Ph.D. Manual

Indian Institute of Technology (Indian School of Mines), Dhanbad

Ph.D. Manual

1. Classification of candidates

1.1. Full-time candidate

- a) A candidate who does his/her courses and research at IIT (ISM) (Institute) is a full-time candidate.
- b) A full-time candidate may have financial support in the form of (i) Institute teaching/research assistantship, (ii) fellowship/scholarships from external agencies, (iii) R&D projects at Institute, (iv) sponsorship by an organization, and (v) self-financing.

1.2. External candidate

- a) A candidate working in an academic institution or an R & D establishment equipped with necessary research facilities, and registered for Ph.D. at the Institute, is considered as an external candidate. Such a candidate is required to stay in the Institute during the course work and is expected to carry out maximum research work at his/her parent organization.
- b) Normal residency requirement is two semesters. The external candidates who clears a diagnostic test to be conducted by the respective department, the residency requirement may be waived-off for one semester.
- c) Such a candidate must be sponsored by his/her employer and must have been in employment with the sponsoring organization for at least 2 years at the time of admission. In case of mentoring under TEQIP and other such programs under MoUs the experience requirement may be relaxed.
- d) The employer must undertake to relieve the candidate to stay in the campus for the specified period to enable the candidate to complete the course work and other requirements.
- e) Certificate from organization that adequate facilities, with details, are available at the organization for carrying out the research work.
- f) The candidate should also provide the biodata of the prospective external supervisor from his/her organization who would supervise the candidate's work at his/her organization. The external supervisor will be a co-supervisor. The main supervisor has to be from the Institute.

1.3. Part-time candidate

- a) A part-time candidate is a professionally employed personnel who can, while employed, attend regular classes as per schedule of the Institute. The candidate will give an undertaking endorsed by his/her employer that he/she will be attending classes as required by the Institute. The candidate may do his/her research in the Institute or in the sponsoring organization.
- b) Such a candidate must be sponsored by his/her employer and must have been in employment with the sponsoring organization for at least 2 years at the time of admission. In case of mentoring under TEQIP and other such programs under MoUs the experience requirement may be relaxed.
- c) If he/she proposes to do research in his/her parent organization, then relevant rules for an external candidate will apply.

2. Eligibility for Admission

For admission to Ph.D. programs of different disciplines, an applicant possessing qualifications mentioned against the disciplines mentioned below is eligible to apply:

Ph.D. in Engineering

- a) An applicant must have a Masters degree in Engineering in the relevant subject with first class/division or a minimum of 60% marks/CGPA of 6.5 (on a 10 point scale), OR
- b) An applicant must have a Bachelors degree in engineering with a minimum of 70% marks/CGPA of 7.5 (on a 10 point scale), OR
- c) An applicant must have a Masters degree in science or an allied area with first class/division or a minimum of 60% marks/CGPA of 6.5 (on a 10 point scale).

Ph.D. in Science

- a) An applicant must have a Masters degree in the relevant subject with first class/division or a minimum of 60 % marks/CGPA of 6.5 (on a 10 point scale), OR
- b) An applicant must have a Bachelors degree in engineering with a minimum of 70 % marks/CGPA of 7.5 (on a 10 point scale), OR
- c) An applicant must have a Masters degree in science or an allied area with first class/division or a minimum of 60 % marks/CGPA of 6.5 (on a 10 point scale).

Ph.D. in Humanities and Social Sciences

- a) An applicant must have a Masters degree in the relevant subject, arts, commerce, humanities and social sciences with first class/division or a minimum of 60 % marks/CGPA of 6.5 (on a 10 point scale), OR
- b) An applicant must have a Masters degree in engineering / technology/science/ commerce / management with first class/division or a minimum of 60 % marks/CGPA of 6.5 (on a 10 point scale), OR
- c) An applicant must have a Bachelors degree in engineering with a minimum of 70% marks/CGPA of 7.5 (on a 10 point scale).

Ph.D. in Management

- a) An applicant must have a Masters degree or equivalent in management or allied areas or engineering / technology with first class/division or a minimum of 60 % marks/CGPA of 6.5 (on a 10 point scale), OR
- b) An applicant with a Bachelors degree in engineering with a minimum of 70 percent marks/7.5 CGPA,OR
- c) An applicant must have a Masters degree in science/arts/commerce with first class/division or a minimum of 60 % marks/CGPA of 6.5 (on a 10 point scale), OR
- d) An applicant who has qualified for CA/ICAI/ICMA/CS, with first class/division or a minimum of 60 % marks/CGPA of 6.5 (on a 10 point scale) in Bachelors degree.

Note: Bachelors degree in Engineering means regular fulltime Bachelors degree. A candidate with AMIE or similar degree is not eligible for admission.

3. Admission Procedure

This section covers the admission procedure for all candidates wishing to be admitted to the Ph.D. program in the Institute, irrespective of whether they opt for full-time, external, or part-time Ph.D. programs. This section also applies to candidates holding positions in projects at the Institute.

- a) The admission procedure consists of (i) shortlisting through GATE/NET/Appropriate National Level Examination and/or written examination conducted by the department, and (ii) interview.
- b) A candidate who has qualified CAT/GMAT is eligible for Ph.D. in Management.
- c) For Masters and/or Bachelors degree holders from Centrally Funded Technical Institutes (CFTIs) having a CGPA of 8.0 or above, the requirement of GATE/NET is waived off.
- d) A candidate, selected under Prime Ministers Research Fellowship (PMRF) scheme, shall be directly admitted to the PhD program without any interview.

- e) In very exceptional cases, for example for faculty rigorously selected under TEQIP for a mentee institution of IIT (ISM) Dhanbad, the Senate may directly admit candidates for the part-time Ph.D. program, provided the minimum eligibility criteria for admission is fulfilled.
- f) The admission to Ph.D. program will normally be held during May-June for the Monsoon Semester. However, if the need arises, admission may also be done during November-December for the Winter Semester, or on a rolling basis.
- g) For admission to Ph.D. program, the candidate must apply on the prescribed form, which must be sent directly to the Convener, DPGC of the Department concerned.
- h) Before the admission process, the Department must provide a list of the names of faculty members along with their research areas who will be available for guiding scholars. All the faculty members of a Department can be the members of the written test/interview committee.
- i) All admissions to Ph.D. program will be made on the approval of the Chairman, Senate on the recommendations of the duly constituted Departmental Selection Committee and the Admission Committee. The Departmental Selection Committee shall consist of faculty members from the Department and at least one faculty member from another Department. The constitution of the Departmental Selection Committee shall be proposed by the DPGC and approved by the Chairman, Senate.
- j) Candidates in the final year of the qualifying degree may be considered for provisional admission provided that they give an undertaking that the results will be made available to Institute on or before the specified date in the Academic Calendar of the Institute. The provisional admission of such candidates will stand cancelled if they fail to produce the result by the specified date or fail to obtain the required class/division or CGPA/% of marks.
- k) On approval by the Chairman, Senate, the Academic Section will issue the admission letters to the candidates who will be required to accept the offer of admission by depositing the prescribed fee before the specified date.
- In case a candidate does not accept the offer by paying the prescribed fee by the specified date, the offer of admission may stand withdrawn, and the admission may be offered to the candidates in the waiting list, if any, in the order of merit.
- m) The offer of admission may also stand withdrawn if the candidate, who has accepted the offer, fails to register by the date for late registration.

4. Reservation of Seats

a) Reservation policy as in-force at the Institute, from time to time shall be applicable to admissions in all academic programs of the Institute. The extant policy entails

- reservation of 15% of seats for Scheduled Caste applicants, 7.5% for Scheduled Tribe applicants and 27% for Other Backward Classes (OBC-NCL) applicants.
- b) There shall be horizontal reservation of 5% of the sanctioned strength, across all categories, for applicants belonging to persons with disabilities (PwD).

5. Admissions under QIP/Sponsored category/ NRIs/ PIO/OCI/Foreign Nationals, etc.

- a) An applicant shall be eligible to apply as a full-time candidate for admission under this category.
- b) The procedures and requirements for admission of QIP and defense personnel candidates will be as per the prescribed procedure. These candidates will have to satisfy the prescribed minimum marks/CGPA and qualifications as laid down in Section 2.
- c) The applications of foreign nationals sponsored by the Indian Council of Cultural Relations (ICCR)/under an MoU between Institute and the sponsor, shall be scrutinized by the Department concerned to assess their suitability for admission to the program. Admission to such applicants shall be offered by the Institute after considering the recommendation of DPGC and SPGC and the approval of the Chairman, Senate.
- d) Admission of Non-Resident Indians (NRI)/Persons of Indian Origin (PIO)/Overseas Citizens of India (OCI) and Foreign Nationals to Ph.D. Program is provided under the following subsections:
 - i) NRI candidates must have been residing abroad continuously for at least one year at the time of submission of their application for admission; however, PIO/OCI candidates shall have no such restriction. The equivalence of their qualifications (except that of GATE/NET, etc.) with that of the general candidates shall be assessed by the DPGC of respective Departments and considered and approved by the SPGC. All such candidates who meet the qualifications may be admitted to the appropriate program.
 - ii) Non-sponsored candidates who belong to NRI/PIO/OCI/foreign national category, shall also be considered for admission to the Ph.D. program. Such candidates who are currently in India but have not taken GATE/NET may also seek admission to Ph.D. program, provided that the respective Department recommends their application for admission based on their qualifications and other credentials and these recommendations are considered and approved by the SPGC. Admission of such candidates, however, shall be subject to the clearance of the Central Government.

e) Admission of Scholars of other institutions (Non-Degree scholars) under MoU for carrying out research or for study.

