

## External Experts Feedback

The Experts are requested to provide their assessment on the following dimensions:

1. Vision of the department and suggestions for future growth, both short and long term.
2. Quality (depth, breadth, relevance, adequacy, methodology, logical progression, link to industry/research, novelty) of academic programme and teaching.
3. Level of Research: Breadth, width, impact, relevance, uniqueness, leadership, national/international stature/reputation.
4. Facilities: Infrastructure, machines, teaching labs, research labs, staff quality log book, student/scholar participation, modernity and status compared to best international facilities.
5. Output: quality/quantity of publications, patents, UG/PG/PhD thesis, books, reports.
6. General reputation (of department) teaching, faculty, students, alumni, contribution to industry, nation projects.
7. Level of collaboration: national and international.
8. Strengths and Weaknesses – faculty, students, labs, infrastructure.
9. Suggestions for future growth of the department: short-term/long-term.

The feedback will be in **two parts**:

The **1<sup>st</sup> Part** will be in the form of score sheet on several parameters and feedback sheets on individual, while in the **2<sup>nd</sup> Part**, the experts will provide a detailed qualitative report on the above dimensions including suggestions for improvements.

## External Expert's Report (1<sup>st</sup> Part)

|  |  |
|--|--|
| Name of the Department                                 | Humanities and Social Sciences   |
| Name and address of the institution                    | IIT (ISM) Dhanbad  |
| Dates of the visit                                     | 20 - 21 February 2023  |
| Name, designation, and affiliation of programme Expert | C. D Sebastian, Professor, Department of Humanities and SS, IIT Bombay, Mumbai |

### Score Sheet

- On each of the following parameters, a grading as per the given scale (1 = Poor, 2 = Average, 3= Good, 4 = Very Good, 5 = Excellent).
- The Expert may choose any score in between 1 – 5.
- Attribute are indication for the areas of evaluation or assessment.
- Feedback (in terms of score) from the Experts will be shared with the Department without disclosing the identity of the Expert Member.

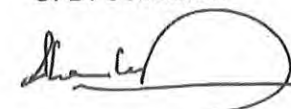
| No. | Parameter                                       | Attributers   | Score Scale |
|-----|---|---|-------------|
| 1   | Teaching programme                              | Regularity, methods, lecture plan, Syllabus, Teaching aids and Supplements, Reference materials, Pace of teaching, Mentoring/ Authoring, Numerical/ Analytical problems, Research (thesis/non-thesis) component, Scope for academic rehabilitation for weaker students, Pace of learning. | 4           |
| 2   | Academic curriculum                             | Breadth, Depth, Relevance to research/industry, contemporary/modern, logical progression, Number and variety of electives, innovative components, New/pioneering courses/ Flexibility in terms of minor/double major/dual degree.   | 4           |
| 3   | Laboratory/experiments, Assignment and exercise | Design and quality of experiments, Relevance, Theory and introduction lectures, Level of student participation (hands-on training) Grading, Standard of machines/equipment, Model experiments, Report writing/submission mechanism, Evaluation process, Attendance level                  | NA          |

|    |  |   |   |
|----|--|---|---|
| 4  | Learning methodology aids  | Books, Reference, Library, Slides, Tutor, Question Paper, Tutorials, Type of assignments, Computer/net/video library/web-based aids, Archives for reference, Aid for slow paced learning, Scope for improving communication skills.   | 3 |
| 5  | Grading/ evaluation system                                       | Realistic or irrational, Paper checking/sharing, Awareness Grading process and transparency, Record keeping, Uniformity (year to year; teacher to teacher), Assignment quality and frequency, Tutor support, Student feedback system, Stress on attendance  | 4 |
| 6  | Faculty quality  | Academic credentials, Teaching experience, Research output, Age/competence profile, Articulation, Thesis and project supervision records, Peer recognition and awards, National/International stature, Vision and Philosophy, Office and laboratory space management, Reputation among students/scholars/colleagues | 4 |
| 7  | Research contribution  | Quality, Quantity, Impact, Perception, Patent, Novelty, Standard of facility, Research plan/vision, Translational research, Creation of faculty company (start-up), industrial collaboration.   | 3 |
| 8  | Sponsored Research   | Quantum, Source and type of funding, Level of support provided to students and infrastructures, Uniqueness of facility created, Regularity and continuity, Creation of national facility  | 3 |
| 9  | Industrial consultancy project/ EDP courses/ Outreach programmes | Quantum, source and type of funding, level of support provided to students and infrastructures, uniqueness of facility created.   | 3 |
| 10 | Collaboration Within or Outside IIT(ISM) Dhanbad                 | Number, type and quality of collaboration with academia/R&D/ Industry at national or international level, Project funding (joint), Organization of meeting/conference, Joint supervision of students/ projects/ thesis, Special (executive) courses for industry Level and Impact of output from collaboration.     | 2 |
| 11 | International Component and connection                           | Number/type/frequency of international students, scholars, Visitors and projects, Collaboration, Exchange program, international events organized, MoU/MoA, Foreign visits of IIT(ISM) students/scholars, faculty members, International Mobility/Projects/Fellowships.   | 2 |
| 12 | Ambience/ Atmosphere in the department                           | Levels and effectiveness or collective initiatives, Publicity and information materials, Teacher-student relationship, Scholar-Supervisor relationship, Overall ambience of the department.   | 3 |
| 13 | Infrastructure (General)   | Classroom, Seminar halls, Laboratories, Workshops, Faculty offices, Research Scholar offices/space, Laboratory Safety   | 2 |

