भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान कोलकाता

# INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH KOLKATA

Transcript of Academic Records for **Anuran Pal**, Roll No: **16MS152**

IISER KOLKATA

Major: **Physical Sciences** | **5 Year BS-MS Dual Degree Programme** | Medium of Instructions: **English**

0 1 2 4 9 6 2

**Semester: I** — **Session: 2016-17**

| Code | Course Title | Type | Credit | Grade |
|---|---|---|---|---|
| CH1101 | Elements of Chemistry | T | 3.0 | B+ |
| CH1102 | Chemistry Lab I | L | 3.0 | A |
| CS1101 | Introduction to Computer Programming I | L | 3.0 | A |
| ES1101 | Earth and Planetary Sciences | T | 3.0 | A |
| HU1101 | Communicative English and Sociology I | T | 2.0 | B+ |
| LS1101 | Introduction to Biology I | T | 3.0 | B+ |
| LS1102 | Biology Laboratory I | L | 3.0 | B+ |
| MA1101 | Mathematics I | T | 3.0 | A+ |
| PH1101 | Physics I | T | 3.0 | A |
| PH1102 | Physics Laboratory I | L | 3.0 | A |

**Total semester credit**: 29.0 **SGPA**: 8.72 **CGPA**: 8.72

**Semester: II** — **Session: 2016-17**

| Code | Course Title | Type | Credit | Grade |
|---|---|---|---|---|
| CH1201 | General Physical Chemistry | T | 3.0 | B+ |
| CH1202 | Physical Chemistry Laboratory | L | 3.0 | B |
| CS1201 | Introduction to Computer Programming | L | 3.0 | A |
| ES1201 | Earth System Processes | T | 3.0 | B |
| HU1201 | Communicative English and Sociology II | T | 2.0 | B+ |
| LS1201 | Introduction to Biology II | T | 3.0 | B+ |
| LS1202 | Biology Laboratory II | L | 3.0 | A |
| MA1201 | Mathematics II | T | 3.0 | A |
| PH1201 | Physics II | T | 3.0 | A+ |
| PH1202 | Physics Laboratory II | L | 3.0 | B+ |

**Total semester credit**: 29.0 **SGPA**: 8.31 **CGPA**: 8.52

**Semester: III** — **Session: 2017-18**

| Code | Course Title | Type | Credit | Grade |
|---|---|---|---|---|
| ES2101 | Biogeochemical Cycles and Surface Processes | T | 4.0 | B+ |
| ES2102 | Hydrology and Geomorphology | T | 4.0 | A |
| MA2101 | Analysis I | T | 3.0 | C |
| MA2102 | Linear Algebra I | T | 3.0 | C |
| MA2103 | Mathematics III | T | 2.0 | D |
| PH2101 | Physics III | T | 3.0 | B |
| PH2102 | Electricity and Electronics | T | 2.0 | B |
| PH2103 | Physics Laboratory III | L | 3.0 | A |

**Total semester credit**: 24.0 **SGPA**: 7.33 **CGPA**: 8.17

**Semester: IV** — **Session: 2017-18**

| Code | Course Title | Type | Credit | Grade |
|---|---|---|---|---|
| ES2201 | Geophysics | T | 4.0 | C |
| ES2202 | Basic Structural Geology and Tectonics | T | 4.0 | C |
| MA2201 | Analysis II | T | 3.0 | D |
| MA2202 | Probability I | T | 3.0 | B |
| MA2203 | Mathematics IV | T | 2.0 | B |
| PH2201 | Physics IV | T | 3.0 | B+ |
| PH2202 | Thermal Physics | T | 2.0 | B |
| PH2203 | Physics Laboratory IV | L | 3.0 | A |

**Total semester credit**: 24.0 **SGPA**: 6.79 **CGPA**: 7.86

**Semester: V** — **Session: 2018-19**

| Code | Course Title | Type | Credit | Grade |
|---|---|---|---|---|
| MA3103 | Introduction to Graph Theory | T | 4.0 | B |
| PH3101 | Intermediate Classical Mechanics | T | 4.0 | B |
| PH3102 | Intermediate Quantum Mechanics | T | 4.0 | A |
| PH3103 | Mathematical Methods of Physics | T | 4.0 | B |
| PH3104 | Electronics Laboratory | L | 4.0 | B+ |
| PH3105 | Computational Physics | L | 4.0 | A |