For admission under this category, the details are provided under the following subsections:

- A scholar registered for Ph.D. program at another Institute/University or under twinning program at both the Institutes with guides from both the Institutes may also be allowed to work at the Institute. For such studies/research, the scholar has to pay to the Institute requisite academic fee/hostel fee and other charges as may be specified at the time of joining the Institute.
- submit an application to the Dean (Academic) for seeking admission to the Institute. All such applications will be vetted by a committee comprising of Dean (Academic), Dean (Research & Development), concerned Head of Department and the Convener, DPGC, as the case may be. The recommendation of the Committee shall be considered by the SPGC and their recommendation will be considered by the Chairman, Senate for granting approval.

6. Institute Assistantship

a) The Institute may provide financial assistance in the form of teaching or research assistantship (refer Institute Assistantship Section) to the full-time Ph. D. scholars who have qualified GATE or any other eligible national level examination. Assistantship is provided for a period up to five years or up to the date of submission of thesis, whichever is earlier, subject to devoting up to eight hours per week towards teaching/laboratory assistantship assigned to them. The stipend for the assistantship is paid at the approved rates as specified by the Ministry of Education, Govt. of India.

Amendment
of some
clause and
Addendum of
new clause
approved by
the Senate in
its 16th
Meeting (held
on 12 Oct
2020)
[Agenda Item
no. 16.04]

- b) Full time Ph.D. scholars financially supported by research projects may avail institute fellowship after completion of the project, provided that she/he has qualified GATE or any other eligible national level examination and have been admitted through Institute selection process (Section 3). The maximum duration of fellowship in all such cases will be up to five years (inclusive of Project and Institute funding) or up to the date of submission of thesis, whichever is earlier from the date of admission in the Ph.D. program.
- c) A report on the scholar's performance in the assistantship task will be provided by the concerned faculty to the scholar's supervisor.

- d) The fellowship will be released only after completing the semester registration, including payment of Registration Fees, and clearance of outstanding dues, if any, and if the DSC does not recommend otherwise.
- e) The Institute norms to assess the research progress of the scholar by the DSC must be followed at the end of every academic session. The concerned supervisor shall maintain the annual progress report. And if the DSC observes, as per the feedback of the supervisor, that the progress on research work is unsatisfactory then a report should be sent to the Academic Section for reduction/discontinuation of fellowship of the scholar.

The amendments (a to e) is effective from 2020-2021 academic session irrespective of the date of admission of the scholar.

f) Upgradation from JRF to SRF:

On completion of minimum two years and after satisfactory completion of Research Proposal Seminar within the stipulated duration, the scholar will be eligible for upgradation from JRF to SRF. Accordingly, the scholar will be entitled to get enhanced fellowship, as applicable, on the basis of the recommendation of the DSC.

The amendment is effective from 2019 admitted batch.

Addendum of new clause approved by the Senate in its 16th Meeting (held on 12 Oct 2020)

[Agenda Item no. 16.11]

g) Discontinuation/Resumption of the Fellowship:

Fellowship of the Ph.D scholar will be discontinued if the CGPA falls below 6.5 or if he/she get an 'F' grade in any of the course(s). The fellowship will be resumed only after the requirement of CGPA of 6.5 is fulfilled and on the basis of the recommendation of the DSC.

The amendment is effective from 2020 admitted batch.

Addendum of new clause approved by the Senate in its 16th Meeting (held on 12 Oct 2020) [Agenda Item no. 16.11]

7. Leave Rules

Ph.D. scholars may be granted leave under Sections (7i) and (7ii) on an application to the Head of the Department concerned through the Supervisor. Leave under Sections (7iii) will be sanctioned by Dean (Academic) on the recommendation of DPGC. Applications must be submitted well in advance of the date of commencement of the leave requested. Leave for a period longer than that specified in Sections (7i) and (7ii) may be sanctioned by Dean (Academic) on the recommendation of DPGC and it will entail loss of financial assistantship for the extended period.

(a) A Ph. D scholar may take a maximum of 30 days of personal leave (inclusive of medical) in an academic year (including winter break, mid- semester breaks and summer vacation) such that no more than 10 days of leave are taken during a semester. However, this 10-day

cap will not be enforced when semesters are not in progress and during the summer term. Leave not availed in one academic year will not be carried over to the next academic year. If leave is taken along with one weekend (Saturday and Sunday), addition of weekend shall be allowed only as a prefix or suffix. If both prefix and suffix of weekends are taken along with leave, total period of absence will be counted towards leave period.

- (b) A scholar may be granted maternity/paternity leave for a period as per government policy. Leave up to 6 weeks can also be granted for miscarriage including medical termination of pregnancy, if supported by a proper medical certificate. Such leave can be combined with any other leave due and will not entail any loss of financial assistantship.
- (c) If a registered scholar is absent on sanctioned leave for a period of 4 weeks or more during a semester, SPGC may decide to convert the leave to a semester/term leave, or reduce the thesis credits (in blocks of 9 credits) appropriately, in case the scholar is registered only for thesis credits
- (d) Absence without sanctioned leave will entail loss of financial assistantship for the period of absence, and may result in the termination of the scholar's program on the recommendation of the DPGC and approval of SPGC.
- (e) If a scholar falls ill while on the campus, the medical certificate must be obtained from the Institute's medical officer. If he/she falls ill outside the campus while on sanctioned leave, the medical certificate must be obtained from a registered medical practitioner.

8. Permission to Proceed for Academic Work outside Institute

In order to help-scholars broaden their horizons and enrich their cultural and academic experience, provision to proceed to other academic and research institutions in India or abroad as non-degree scholars is available. Rules and procedures to be followed for availing this provision are as follows:

- a) A Ph.D. scholar who clears Research Proposal Seminar may proceed to another academic institution in India or abroad with prior permission of the SPGC on the recommendation of the DPGC. However, he/she needs to get registered each semester as per Institute norms.
- b) The DPGC will consider the scholar's application and will determine if the proposed program of work is of such a nature that waiver for at least 18 credits per regular semester or 9 credits per summer term is possible. The SPGC may approve the application on the recommendation of the DPGC. In all such cases, the scholar will be informed about the requirements he/she must fulfill to apply for academic credit on his/her return. All application must be forwarded by the supervisor.

9. Semester Load Distribution

- a) Credits are based on assumption that the courses normally offered for Ph.D. scholars are 3-0-0 (i.e., 9 credits). In certain cases if tutorials and/or practicals are included then there may be slight variation in the number of credits.
- b) The total credits can consist of (i) only research credits, (ii) only course credits, and (iii) combination of research and course credits.
- c) The normal semester load for a full-time scholar is equivalent to 36 credits.
- d) The normal semester load for a part-time scholar is equivalent to 27 credits. For deserving cases, the DPGC may permit a part-time scholar to register for a maximum of 36 credits. The minimum duration for completing the course requirement in such cases may exceed 2 semesters.
- e) The maximum semester load for an external scholar for carrying out thesis research at his/her organization is 27 credits.
- f) Full-time and external scholars (during their residency) can register for a maximum of 45 credits to complete their course requirements.
- g) Scholars are required to register for minimum of 18 research credits out of a maximum 36 research credits per semester preferably from third semester onwards.

10. Academic Requirements

Ph.D. Registration will have three components, namely,

- Course Work,
- Comprehensive Examination and

Research Proposal Seminar.

Details are given below.

A. Minimum Duration, Maximum Duration and Academic Requirements

Table 1 lists the minimum duration and maximum duration allowed in the program, and credit requirements for graduation in various programs. "Course Work" includes only postgraduate course credits unless otherwise stated. To satisfy the "Minimum Duration" requirements, registration must be over consecutive semesters; exception will be made only if the scholar is on authorized leave. "Maximum Duration" is counted from the scholar's first registration date, i.e., admission date. CGPA will be calculated on the basis of all permitted courses taken by the scholar.

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Ta	ble 1. Minimum	Duration, M	laximum Dı	uration and A	cademic Req	uirements

Sl. No.	Program [Qualifying Degree]	Minimum Total Credits	Minimum Credit through Course Work	Minimum Credit through Research Work*	Minimum Duration (Semester) @	Maximum Duration (Semester)**
1	Ph.D. [after Masters in relevant field]	288	72#	108	8 Semester	12 Semester
2	Ph.D. [after BE/B. Tech or Masters not in relevant field]	306	90	108	9 Semester	14 Semester

Note:

Course work credits are calculated as follows: C = 3L+2T+1P; where C = credits, and L, T and P refer to lecture, tutorial and practical hours/week in a course. In our definition, course is same as subject.