|   |   |   |   |
|---|---|---|---|
| 14                                      | Student quality (UG/PG)   | Academic background and progress, Level of motivation and interest in core subjects, Depth of understanding, Interests and hobbies, Discipline, Future ambition, Communication and comprehension skills, Degree of satisfaction about academic and extra-academic standards.  | 3 |
| 15                                      | Student quality (PhD Scholar)   | Level of understanding in core area, Exposure in core specialization, Quality and quantity of research output, Average time for PhD, Motivation and interest, Discipline, Articulation (Communication skill), Ambition, Awareness, National/International exposure, Leadership quality.   | 3 |
| 16                                      | Employability of students and scholars  | Companies, Statistics, Student or employer feedback, Salary/perks level, Pattern of employment or placement, Job distribution among UG/PG/PhD students, Relation between elective/training and employment, Relation between academic performance and employment.  | 3 |
| 17                                      | Number, location, sector and professional success profile of alumni, Contribution | Number, location, sector and professional success profile of alumni, Contribution of alumni to his/her profession and society, Alumni-IIT(ISM) link/bond, Participation in or contribution to alma mater, Alumni feedback, Famous alumni and their profile.   | 2 |
| 18                                      | Scientific or Engineering contribution to National/Society                        | Quality of academic (non-degree) programs, Short courses, Training, Refresher courses, Societal projects, Large/mega project (product/process), Contribution to strategic sectors (Nuclear/Defence/Space/Energy), Partnership with industry (private/public sector), Quality and reputation of alumni, Academic contributions and impact (publications, book, patents, products). | 2 |
| 19                                      | Overall Reputation and Standing (national)  | General impression about this Department in the country (teaching, research, faculty, staff, students, alumni, research/academic output, peer recognition, technical expertise, infrastructure, Atmosphere and Vision   | 3 |
| 20                                      | Overall Reputation and Standing (International)                                   | General impression about this Department: Teaching, Research, Faculty, Staff, Students, Alumni, Research/Academic output, Peer recognition, Technical expertise Infrastructure, Atmosphere and Vision.  | 1 |
| <b>Overall feedback and suggestions</b> |   | Good. We have given the suggestions in a separate sheet.  |   |

Name and Signature of the Expert

C. D. Sebastian



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3. Level of Research: Breadth, width, impact, relevance, uniqueness, leadership, national/international stature/reputation.
4. Facilities: Infrastructure, machines, teaching labs, research labs, staff quality log book, student/scholar participation, modernity and status compared to best international facilities.
5. Output: quality/quantity of publications, patents, UG/PG/PhD thesis, books, reports.
6. General reputation (of department) teaching, faculty, students, alumni, contribution to industry, nation projects.
7. Level of collaboration: national and international.
8. Strengths and Weaknesses – faculty, students, labs, infrastructure.
9. Suggestions for future growth of the department: short-term/long-term.

The feedback will be in **two parts**:

The **1<sup>st</sup> Part** will be in the form of score sheet on several parameters and feedback sheets on individual, while in the **2<sup>nd</sup> Part**, the experts will provide a detailed qualitative report on the above dimensions including suggestions for improvements.

