External Expert's Report (1st Part)

Name of the Department	Applied Geology
Name and address of the institution	I.I.T. (ISM), Dhanbad
Dates of the visit	31.3.2023 — 01.04.2023
Name, designation, and affiliation of programme Expert	DR. George Mathew, IIT Bombay; DR. A. Basu, IIT Kgp; DR. R. Krishnamurthy, IIT, Roorkee

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.	– 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, Popularity of ESO/Electives.	– 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	– 3 –

1/4/23 (G. Mathew)

(R. Krishnamurthy) 1/4/23

(A. BASU) 01/04/23

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.	- 4 -
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	- 3 -
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	- 4 -
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.	- 4 -
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.	- 3 -
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.	- 3 -
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 -

R. Kroni 1/4/23 (R. Krishnaiah)

1/4/23 (G. Mathew)

(A. BASU) 01/04/2023