- @ Excluding Summer Semester.
- * Detailed in Section 10(E).
- ** An additional two semesters may be given for Part-time/External Scholars.
- # For External and Part Time Scholars a diagnostic test will be conducted by the respective Department based on which the extent of course waiver may be considered.

B. Course work [Format PH-3]

a) Scholars joining for the program after Masters in relevant field

During the first two semesters, scholars are preferably required to register only for the course work. Minimum eight courses have to be taken from the following:

- i. Two Compulsory Departmental Papers
- ii. One Compulsory Paper on numerical methods/modeling/simulation use of Python/MATLAB/Mathematica etc. related to the Department offered by respective Department.
- iii. Four Elective Papers to be decided in consultation with the supervisor/DSC
- iv. Research Methodology offered by the respective Department
- v. Research and technical communication
- vi. If guide desires, he/she can ask the scholar to get registered for more courses.

Note:

- (1) The scholars, except those registered in the Department of Humanities and Social Sciences, are required to clear the course on Research and technical communication before the Research Proposal Seminar. However, this course shall not be counted towards CGPA calculation. Above (i)-(iv) will comprise of minimum eight courses.
- (2) The scholars registered in the Department of Humanities and Social Sciences are exempted from taking the course on Numerical Methods/Modelling/simulation, as given in (b) above. However, they have to clear the course on Research and technical communication as the normal course within the first two Semesters. This course shall also be counted towards CGPA calculation. Above (i) and (iii)-(v) will comprise of minimum eight courses.
- (3) Part Time and External scholars who have cleared diagnostic test need to opt for minimum of five courses comprising of (iii) and (iv). However, for scholars registered in Department of Humanities and Social Science the scholar needs to opt for six courses comprising of (iii), (iv) and (v).

The minimum credits through course work needs to be completed <u>within the first</u> <u>two semesters</u> for Full-Time and External Scholar, failing which the candidature is deemed to be terminated.

b) Scholars joining the program either after Masters degree not in relevant field or after Bachelors degree in engineering

During the first two semesters, scholars are preferably required to register only for the course work [Format PH-3]. Minimum ten courses have to be taken from the following:

- i. Four Compulsory Departmental Papers
- ii. One Compulsory Paper on numerical methods/modelling simulation use of Python/MATLAB/Mathmetica etc. related to the Department offered by the respective Department.
- iii. Four Elective Papers to be decided by the supervisor/DSC
- iv. Research Methodology from Department offered by the respective Department.
- v. Research and technical communication

If guide desires, he/she can ask the scholar to get registered for more courses.

Note:

- (1) The scholars, except those registered in the Department of Humanities and Social Sciences, are required to clear the course on Research and technical communication before the Research Proposal Seminar. However, this course shall not be counted towards CGPA calculation. Above (i)-(iv) will comprise for minimum of ten courses.
- (2) The scholars registered in the Department of Humanities and Social Sciences are exempted from taking the course on Numerical Methods/Modelling/simulation, as given in (ii) above. However, they have to clear the course on Research and technical communication as the normal course within the first two Semesters. This course shall also be counted towards CGPA calculation. Above (i) and (iii)-(v) will comprise for minimum of ten courses.
- (3) Waiver in course work for a Ph.D. scholar who has completed Master degree from any IIT [*Format PH-1*]:

A Ph.D. scholar who has completed Master degree from any IIT can be waived off a maximum of three courses (Two Compulsory Departmental Papers and One Compulsory Paper on numerical methods/modelling simulation use of Python/MATLAB/ Mathematica etc.). However, the scholars registered for Department of Humanities and Social Science can have a waiver of maximum of two papers i.e., Two Compulsory Departmental Papers.

Amendment approved by the Senate in its 16th Meeting (held on 12 Oct 2020)

[Agenda Item no. 16.04(e)]

The scholar will get waiver of the courses only if:

- 1) The course offered in the current semester of Ph.D is matching (80-100%) with the course cleared in master program, and
- 2) A minimum of 60% marks or equivalent grade has been obtained in that course in master program.

Waiver of course must be recommended by the DPGC.

The amendment is effective from 2020 admitted batch.

The minimum course work needs to be completed within first four semesters, failing which the candidature is deemed to be terminated.

C. Comprehensive examination [Format PH-4]

Scholars registered the Ph.D.program must clear Comprehensive examination (written or oral) with Satisfactory (S) grade within TWO months after releasing the list of the eligible candidates by the Academic Section. On Unsatisfactory (X) result, the scholar will get one chance again to appear in Comprehensive Examination within ONE month. That is the maximum duration for completion of Comprehensive Examination is within THREE months after releasing the list of the eligible candidates by the Academic Section. Modalities of the comprehensive examination will be decided by the DAC of the individual departments. Written part of the Comprehensive examination is optional and the decision is left to the DACs. However, the Oral examination will be mandatory. If any department decides to conduct the written examination they should conduct the examination for all the scholars of the department. The decision of the department to conduct a written examination should be communicated to the Dean (Academic) in advance.

Amendment approved by the Senate in Meeting (held on 12 Oct [Agenda Item nos. 16.11 & 16.12]

The comprehensive examination is designed to test the overall comprehension of the scholar registered for Ph.D program. A scholar can appear in the comprehensive examination only after he/she has completed the course work requirements and has secured a minimum CGPA of 6.5 (out of 10.0).

For securing the minimum required CGPA of 6.5, repeating or substituting of the course(s) in which a lower grade has been obtained is not permissible.

Maximum of two attempts is allowed to clear the comprehensive examination, failing which the academic program of the scholar is deemed to be terminated. The **Doctoral** scholar Scrutiny Committee will be the comprehensive examination board of the scholar.

A scholar enrolled in the Ph.D. program is formally admitted to the candidacy for the Ph.D. degree after the scholar completes the course requirements for the least with a CGPAat has passed the comprehensive examination.'

The amendment is effective from 2018 admitted batch.

D. Research Proposal Seminar [Format PH-5]

Every Ph.D. scholar admitted to the candidacy for the Ph.D. degree is required to deliver a Research Proposal Seminar on the area of research before the DSC. This seminar must be delivered within THREE months of clearing the Comprehensive Examination. The DSC report of satisfactory completion of this requirement is to be communicated to the Academic Section by the supervisor. If a scholar fails to on 12 Oct

Amendment approved by the Senate in its Meeting (held

2020) [Agenda Item no. 16.11]

successfully deliver the seminar/is unable to deliver the seminar due to some unavoidable circumstances within the stipulated three months, then on request of the scholar and recommendation from the DSC, the Dean (Academic) may grant an extension up to ONE month. That is the maximum duration to deliver a Research Proposal Seminar is within FOUR months after clearing of the Comprehensive Examination. If a scholar fails to deliver the Research Proposal Seminar even after this extension or the result of seminar is unsatisfactory, academic program of the scholar is deemed to be terminated.

It is mandatory for all the eligible scholars to deliver the research proposal seminar, with satisfactory grade (S), before the start of the classes for the next semester.

The amendment is effective from 2018 admitted batch.

E. Credit through Research Work

A scholar earns 9 credits for each Ph.D. project/thesis unit he/she is registered in a semester. The grade S or X will be awarded for project/thesis credits as follows:

At the end of the semester, the project/thesis supervisors(s) and DSC will assess the scholar's progress towards the project/thesis work during the semester and will award the grade S for each unit if the work is satisfactory and X for every unsatisfactory unit. Thus, a scholar registered for 36 credits can get one of the following five combinations SSSS, SSSX, SSXX, SXXX, XXXX. Format for the Ph.D. thesis grades in scholar's transcripts is given in Table 2.

Thesis Unit*	Thesis Credit	Grading Options
4	36	4S,3S1X,2S2X,1S3X,4X
3	27	3S, 2S1X, 1S2X,3X
2	18	2S, 1S1X, 2X

Table 2. Grading options for Thesis

The four thesis unit* could be assigned by supervisor to the Ph.D. scholars subject to full filling the following criteria:

- Scholar's literature survey and basic understanding of adopted problem. [continuous evaluation in regular intervals throughout the semester]
- Progress in Research work. [continuous evaluation throughout the semester by Supervisor]
- Usefulness and impact of research work done to cater the gaps in existing knowledge. [continuous evaluation throughout the semester]
- Credit on the basis of Lab Assignment/Field work, etc.

• Semester evaluation through a progress and oral presentation at the end of semester [by DSC].

Grades

- Course work will have Letter Credits Such as A+: 10, A: 9, B+: 8, B: 7, C+: 6, C: 5, D: 4, F: Fail
- Research Proposal Seminar, Thesis Units, Six monthly Report and Research and technical communication for those who have registered for Ph.D. in Departments other than Humanities and Social will be graded as satisfactory (S) or unsatisfactory (X) and will carry zero credits.