## External Expert's Report (1<sup>st</sup> Part)

|  |  |
|--|--|
| Name of the Department                                 | HSS  |
| Name and address of the institution                    | (Formerly at) IIT Kanpur                                     |
| Dates of the visit                                     | Feb 20-21, 2023  |
| Name, designation, and affiliation of programme Expert | Lilavati Krishnan, Professor (Retd), Dept of HSS, IIT Kanpur |

### Score Sheet

Comment – The Dept of HSS, IIT (ISM) Dhanbad, has come into existence only in the recent past (except for the English and Philosophy disciplines), and is multi-disciplinary, with varying requirements of each discipline. The ratings I have given below are based on the parameters as they related to PhD students, and not UG students. They should be viewed in the light of these and other features (such as the small number of faculty in each discipline). I am unable to assess some of the given attributes, considering the nature of the Department.

- On each of the following parameters, a grading as per the given scale (1 = Poor, 2 = Average, 3= Good, 4 = Very Good, 5 = Excellent).
- The Expert may choose any score in between 1 – 5.
- Attributes are indicated for the areas of evaluation or assessment.
- Feedback (in terms of score) from the Experts will be shared with the Department without disclosing the identity of the Expert Member.

| No. | Parameter          | Attributes  | Score Scale |
|-----|--------------------|---|-------------|
| 1   | Teaching programme | Regularity, methods, lecture plan, Syllabus, Teaching aids and Supplements, Reference materials, Pace of teaching, Mentoring/ Authoring, Numerical/ Analytical problems, Research (thesis/non-thesis) component, Scope for academic rehabilitation for weaker students, Pace of learning. | Overall 3   |

|    |  |  |                  |
|----|--|--|------------------|
| 2  | Academic curriculum  | Breadth, Depth, Relevance to research/industry, contemporary/modern, logical progression, Number and variety of electives, innovative components, New/pioneering courses/ Flexibility in terms of minor/double major/dual degree. (Most of these components could not be judged).  | 3                |
| 3  | Laboratory/experiments, Assignment and exercise                  | Design and quality of experiments, Relevance, Theory and introduction lectures, Level of student participation (hands-on training) Grading, Standard of machines/equipment, Model experiments, Report writing/submission mechanism, Evaluation process, Attendance level.  | Unable to assess |
| 4  | Learning methodology aids  | Books, Reference, Library, Slides, Tutor, Question Paper, Tutorials, Type of assignments, Computer/net/video library/web-based aids, Archives for reference, Aid for slow paced learning, Scope for improving communication skills.(More resources are needed in this parameter)   | 2.5              |
| 5  | Grading/ evaluation system                                       | Realistic or irrational, Paper checking/sharing, Awareness Grading process and transparency, Record keeping, Uniformity (year to year; teacher to teacher), Assignment quality and frequency, Tutor support, Student feedback system, Stress on attendance (Faculty should be given more autonomy in grading/ evaluation)                          | Unable to assess |
| 6  | Faculty quality  | Academic credentials, Teaching experience, Research output, Age/competence profile, Articulation, Thesis and project supervision records, Peer recognition and awards, National/International stature, Vision and Philosophy, Office and laboratory space management, Reputation among students/scholars/colleagues                                | Overall 4        |
| 7  | Research contribution  | Quality, Quantity, Impact, Perception, Patent, Novelty, Standard of facility, Research plan/vision, Translational research, Creation of faculty company (start-up), industrial collaboration.  | Overall 3.5      |
| 8  | Sponsored Research   | Quantum, Source and type of funding, Level of support provided to students and infrastructures, Uniqueness of facility created, Regularity and continuity, Creation of national facility. (Relatively few funding sources are available for HSS research in the country)   | Overall 3        |
| 9  | Industrial consultancy project/ EDP courses/ Outreach programmes | Quantum, source and type of funding, level of support provided to students and infrastructures, uniqueness of facility created. (Comparison with Engineering/Science departments, and high expectations from HSS Dept, on this parameter would not be realistic).  | Unable to assess |
| 10 | Collaboration Within or Outside IIT(ISM) Dhanbad                 | Number, type and quality of collaboration with academia/R&D/ Industry at national or international level, Project funding (joint), Organization of meeting/conference, Joint supervision of students/ projects/ thesis, Special (executive) courses for industry Level and Impact of output from collaboration. (Same comment as in point 9.above) | Unable to assess |

