ENGINEERING: PASSED**

(Refer backside for legend)

It is verified that the above statements are correct.

Checked and Verified by:

(Signature)

Minni Seth  
9/6/19

सहायक कुलसचिव (शिक्षण-परीक्षा)  
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Indian Institute of Technology  
Banaras Hindu University

## LEGEND

| Grade | Grade Point | Academic Performance   |
|-------|-------------|--|
| A*    | 10          | Outstanding (extraordinarily high level of learning)           |
| A     | 10          | Excellent  |
| A-    | 09          | Very Good  |
| B     | 08          | Good   |
| B-    | 07          | Very Fair  |
| C     | 06          | Fair   |
| C-    | 05          | Poor (but pass grade for the course)                           |
| F     | 00          | Fail (extremely low level of learning)                         |
| S     | --          | Satisfactory   |
| X     | --          | Unsatisfactory   |
| I     | --          | Incomplete   |
| T     | --          | Waiver/Transfer  |
| Z     | 0           | Deregistered from the Course<br>due to insufficient attendance |

Grade ‘T’ stands for waiver/transfer for the work done at the other Institute/ University/ Organization.

The Semester Performance Index (SPI) is a weighted average of the grade points earned by a student in courses credited and describes his/her academic performance in a semester. If the grade points associated with the letter grades awarded to a student are  $G_1, G_2, G_3, G_4$ , and  $G_5$  in five courses and the corresponding credits are  $C_1, C_2, C_3, C_4$ , and  $C_5$ , the SPI is given by:

$$SPI = \frac{C_1 \times G_1 + C_2 \times G_2 + C_3 \times G_3 + C_4 \times G_4 + C_5 \times G_5}{C_1 + C_2 + C_3 + C_4 + C_5}$$

The Cumulative Performance Index (CPI) indicates the overall academic performance of a student in all the courses registered up to and including the latest completed semester/summer term. It is computed in the same manner as the SPI.

In the computation of both SPI and CPI, courses with S, X and T grades are ignored.

From SPI, CPI the equivalent average percentage of marks may be obtained by using the following formula

$$X = 10Y$$

Where, X is the equivalent average percentage of marks and Y is the SPI, CPI, as the case may be