11. Change of Registration from Full-Time to Part-Time/External Ph.D. Program

A scholar admitted as a full-time Ph.D. scholar may be permitted to convert to a part-Time/External Ph.D. scholar. A scholar requesting such a conversion must: (i) have completed the minimum course work, passed the comprehensive examination, delivered the research proposal seminar which is adjudged as satisfactory, and (ii) get the request endorsed by the supervisor(s) and the DSC *[Format PH - 20]*. However, External scholars need to have a 'No Objection Certificate' from the employer. Such conversion, if approved by the Dean (Academic), will be subject to the following conditions: (i) The scholar must complete his/her thesis within the time limit stipulated in the Table 1. (ii) Provision of conversion from full-time to part-time status can be availed only once by the scholar during his/her program, and (iii) the progress of the scholar will be reviewed by the DSC at least once in every semester after the conversion, and his/her continuation on part-time status will be subject to his/her making satisfactory progress towards completing the Ph.D. thesis.

12. Medium of Instruction

The medium of instruction in the Institute is English. The answers written in languages other than English language need not be taken cognizance of and the part written in language other than English may not be graded.

13. General Guidelines

- (i) The monitoring body for Ph.D. program will be Senate Postgraduate Committee (SPGC). All academic matters concerning Ph.D. program shall be under the domain of the SPGC. The recommendations of the Department Postgraduate Committee (DPGC) shall be considered by the SPGC and the decisions of the SPGC shall be implemented.
- (ii) The minimum eligibility conditions for admission to Ph.D. programs of the Institute have already been stated above. However, the conditions may be made more

stringent by DPGC, provided that these are approved by the Senate. The number of seats to which admissions can be made in a given program shall be approved by the Senate from time to time.

- (iii) The attendance requirement in course work shall be applicable to all Ph.D. scholars.
- (iv) The DSC will have at least six members as mentioned below. Constitution of DSC will be approved by Dean (Academic) and the panel should be sent to the Dean (Academic) through the HOD [Format PH-2]:

Chairperson

: A Faculty member out of a panel of three Faculty members suggested by the Supervisor (s). The Chairperson of DSC shall be either from the same department or from other Department of the Institute. Provided that the Chairperson so proposed has expertise in the same discipline as that of research proposal.

Two Members from the Department: To be suggested by the Ph.D. Supervisor

Two Members from a Sister Department: From a panel of four members suggested by the Supervisor (s)

Supervisor and Co-Supervisor (if any):

- (v) The quorum for any meeting of the DSC shall be the following:
 - Chairperson
 - One Member from the Sister Department
 - One Member from the Department
 - Supervisor (s)

The Supervisor shall be the Convener of the DSC.

(vi) The maximum duration of fellowship for full time Ph.D scholar will be up to five years or up to the date of submission of thesis, whichever is earlier from the date of admission in the Ph.D. program. The Institute norms to assess the research progress of the scholar by the DSC must be followed at the end of every academic session. The concerned supervisor shall maintain the annual progress report. And if the DSC observes, as per the feedback of the supervisor, that the progress on research work is unsatisfactory then a report should be sent to the Academic Section for reduction/discontinuation of fellowship of the scholar.

However, the annual assessment and extension of registration for part-

Amendment
approved by
the Senate in
its 16th
Meeting (held
on 12 Oct
2020)
[Agenda Item
no. 16.04]

time/external Ph.D scholar is mandatory. The extension will be given by the academic section based on the recommendation of DSC.

The amendment is effective from 2020-2021 academic session irrespective of the date of admission of the scholar.

- (vii) The change of topic of research shall be considered by the DSC on an application by the scholar recommended by the Supervisor. The final approval of the title of the dissertation shall be considered by the DSC after reviewing the Pre-Submission Seminar.
- (viii) The notice for Pre-submission seminar shall be uploaded on the Institute website at least one week before the date of seminar. It is expected that all the Departmental Faculty members and research scholars would be attending the seminar.
- (ix) The scholar may apply for a Pre-Submission Seminar only when at least one research paper is accepted for publication/published in SCI/SCIE/SSCI*/AHCI*/ABDC/MCI Journals (Q1 or Q2) and the entire draft of the thesis has cleared the plagiarism check as prescribed and is certified by the supervisor for submission of the thesis. The DSC will forward the application of the scholar to the Academic Section, if the thesis is ready in all respect [Format PH-6].

 $\begin{tabular}{lll} Addendum & of \\ new & clause \\ approved & by \\ the Senate & in \\ its & 16^{th} \\ Meeting & (held \\ on & 12 & Oct \\ 2020) & [Agenda \\ Item no. 16.11] \\ \end{tabular}$

- (x) On clearance for a Pre-Submission Seminar from the Academic Section, the scholar needs to finish the Pre-Submission Seminar and submit the thesis for evaluation within three months from the date of issuance of clearance for Pre-Submission Seminar [Format PH-7; PH-7A; PH-8 & PH-9].
- (xi) Only soft copies of the thesis and synopsis are to be submitted to the Academic Section for evaluation and record [Format PH-10; PH-11; PH-12 & PH-13]. The final version of the thesis (soft copy), after incorporating all the suggestions indicated at the time of final viva-voce, is to be submitted to the Central Library for record [Format PH-15; PH-16; PH-17].
- (xii) The Panel of Examiners for Pre-Submission Seminar will consist of the members of Doctoral Scrutiny Committee of the scholar.
- (xiii) The panel of examiner for thesis evaluation will be provided by the supervisor(s) as per Institute norms notified from time to time [Format PH 8].
- (xiv) The Panel of Examiners for Final Thesis Defense Seminar will comprise of the members of the Doctoral Scrutiny Committee of the scholar along with one External Examiner [External Examiner to be decided by the Dean (Academic)]. The defense Seminar shall be open to all in the Institute.
- (xv) Change/Addition of Supervisor(s): If a scholar has only one Supervisor and the *Ph.D. Manual 2018*Page 17

Supervisor goes on leave for more than 12 (twelve) months, another Supervisor may be appointed by the Dean (Academic) on the recommendation of DSC. Such requests has to be routed through Convener, DPGC. Mutual consent of both the scholars and Supervisor(s) (being proposed) is to be taken in such cases.

- (xvi) The Chairman, Senate may permit a scholar to change his/her Supervisor(s) for valid reasons. The request of a Supervisor to be relieved from the Supervisory role of a research scholar may also be considered and decided by the Chairman Senate. Mutual consent of the scholar and supervisor(s) and recommendations of the DSC and HOD are required. Such cases are to be reported in the Senate. [Format PH 21]
- (XVII) The scholar may request to supervisor for inclusion of co-supervisor (Internal/External), with proper justification. Based on the consent of the supervisor(s), DPGC will send the recommendation to the Chairman, Senate through Dean (Academic) for approval [Format PH-21]. For including a co-supervisor, the following documents shall also be submitted: (i) Consent letter of the Co-supervisor and (ii) Brief bio-data, in case of the External Co-supervisor. After inclusion of Co-Supervisor, scholar will be allowed for Pre-Submission Seminar only on completion of twelve months from the date of inclusion. However, the condition to wait for a period of twelve months for Pre-Submission Seminar after inclusion of Co-supervisor would not be applicable in case of retirement of Supervisor.

 $\begin{tabular}{lll} Addendum & of new & clause \\ new & clause & by \\ the & Senate & in \\ its & & 16^{th} \\ Meeting & (held on & 12 & Oct \\ 2020) & [Agenda \\ Item & no. & 16.15 \\ (ii)] \\ \end{tabular}$

- (xviii) The change of Supervisor is normally not permissible after three years of date of admission and a scholar needs to complete a minimum of one year with the new Supervisor before submitting the thesis.
- (xix) Submission of six monthly report based on Table 2 is mandatory. The report has to be submitted before the next semester registration. The six monthly report is to be graded as Satisfactory (S) / Unsatisfactory (X). Two consecutive X grade and/or the accumulation of 4X grades as per Table 2 shall lead to termination of the Ph.D. program for which a scholar is registered and will be reported to the Senate
- (xx) A letter of warning will be issued to a Ph.D. scholar by the Head of the Department when he/she accumulates two or more Xs which is to be reported to the Senate
- (xi) At the time of submission of final thesis (soft copy) for evaluation, the scholars must have completed all the semester registration process (Academic Registration & Administrative Registration) for the on-going semester within the stipulated time frame as prescribed in the Academic Calendar. However, if a scholar submits the final thesis for evaluation within 4 weeks from the date of commencement of the semester, s/he may be eligible for getting the refund of the fees of that semester, after deduction of the actual charges for food and lodging during the period of stay. No refund request will be entertained after submission of thesis beyond the prescribed

 $\begin{tabular}{lll} Addendum & of new & clause \\ approved & by \\ the Senate & in \\ its & 16^{th} \\ Meeting & (held on 12 & Oct \\ 2020) & [Agenda \\ Item no. 16.11] \\ \end{tabular}$

duration.

(xxii) Scholars registered in the Ph.D. programs may count for residence and credit requirements, research or field work undertaken outside the Institute under the supervision of the Institute supervisor(s), if facilities for such work are not available at this institute. Such cases must be recommended by the DSC and approved by Dean (Academic).

(xxiii) Registration in every semester along with the payment of requisite full registration fees is mandatory for all the Ph.D. Scholars [Full Time / Part Time / External / Faculty and Staff Members of IIT(ISM)] as per the Institute norm.