|    |   |   |                  |
|----|---|---|------------------|
| 11 | International Component and connection  | Number/type/frequency of international students, scholars, Visitors and projects, Collaboration, Exchange program, international events organized, MoU/MoA, Foreign visits of IIT(ISM) students/scholars, faculty members, International Mobility/Projects/Fellowships. (Same comment as in point 9.above)  | Unable to assess |
| 12 | Ambience/ Atmosphere in the department  | Levels and effectiveness or collective initiatives, Publicity and information materials, Teacher-student relationship, Scholar-Supervisor relationship, Overall ambience of the department.   | 4                |
| 13 | Infrastructure (General)  | Classroom, Seminar halls, Laboratories, Workshops, Faculty offices, Research Scholar offices/space, Laboratory Safety   | 3.5              |
| 14 | Student quality (UG/PG)   | Academic background and progress, Level of motivation and interest in core subjects, Depth of understanding, Interests and hobbies, Discipline, Future ambition, Communication and comprehension skills, Degree of satisfaction about academic and extra-academic standards.  | Unable to assess |
| 15 | Student quality (PhD Scholar)   | Level of understanding in core area, Exposure in core specialization, Quality and quantity of research output, Average time for PhD, Motivation and interest, Discipline, Articulation (Communication skill), Ambition, Awareness, National/International exposure, Leadership quality. (Some of these attributes could not be assessed)  | Overall 4        |
| 16 | Employability of students and scholars  | Companies, Statistics, Student or employer feedback, Salary/perks level, Pattern of employment or placement, Job distribution among UG/PG/PhD students, Relation between elective/training and employment, Relation between academic performance and employment.  | Unable to assess |
| 17 | Number, location, sector and professional success profile of alumni, Contribution | Number, location, sector and professional success profile of alumni, Contribution of alumni to his/her profession and society, Alumni-IIT(ISM) link/bond, Participation in or contribution to alma mater, Alumni feedback, Famous alumni and their profile.   | Unable to assess |
| 18 | Scientific or Engineering contribution to National/Society                        | Quality of academic (non-degree) programs, Short courses, Training, Refresher courses, Societal projects, Large/mega project (product/process), Contribution to strategic sectors (Nuclear/Defence/Space/Energy), Partnership with industry (private/public sector), Quality and reputation of alumni, Academic contributions and impact (publications, book, patents, products). | Unable to assess |
| 19 | Overall Reputation and Standing (national)  | General impression about this Department in the country (teaching, research, faculty, staff, students, alumni, research/academic output, peer recognition, technical expertise, infrastructure, Atmosphere and Vision. (For HSS, these attributes can be assessed only after some years)  | Unable to assess |
| 20 | Overall Reputation and Standing (International)                                   | General impression about this Department: Teaching, Research, Faculty, Staff, Students, Alumni, Research/Academic output, Peer recognition, Technical expertise Infrastructure, Atmosphere and Vision.  | Overall 4        |



|   |  |  |  |
|---|--|--|--|
|   |  | The faculty and PhD scholars seem highly motivated for teaching and research. With more resources and autonomy, especially in teaching, they are likely to add to the reputation of the Institute.                             |  |
| <b>Overall feedback and suggestions</b> |  | Considering that the HSS dept has existed for a fairly short time, the achievements are commendable. The suggestions for further growth of the department have been given in detail in the joint report of the Review Comment. |  |

*Lilavati Krishnan*

Name and Signature of the Expert

### External Expert's Report (2<sup>nd</sup> Part)

Please refer to the joint report submitted by the Review Committee. All the parameters mentioned below have been addressed in the report.

|  |  |  |
|--|--|--|
| Name of the Department                                 | HSS  |  |
| Name and address of the institution                    | (Formerly at) IIT Kanpur                                     |  |
| Dates of the visit                                     | Feb 20-21, 2023  |  |
| Name, designation, and affiliation of programme Expert | Lilavati Krishnan, Professor (Retd), Dept of HSS, IIT Kanpur |  |

|           |  |
|-----------|--|
| Strengths |  |
|-----------|--|

|                              |  |
|------------------------------|--|
| Weaknesses                   |  |
| Suggestions for improvements |  |
| Additional remarks, if any   |  |

*Lilavati Krishnar*

Name and Signature of the Expert