**Total semester credit**: 24.0 **SGPA**: 7.83 **CGPA**: 7.85

**Semester: VI** — **Session: 2018-19**

| Code | Course Title | Type | Credit | Grade |
|---|---|---|---|---|
| MA3202 | Geometry of Curves and Surfaces | T | 4.0 | C |
| PH3201 | Basic Statistical Mechanics | T | 4.0 | B |
| PH3202 | Intermediate Electricity and Magnetism | T | 4.0 | A |
| PH3203 | Advanced Quantum Mechanics | T | 4.0 | B+ |
| PH3204 | Advanced Optics Laboratory | L | 4.0 | B |
| PH3205 | Basic Nuclear Physics - Theory and Laboratory | L | 4.0 | A |

**Total semester credit**: 24.0 **SGPA**: 7.67 **CGPA**: 7.82

**Semester: VII** — **Session: 2019-20**

| Code | Course Title | Type | Credit | Grade |
|---|---|---|---|---|
| PH4101 | Basic Condensed Matter Physics | T | 4.0 | A |
| PH4102 | Introductory Astrophysics | T | 4.0 | A |
| PH4103 | Condensed Matter Laboratory | L | 4.0 | A |
| PH4104 | Nonlinear Dynamics | T | 4.0 | A+ |
| PH4106 | Basics of Field Theory and Relativistic Quantum Mechanics | T | 4.0 | A+ |
| SS4101 | Space Astronomy | T | 4.0 | A |

**Total semester credit**: 24.0 **SGPA**: 9.33 **CGPA**: 8.03

**Semester: VIII** — **Session: 2019-20**

| Code | Course Title | Type | Credit | Grade |
|---|---|---|---|---|
| MA4207 | Machine Learning and Network Analysis | T | 4.0 | A |
| PH4204 | High Energy Physics | T | 4.0 | A |
| PH4205 | General Theory of Relativity and Cosmology | T | 4.0 | B+ |
| PH4207 | Quantum Information Processing | T | 4.0 | B+ |
| PH4209 | Quantum Field Theory II | T | 4.0 | A+ |
| PH4210 | Evolutionary Dynamics | T | 4.0 | A+ |

**Total semester credit**: 24.0 **SGPA**: 9.0 **CGPA**: 8.14

**Semester: IX** — **Session: 2020-21**

| Code | Course Title | Type | Credit | Grade |
|---|---|---|---|---|
| CS3101 | Programming and Data Structures I | L | 4.0 | A+ |
| PH5101 | BS-MS Project | P | 16.0 | A+ |
| PH5102 | Independent Study | P | 4.0 | A |

**Total semester credit**: 24.0 **SGPA**: 9.83 **CGPA**: 8.32

**Verified by**

**Date: March 3, 2021**

**Assistant Registrar (Academic)**

**Dean of Academic Affairs**

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# INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH KOLKATA

Transcript of Academic Records for **Anuran Pal**, Roll No: **16MS152**

Major: **Physical Sciences** | **5 Year BS-MS Dual Degree Programme** | Medium of Instructions: **English**

**Course details:** **CH**: Chemical Sciences, **CS**: Computer Sciences, **ES**: Earth Sciences, **HU**: Humanities, **ID**: Interdisciplinary, **LS**: Biological Sciences, **MA**: Mathematical Sciences, **PH**: Physical Sciences, **SS**: Space Sciences

**Course types:** **T**: Theory, **L**: Laboratory, **P**: Project

## Grading System

| Grade | Grade Point |
|---|---|
| A+ | 10 |
| A | 9 |
| B+ | 8 |
| B | 7 |
| C | 6 |
| D | 5 |
| F | 0 |

**Semester Grade Point Average (SGPA)** = $\sum_{i=1}^{m} C_i.G_i / \sum_{i=1}^{m} C_i$ ,

where $m$ is the total number of courses the student has registered in a particular semester, $C_i$ is the number of credits allotted to $i^{th}$ course and $G_i$ is the grade point corresponding to the letter grade (as per the adjacent table) awarded to the student for the $i^{th}$ course. The SGPA is rounded off to the second place of decimal. This SGPA reflects the student's performance for the semester.

**Cumulative Grade Point Average (CGPA)** = $\sum_{i=1}^{n} C_i.G_i / \sum_{i=1}^{n} C_i$ ,

where $n$ is the total number of courses the student has registered from the first semester onwards up to and including the student's last completed semester, $C_i$ is the number of credits allotted to $i^{th}$ course and $G_i$ is the grade point corresponding to the letter grade awarded to the student for the $i^{th}$ course. The CGPA is rounded off to the second place of decimal. The CGPA would indicate the cumulative performance of the student from the first semester up to the end of the semester to which it refers.