Amendment approved by the Senate in its 16th Meeting (held on 12 Oct 2020) [Agenda Item no. 16.11]

- (xxiv) The scholar has to submit a report from any specified anti-plagiarism software, with the total common portion not exceeding 20% (excluding his own papers) for submission of Ph.D. thesis.
- (xxv) The procedures and requirements stated in this manual, other than those in Section 1 and 2 (Classification of candidates and Eligibility for Admissions), CGPA of 6.5 in the credit through course work and Section 12 (xv) may be waived in special circumstances by the Chairman Senate on the recommendation of DPGC and SPGC. All such exceptions shall be reported to the Senate.

Visit to

 $\frac{https://www.iitism.ac.in/\sim academics/assets/acad_forms/Ph.D\%20Road\%20Map\%20(Full\%20Time).pdf}{e).pdf}\ to know the complete roadmap for Ph.D.$

Various forms to be submitted at different stages are listed below.

Course Waiver to Ph.D Scholar	PH - 1
Constitution of Doctoral Scrutiny Committee (DSC)	PH - 2
Form for 2nd Semester Course Work Proposed By DSC for Ph.D Scholar	PH - 3
Comprehensive Examination Report	PH - 4
Research Proposal Seminar Report	PH - 5
Pre-Submission Thesis Assessment by Doctoral Scrutiny Committee	PH - 6
Pre-Submission Report of Ph.D Scholar	PH - 7
Certificate for Acceptance of Draft Thesis by DSC	Ph – 7A
Suggested Panel of Examiners	PH - 8
Particulars of candidate for Submission of Synopsis for Ph.D	PH - 9
Copyright and Consent Form	PH - 10
Certificate for Classified Data	PH - 11
Certificate regarding English Check	PH - 12
Certificate from Supervisor(s)	PH - 13
Statement of Corrections for Revision of Ph.D Thesis	PH - 14
Viva-voce Report for Ph.D	PH - 15
Certificate For Final Version of Thesis	PH - 16
Receipt of Soft Copy of Thesis at Central Library	PH - 17
Remuneration Bill of External Examiner (Indian)	PH – 18
Compliance of UGC Regulations Certificate/ Ph.D Course Work Certificate / Provisional	PH – 19
Ph.D Certificate	
Doctoral Scrutiny Committee Recommendation on Specific Purpose	PH – 20
Appointment of Co-Supervisor (Internal/External)	PH - 21

Form No: PH1

WINTER



Academic

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

FORM FOR GIVING WAIVER TO PHD SCHOLAR IN COURSE WORK

(Only for Ph.D. Scholar who Completed Master Degree from any of the IITs)

Semester MONSOON

	ssion:									
1.	Name of So	cholar								
2.	Admission	No.				Date	of Ph.D	Admission	DD/MM/YY	YYY
3.	Registration Scholar (Pu			Full-	Time		Part- Time		External	
4.	Departmen	t					Branch	(if any)		
5.	Institute Er ID	nail								
6.	Contact Nu	ımber o	f Scholar							
	Qualifying	Degree	during Ph.I	O Adn	nission					
7.	PG Degree was in relevant field? (Put √ Mark) Yes No		Not Applicable							
PRE	SCRIBED C S'	OURSI TRUCT		COUR	SE	COU	POSED URSES DBE IVED	CLEAI DEGREE	AILS OF THE RED DURING IN LIEU OF I WAIVER ttach the Grade	MASTER REQUESTE
						Course Code			Course Name	
No.	Course Code	Ti	itle of the Co Credits		&			Cou	irse Name	
.•		Ti			& 			Cou	rse Name	Grad Obtain
•		Ti			&			Cou	rse Name	
	Code		Credits	5		С	ode			Obtain
I her approduced IIT of Compete.). of monking work	reby declare to oved norms goan be waive pulsory Pape However, the aximum of two of discrepance	that my iven in t ed off a er on Ni e studen o paper: cy in con	request for when the Ph.D. Main maximum of the registered is registered is i.e., Two Co	vaiver nual [f three thods/l for De	in cours "A Ph.D. course Modellin partmen cory Dep	e work students (Two g Simul t of Hun	of Ph.D. t who has Compuls ation, us nanities cal	Program is s completed Moory Department of Pythonand Social Sc."] and I wii	made as per the Master degree* nental Papers n/MATLAB/Mat ience can have ll be responsible above requeste	ne Senate from any and One hematica a waiver te for any
I her approduced approximate	reby declare to oved norms goan be waive pulsory Pape However, the aximum of two of discrepances.	that my iven in t er on Ni e studen o papers ey in con	request for where Ph.D. Main maximum of the properties of the properties of the properties i.e., Two Completion of my	vaiver nual [f three thods/l for De	in cours "A Ph.D. course Modellin partmen cory Dep	e work students (Two g Simul t of Hun	of Ph.D. t who has Compuls ation, us nanities cal	Program is s completed Moory Department of Pythonand Social Sc."] and I wii	made as per th Aaster degree* nental Papers n/MATLAB/Mat ience can have ll be responsibl	Description of the control of the course of

T	e			•
Reasons f	or	oivino	COURSE	waiver.

Recommended by DPGC as it is consistent with the Senate Guidelines (Signature with Date)

For Office Use only

Verified the Qualifying Degree of the scholar during Ph.D Admission	□ Yes	□ No
Verified the Academic record of the Scholar	□ Yes	□ No
Observations, if any		

Dealing Assistant (Academic)

AR (Academic - (PG) / DR

Accepted for the next Standing Committee Meeting

 $Associate\ Dean\ (Academic-PG)\ /\ Dean\ (Academic)$

Date:

Form No: PH2



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

FORM FOR CONSTITUTION OF DOCTORAL SCRUTINY COMMITTEE (DSC) (To be filled up at the end of First Semester)

			(10 be line	ս սբ շ	it the ci	ild of First 5	cincs	itti)				
Ac	ademic Session:		<u> </u>			Semester						
							•					
1.	Name of Scholar	•										
2.	Admission No.			1		Date of Ph	ı.D A	dmissi	on		DD/MM/Y	YY
3.	Registration Stat (Put √ Mark)	us of	the Scholar	Full	-Time			art-Time Ex			External	
4.	Department			Branch (if any)								
5.	Institute Email I											
6.	Contact Number											
	Qualifying Degr											
7.	Was PG Degree (Put √ Mark))	Yes			No		Not	Applicable	
8.	Broad Area of R	eseai	rch Work									
. D	etails of the Propo	sed I		y Con	nmittee		const	ituted 1	for the S	Scholar:	<u> </u>	
	Name	(Pı	Designation rof/Assoc. Prof./A	AP)	Dept.	Area of Specialization	Area of Position		n	Signatu	Signature	
								Chairperson				
								Member (Dept.)				
								Member (Sister Dept.)) —	
									. (1	´	
								Supervisor				
									upervisor	-		
								Externa	l Co-Sup	ervisor, i	f	
									any			
	Proposed by:								R	ecomm	ended by:	
	(Supervisor)								(Con	vener, l	DPGC)	
am	e:			_			N	Name: _				
ate	:						Γ	Oate:				
				A	Approve	ed by						
			Associate Dean	. (domia	DC) / Door	. (A ~ -	adom:	a)			
			Associate Dean	`		,	ı (AC	aueiiil(c)			
				Date	e:							

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Form No: PH3

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD OFFICE OF THE DEAN (ACADEMIC)

RM FOR 2ND SEMESTER COURSE WORK PROPOSED BY DSC FOR PH.D SCHOLAR (To be filled up after the constitution of DSC)

Aca	ademic Sessio	n:							S	Semest	er: WIN	TER	
1.	Name of Sch	nolar											
2.	Admission N	No.				Date	of Ph	.D Ad	missio	on	D	DD/MM/YYYY	
3.	Registration (Put √ Mark)	Status of t	the Scholar	Full-	Time]	Part-Time			External		
1.	Department]	Brancl	ı (if aı	ny)			1
	Qualifying I	Degree dur	ing Ph.D Ad	lmissio	n						I		
5.		as PG Degree in the relevant field? Yes No Not Applicate \sqrt{Mark}						Applicab	ole				
	List of Cours	es (DE/OE	E) proposed l	by the				emeste	r:			1	
Course Code Course Name									Co	urse Type			
													DE-1
												DE-2	
												DE-3/OE-1	
												DE-4/OE-2	
												*DC/DE	
												*DC/DE	
*Students with B.Tech degree or M Signature of DSC Members: Name (Department)					Signa	,	d require two additional DC courses. Posi			ourses. Positi	ion	Signature	
			Superv	isor							Chairpe	erson	
			Member (Dept.)							Meml (Dep	ber		
			Member (Sister Dept.)								Meml (Sist Dept	er	
			Co- Superv	isor							Externa Superv	l Co- visor	

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Forwarded by Convener, DPGC (Name & Signature):

For Office Use only

Verified the Qualifying Degree of the scholar during Ph.D Admission	□ Yes	□ No							
Proposed course work is a per template	□ Yes	□ No							
Observations, if any									
Dealing Assistant	(Academic)	AR (Academic - (PG) / DR							
Accepted for the next Standing Committee Meeting									
Associate Dean (Academic – PG) / Dean (Academic) Date:									
Date									

Form No: PH4



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

COMPREHENSIVE EXAMINATION REPORT

		of the Compreher	isive Examinat	ion mus	t be sent	to the	e Associate	Dea	II (Acau	enne - r G)	WILIIII	IONI	L week)	
1.	Name of	Scholar												
2.	Admissio	on No.				Dat	te of Ph.D) Ad	lmissio	ı		DD/MM/YYY		
3.	Registrati (Put √ Marl	ion Status of the	e Scholar	Full-7	Гіте		P	Part-Time			External			
4.	Departme	ent					В	ran	ch (if ar	ny)				
		g Degree durin									•			
5.	Was PG I (Put √ Marl	Degree in the re	elevant field?		Yes		N	lo		Not Ap	Not Applicable			
6.	,	Comprehensive	Examination		DD/N	/M/	YYYY							
7.		Comprehensive			ritten				Oral			E	Both	
lepa o co	rtment decides nduct a writter	the Comprehensive Ex to conduct the written to examination should trees suggested b	en examination, ti be communicated	hey should d to the De	d conduct ean (Acade	the exc emic) i	amination foi in advance.							
8. List of Courses suggested by the DSC and cleared Course Course Name Code						SCHO	141.		Course (DC/D			Course Gra		e
	Code						(DC/D	E/OE)	Cre	an				
). E	Eligibility (Criteria:												
		ne assigned cou	rses (Put √ Ma	ırk)	Yes	S				No				
	otal Course rned	Credit					Current	CG	PA		ı			
10.	Result of C	Comprehensive DSC Members p	present in the	Compr	rehensiv	е Ех	kaminatio	n:						
	Name (D	epartment)	Position		ignatur	e	Name (Do	epar	tment)		ition		Signatu	re
			Superviso	or						Chair	perso	n		
			Member (Dept.)								mber ept.)			
			Member (Sister Dept.)	r						Mei (Si	mber ster			
Co-Supervisor (if any)				sor						Exteri Super	nal Co- visor (i			

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For Office Use only									
Verified the Qualifying Degree for scholar for admission in the Ph.D program	□ Yes	□ No							
Verified the Course Credits earned by scholar	☐ Yes	□ No							
Verified the CGPA	☐ Yes	□ No							
Observations, if any									
Dealing Assistant AR (Academic - (PG) / DR (Academic)									
Accepted for the next Standing Committee Meeting									
Associate Dean (Academic – PG) / Dean (Academic)									
Date:									

Forwarded by Convener, DPGC (Name & Signature):_____

Form No: PH5



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

RESEARCH PROPOSAL SEMINAR REPORT

1.	Name of Scholar									
2.	Admission No.		Da	te of Ph.D Adm	ission	DD/MM/	YYYY			
3.	Registration Status of the Scholar (Put √ Mark)	Full-Time		Part-Time		External				
4.	Department		Branch (if any)							
5.	Date of Research Proposal Seminar		DD/MM/YYYY							
6.	Title of Proposed Research									
the-a	Research Proposal of 4-5 pages is to art, 4. Research / Knowledge Gap, 5. Fnework, 7. Conclusion and 8. Reference	Present Research Objective, 6								
	Brief Comments on the	•								
7.	Student's Performance in									
	Research Proposal Seminar	r								
8.	Overall Recommendation	SATISFACTORY	Y							

Signature of DSC Members present in the Research Proposal Seminar:

Name (Department)	Position	Signature	Name	Position	Signature
			(Department)		
	Supervisor			Chairperson	
	Member (Dept.)			Member (Dept.)	
	Member (Sister			Member (Sister	
	Dept.)			Dept.)	
	Co-Supervisor,			External Co-	
	if any			Supervisor, if any	

Forwarded by Convener, DPGC (Name and Signature with Date):
Approved by
Associate Dean (Academic – PG) / Dean (Academic)
Date:



Form No: PH6

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

FORM FOR PRE-SUBMISSION THESIS ASSESSMENT BY DOCTORAL SCRUTINY COMMITTEE

No Authors Journal Publisher Accepted publication No	1.	Name of So	cholar											
3. Scholar (Put √ Mark) 4. Department Qualifying Degree during Ph.D Admission Was PG Degree in the relevant field? (Put √ Yes No No Mark) 6. Title of the Thesis 7. Details of Course Work (Pls specify number of courses) 8. The draft copy of the thesis is ready (Put √ Mark) 9. Summary of Research Papers published/accepted by the scholar based on the (a) Total no. of papers indexed in SCI/SCIE/SSCI/A&HCI (b) Total no. of papers indexed in Q1/Q2 Journals (d) Total no. of papers indexed in Q1/Q2 Journals (d) Total no. of papers in which the candidate is the first/corresponding author (f) Total no. of papers presented in seminar/conferences/others 10. Details of Research Papers published/Accepted by the scholar as first/othesis work: (Attach a copy of the first page of papers in SCIE/SSCI/A&HCI/SCOPUS Indexes (Attach a copy of the first page of papers in SCIE/SSCI/A&HCI/SCOPUS Indexes (S1. Name of Journal Publisher Accepted publication No Name of Published/ Papers publication No Name of Published Papers of Published Papers of Published Nacepted S1. Name of Publisher Accepted Name of Published Papers of Published Publisher No Name of Published Papers of Published Publisher No	2.	Admission	No.				Date of	Ph.D Adn	nissic	on	DD/M	M/	YYYY	
Qualifying Degree during Ph.D Admission Was PG Degree in the relevant field? (Put √ Yes No No Nark) 6. Title of the Thesis 7. Details of Course Work (Pls specify number of courses) 8. The draft copy of the thesis is ready (Put √ Mark) 9. Summary of Research Papers published/accepted by the scholar based on the (a) Total no. of papers indexed in SCI/SCIE/SSCI/A&HCI (b) Total no. of papers indexed in Q1/Q2 Journals (d) Total no. of papers indexed in Q1/Q2 Journals (d) Total no. of papers in which the candidate is the first/corresponding author (f) Total no. of papers presented in seminar/conferences/others 10. Details of Research Papers published/Accepted by the scholar as first/c thesis work: (Attach a copy of the first page of papers in SCIE/SSCI/A&HCI/SCOPUS Indexed in No Authors Doublished Papers in SCIE/SSCI/A&HCI/SCOPUS Indexed in Science of Published Papers of Publisher Accepted Publication No No Authors Doublished on case-to-case basis Attach separate sheet(s) indicating the brief details of Research Work		Scholar (Put √ Mark)		s of the	Full-Tin	ne					External			
5. Was PG Degree in the relevant field? (Put √ Yes No Mark) 6. Title of the Thesis 7. Details of Course Work (Pls specify number of courses) 8. The draft copy of the thesis is ready (Put √ Mark) 9. Summary of Research Papers published/accepted by the scholar based on the (a) Total no. of papers indexed in SCI/SCIE/SSCI/A&HCI (b) Total no. of papers indexed in Q1/Q2 Journals (c) Total no. of papers indexed in Q1/Q2 Journals (d) Total no. of papers in which the candidate is the first/corresponding author (f) Total no. of papers presented in seminar/conferences/others 10. Details of Research Papers published/Accepted by the scholar as first/c thesis work: (Attach a copy of the first page of papers in SCIE/SSCI/A&HCI/SCOPUS Indexed in Science in Scie	4.							Branch	(if a	ny)				
6. Title of the Thesis 7. Details of Course Work (Pls specify number of courses) 8. The draft copy of the thesis is ready (Put √ Mark) 9. Summary of Research Papers published/accepted by the scholar based on the (a) Total no. of papers indexed in SCI/SCIE/SSCI/A&HCI (b) Total no. of papers indexed in SCOPUS (c) Total no. of papers indexed in Q1/Q2 Journals (d) Total no. of papers in which the candidate is the first/corresponding author (f) Total no. of papers presented in seminar/conferences/others 10. Details of Research Papers published/Accepted by the scholar as first/c thesis work: (Attach a copy of the first page of papers in SCIE/SSCI/A&HCI/SCOPUS Indexed) SI. Name of Title Name of Name of Published/ Year of Very No Authors *SCOPUS will be considered on case-to-case basis Attach separate sheet(s) indicating the brief details of Research Work	5.	Was PG Degree in the relevant field? (Put √					es	No		Not Applicable				
8. The draft copy of the thesis is ready (Put √Mark) 9. Summary of Research Papers published/accepted by the scholar based on the (a) Total no. of papers indexed in SCI/SCIE/SSCI/A&HCI (b) Total no. of papers indexed in SCOPUS (c) Total no. of papers indexed in Q1/Q2 Journals (d) Total no. of published Patent/Book Chapter contribution etc. (e) Total no. of papers in which the candidate is the first/corresponding author (f) Total no. of papers presented in seminar/conferences/others 10. Details of Research Papers published/Accepted by the scholar as first/c thesis work: (Attach a copy of the first page of papers in SCIE/SSCI/A&HCI/SCOPUS Indexedure) S1. Name of Title Name of Name of Published/ Year of Volume of Published/ Year of Publisher Accepted publication Normal Normal Normal Publisher Accepted Publication Normal Normal Normal Publisher Accepted Publication Normal Normal Publisher Accepted Publisher Normal Normal Publisher Normal Publisher Normal Publisher Normal Normal Publisher Normal P	6.	Title of the				1	1			1				
9. Summary of Research Papers published/accepted by the scholar based on the (a) Total no. of papers indexed in SCI/SCIE/SSCI/A&HCI (b) Total no. of papers indexed in SCOPUS (c) Total no. of papers indexed in Q1/Q2 Journals (d) Total no. of published Patent/Book Chapter contribution etc. (e) Total no. of papers in which the candidate is the first/corresponding author (f) Total no. of papers presented in seminar/conferences/others 10. Details of Research Papers published/Accepted by the scholar as first/c thesis work: (Attach a copy of the first page of papers in SCIE/SSCI/A&HCI/SCOPUS Indexed) SI. Name of Title Name of Name of Published/ Year of Volume No. No. Authors Journal Publisher Accepted publication No. No. Authors SCOPUS will be considered on case-to-case basis Attach separate sheet(s) indicating the brief details of Research Work	7.	I Δ cciαneα			ed		Comple	eted		Waived- off, if an				
(a) Total no. of papers indexed in SCI/SCIE/SSCI/A&HCI (b) Total no. of papers indexed in SCOPUS (c) Total no. of papers indexed in Q1/Q2 Journals (d) Total no. of published Patent/Book Chapter contribution etc. (e) Total no. of papers in which the candidate is the first/corresponding author (f) Total no. of papers presented in seminar/conferences/others 10. Details of Research Papers published/Accepted by the scholar as first/othesis work: (Attach a copy of the first page of papers in SCIE/SSCI/A&HCI/SCOPUS Indexed SI. Name of Title Name of Name of Published/ Year of Volume No Authors Journal Publisher Accepted publication No No Authors SCOPUS will be considered on case-to-case basis Attach separate sheet(s) indicating the brief details of Research Work	8.	The draft co	opy of	the thesis is 1	ready (Put√M	lark)		Yes	5		No			
No Authors Journal Publisher Accepted publication No	(b) (c) (d) (e) (f) 10. thes	Total no. of Total	of paper of public of paper of paper of paper Research	rs indexed in rs indexed in shed Patent/lrs in which the rs presented in the Papers put the Pape	SCOPUS Q1/Q2 Journ Book Chapter he candidate in in seminar/co ublished/Acce pers in SCIE/	nals r con is the onfere	tribution first/co ences/ot by the	rrespondin hers scholar as	s firs	t/correspo xed Public	ations)			
Attach separate sheet(s) indicating the brief details of Research Work			Title						n	Volume No./Page No.	SCI/SSCI/ &HCI/ SCOPUS* indexed (YES/NO)		ISSN No.	DOI
	Att	ach separat	te shee	t(s) indicati	ing the brief	f det	ails of	Research	Wor	k includi	 ng its orig	gina	lity an	d
Date: Signa	Dat	e:							Sig	nature of	Scholar			

RECOMMENDATION OF THE DOCTORAL SCRUTINY COMMITTEE

- 1. The information furnished by the scholar have been verified.
- 2. The scholar fulfills the minimum requirement for Ph.D pre-submission seminar, as per Ph.D Manual.
- 3. The scholar has submitted a draft copy of the thesis along with this form.
- 4. The scholar may be allowed for pre-submission seminar.

Signature of DSC Members red					T ~.	
Name (Department)	Position	Signature	Name (Department)	Position	Signature	
	Supervisor			Chairperson		
	Member			Member		
	(Dept.)			(Dept.)		
	Member			Member		
	(Sister			(Sister		
	Dept.)			Dept.)		
	Co-			External Co-		
	Supervisor			Supervisor		
	(if any)			(if any)		
Application submitted with all		For Office Us	Se omy			
Application submitted with all		□ Yes		□No		
required documents						
Verified Semester Registration Details (including Fees paymen	t)	☐ Yes		□ No		
Verified Course Work		☐ Yes		□ No		
Observations, if any						
Dealing Assistant		A	R (Academic - (PG) / D	R (Academic)		
Ac	ecepted for the	next Standin	g Committee Meeting			

Associate Dean (Academic – PG) / Dean (Academic)

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Date: _____



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

Form No: PH7

REPORT OF DOCTORAL SCRUTINY COMMITTEE OF PRE-SUBMISSION SEMINAR

1	Name of Scholar							
1.	Name of Scholar							
2.	Admission No.		Date o		h.D Admissi	on	DD/MM/YYYY	
3.	Registration Status of the Scholar (Put √ Mark)		Full-Time		Part-Time		External	
4.	Department				Branch (if any)			
5.	Date of Pre-Submi	ssion Seminar			DD/MM/	YYYY		
6.	Title of Thesis of							
	During Pre- Submission							
	Seminar							

7. General Features of Thesis (<u>The Details of A, B (1 to 5) & C (1 to 4) need to be provided on SEPARATE SHEET</u>):

Α.	Is the thesis logically organized?		
B.	Technical content of the Thesis:	C.	Originality and Novelty of the Thesis
B1	Do the introduction and literature survey logically lead to the thesis objectives?	C1	Does it open a new field of research?
B2	Does the literature survey comprehensively represent the state-of-the-art?	C2	Does it give a new interpretation to facts already known?
В3	Are the experimental/field survey and/or numerical/theoretical methodologies adequate with respect to the thesis objectives?	C3	Does the thesis show evidence of being a scholarly work of merit carried out independently by the candidate?
B4	Have the results been analyzed in sufficient detail?	C4	Does it make a marked advance on the results of
B5	Do the results and analysis justify the conclusions?		previous investigations?

·	TURNITIN plag	•	k report for the the thethesis (Attach Re	_	rom the ve	ry first pag	ge (Digi	tal Rec	eipt)
b)	Percentage of S	imilarity Ind	lex:						
c)	Whether the pla	giarism che	ck is within accept	able limits (l	ess than 14	words):	Yes	/	No
9. Reco	ommendation(s):								
a)	Whether the title	e of thesis co	ommensurate with	the research	work?		Yes	/	No
b)	Do you suggest	revision of	title of thesis?				Yes	/	No
If	Yes,	the	suggested	title	of	the	th	nesis	is

c) The research work of scholar is adequate and fulfills the minimum criteria for submission of Ph.D. thesis as per Ph.D manual. The scholar may be allowed for submission of the thesis.

to Academic Section to be provided, indicating pre-submission seminar]					-	e certificate from D odifications suggest		
Signature of DSC Members re	ecomn	nending th	e above:					
Name (Department)		osition	Signature	Name (Depa	artment)	Position	Signature	
	Sup	pervisor				Chairperson		
		ember				Member		
		Dept.)				(Dept.)		
		ember				Member		
	(3	Sister				(Sister		
		Dept.)				Dept.)		
		Supervisor if any)				External Co- Supervisor (if any)		
Date):		F	For Office Us	se only				
Report submitted with all req documents	uired		□ Yes			□ No		
Pre-Submission Seminar held within the stipulated period		□Yes				□ No		
Verified Semester Registration Details (including Fees payment)			□ Yes			□ No		
Observations, if any								
Dealing Assistant	Accept	ed for the	e next Standin	AR (Ac		(PG) / DR (Acad	lemic)	
	•	te Dean (A		PG) / Dean (A	C			

d) The DSC scrutinized the draft Ph.D. Thesis and found that it is ready in all respect for submission

Form No: PH7A



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

CERTIFICATE FOR ACCEPTANCE OF DRAFT THESIS BY DSC

(To be submitted after incorporating all the changes suggested during Pre-Submission Seminar)

	Admission	No		_ of Depar	tment of
				scrutinized the	draft Ph.D.
thesis					entitled
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the thesis is made in all man	act and quitable f	on suhmissi	a to Agadamic Soction	_". The DSC ob	
the thesis is ready in all resp	ect and suitable f	or submission	n to Academic Section	_	
the thesis is ready in all resp	ect and suitable f	or submission	n to Academic Section	_	
the thesis is ready in all response	ect and suitable for the Position	or submission	n to Academic Section Name (Department)	for further evalua	
				for further evalua	ntion.
	Position			for further evaluate Position	ntion.
	Position Supervisor			Fosition Chairperson	ntion.
	Position Supervisor Member			Position Chairperson Member	ntion.
	Position Supervisor Member (Dept.)			Position Chairperson Member (Dept.) Member	ntion.
	Position Supervisor Member (Dept.) Member (Sister			Position Chairperson Member (Dept.) Member (Sister	ntion.
	Position Supervisor Member (Dept.) Member			Position Chairperson Member (Dept.) Member	ntion.
	Position Supervisor Member (Dept.) Member (Sister Dept.)			Position Chairperson Member (Dept.) Member (Sister Dept.)	ntion.

Indian Institute of Technology (Indian School of Mines) Dhanbad

Format for Submission of Suggested Panel of Examiners for Evaluation of Ph.D. Thesis

-

Name of Scholar	
Admission Number	Date of Pre-Submission Seminar
Department	
Title of Thesis	
Name of Supervisor	

Examin er Type	QS Ranking of the Departmen t/ Institute (within 200)	Name of Examin er	Designati on	Name of the Institute/Univers ity	Area of Specializati on	Complet e Postal Address with Pin Code	Email addres s	Official Websit e Link and Mobile No.
F-1								
F-2								
F-3								
F-4								
F-5								
F-6								

I-1				
I-2				
I-3				
I-4				
I-5				
I-6				
I-7				
I-8				

This is certified that none of the suggested examiner is related to the supervisor or the scholar in any manner.

Signature of Supervisor/Guide

Signature of HOD

Note:

- 1. The above information in tabular form will be required to be sent through email at **<phdexam@iitism.ac.in>** in MS-Excel Format and the hard copy duly signed should be submitted in sealed cover along with all other documents to Deputy Registrar (Exam &Acad).
- 2. While submitting the panel of foreign examiners, the guide should provide latest published QS Ranking of the concerned department/ universities/institute within 200 including Management / B. Schools. However, the names of foreign examiners from renowned institutions such as NASA, Scripps Institute and such others which are not ranked by QS may also be considered. The official particulars (affiliation and organization name/address etc.) of the foreign examiner should be checked and verified by the respective HODs while forwarding the panel of examiners. The names should be verified from the official website of concerned university or official profile page to confirm designation & affiliation of suggested examiners. The official email address should be provided for all communications in addition to alternate email address, if available.
- 3. The list of Indian Examiners may preferably consist of four/five names from IITs/IISc/IIMs/IISER. The other examiners may include two/three from reputed NITs/CFTIs/Reputed Academic Institutions and universities and/or from National Laboratories and experts from reputed Industries of the relevant field holding Ph.D. degree. The Examiners should preferably be a serving person and should not below the rank of Associate Professor or equivalent position in National Laboratories/Industry having adequate knowledge in the relevant field.



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

PARTICULARS OF SCHOLAR FOR SUBMISSION OF SYNOPSIS

(To be submitted along with synopsis of the scholar)

Full Name of the Scholar in English (IN BLOCK LETTERS)(For Degree Certificate)	
Full Name of the Scholar in Hindi (For Degree Certificate)	
Admission Number (For Degree Certificate)	
Status of Scholar (Full Time/Part Time/External)	
Branch & Department	
Title of Thesis (IN ENGLISH) (For Degree Certificate)	
Title of Thesis (Pronunciation in Hindi) (Example – टाइटल ऑफ़ थीसिस) (For Degree Certificate)	
Name of the Supervisor	
Name of the Co-Supervisor (if any)	
Name and affiliation of the External Co- Supervisor (if any)	
Date of Pre-Submission Seminar	
Father's Name in English (IN BLOCK LETTERS)	
Mother's Name in English (IN BLOCK LETTERS)	
Complete Postal Address with PIN code	
E-mail ID	
Mobile No.	
(Example – टाइटल ऑफ़ थीसिस) (For Degree Certificate) Name of the Supervisor Name of the Co-Supervisor (if any) Name and affiliation of the External Co-Supervisor (if any) Date of Pre-Submission Seminar Father's Name in English (IN BLOCK LETTERS) Mother's Name in English (IN BLOCK LETTERS) Complete Postal Address with PIN code E-mail ID	

Signature of the Scholar



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TITLE OF THESIS:	
AUTHOR'S NAME & ADDRESS:	

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- * The undersigned agrees to indemnify and hold harmless the IIT (ISM) Dhanbad from any damage or expense that may arise in the event of a breach of any of the warranties set forth above.
- * In the event the above work is not accepted and published by the IIT (ISM) Dhanbad or is withdrawn by the author(s) before acceptance by the IIT(ISM) Dhanbad, the foregoing copyright transfer shall become null and void and all materials embodying the Work submitted to the IIT(ISM) Dhanbad will be destroyed.
- * For jointly authored Works, all joint authors should sign, or one of the authors should sign as authorized agent for the others.



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

CERTIFICATE FOR CLASSIFIED DATA

(To be submitted at the time of Thesis Submission)

This is to certify that the thesis entitled	
"	
" being submitted to the Indian	Institute of Technology (Indian School
of Mines), Dhanbad by Mr/Ms	for
award of Doctor of Philosophy (Ph.D) Degree in	does not contains
any classified information. This work is original and yet not been su	abmitted to any institution or university
for the award of any degree.	
Signature of Supervisor (s)	Signature of Scholar



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

CERTIFICATE REGARDING ENGLISH CHECKING

(To be submitted at the time of Thesis Submission)

This	is	to	certify	that	the	thesis	entitled
"						-	
		" being s	submitted to the	Indian Institute	of Technolo	gy (Indian Schoo	ol of Mines),
Dhanbad							by
Mr/Ms							
	_, Admissio	on No			, for the aw	ard of Doctor o	f Philosophy
(Ph.D.) D	egree has be	en thoroughl	y checked for qua	ality of English	and logical se	equencing of top	ics.
It is herel checked.	by certified t	that the stand	ard of English is	good and that	grammar and	l typos have bee	n thoroughly
It is now	worthy for e	valuation by t	he panel of exan	niners.			
Signature	of Supervise	or (s)				Signature o	of Scholar
Name:					Name:		
Date:				Date			



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

CERTIFICATE FROM THE SUPERVISOR(S)

(To be submitted at the time of Thesis Submission)

This	is	to	certify	that	the	thesis	entitled
"							
	"bein	g submitted t	o the Indian Insti	tute of Techr	nology (Indian	School of Mines),	Dhanbad
by	Mr/Ms					, A	dmission
No		, fo	or the award of D	octor of Phile	osophy (Ph.D	Degree is a bonat	ide work
carried	out	by	him/her,	in	the	Department	of
					, IIT (I	SM), Dhanbad, unde	er my/our
supervis	sion and guidar	nce. The thesi	s has fulfilled all	the requirem	ents as per th	e regulations of this	Institute
and, in	my/our opinion	, has reached	the standard nee	eded for subm	nission. The re	esults embodied in t	his thesis
have no	t been submitte	d to any other	r university or ins	titute for the	award of any o	legree or diploma.	
Signatui	re of Supervisor	r (s)					
Name: _		 					
Data							



1.

Name of Scholar

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

Form No: PH14

STATEMENT OF CORRECTIONS FOR REVISION OF PH.D THESIS

(To be submitted at the time of Revised Thesis Submission)

2.	Admission No.			Date of Ph.D Admission DD/MM/YYY			/YYY	Y
3.	Registration Status Scholar (Put √ Mark)	of the	Full-Time	Part-Ti	me	External		
4.	Department			Branch	(if any)			
5.	Title of Thesis of Pr Submission Semina			,	1			
Exa	aminer: Foreign							
Sl. No.	Obser	vation		Complian	nce	Refere Page		*Annexure No.
	ttach copy of all pages	of the revised the	sis, where con	rrections are made, as	s Annexure.			
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		Supervisor		(Department)	Chairners	on		

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Member (Dept.)

Member (Sister

Dept.)

Member (Dept.)

Member (Sister Dept.)

	Co-Supervisor (if an	ny)		External Co-Supervisor (if any)			
For Office Use only							
Statement of Correction	on is [□ Yes		□ No			
submitted with all req		~					
documents	Thereis						
Soft Copy of Revised Submitted	Inesis	□ Yes		□ No			
Observations, if any							
Dealing Assistant		(Academic)		AR (Academic - (PG)	DR		
Accepted for the next Standing Committee Meeting							
Associate Dean (Academic – PG) / Dean (Academic) Date:							



Form No: PH15 INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

REPORT ON VIVA-VOCE FOR DOCTOR OF PHILOSOPHY (PH.D)

1.	Name of Scholar						
2.	Admission No.			Date of l	Ph.D Admission	DD/MM/YY	YY
3.	Registration Status of (Put √ Mark)	the Scholar	Full-Time		Part-Time	External	
4.	Department				Branch (if any)		
5.	Date of Viva-voce			DI	D/MM/YYYY		
6.	Title of Thesis in English						
7.	Title of Thesis (Pronunciation in Hindi)						
8.	Performance						
9.	Suggestions, if any						
10.	Recommendation for award of Degree						

Signature of Examiners with Date:

Name & Affiliation of External Examiner (Indian)	Signature (with Date) of External Examiner

Name (Department)	Position	Signature	Name (Department)	Position	Signature
	Supervisor			Chairperson	
	Member			Member	
	(Dept.)			(Dept.)	
	Member			Member	
	(Sister			(Sister	
	Dept.)			Dept.)	
	Co-			External Co-	
	Supervisor,			Supervisor,	
	if any			if any	

Submitted by Convener, DPGC (Name and Signature with Date):								
Forwarded by HOD (Name and Signature with Date):								
The following needs to be submitted along with this report: (i) Certificate for final version of thesis (ii) Receipt of Thesis at the Central Library (iii) Remuneration Bill of External Examiner								
	For Office Use only							
Certificate for final version of thesis submitted along with this report	□ Yes	□ No						
Receipt of Thesis (Soft Copy) at the Central Library	□ Yes	□ No						
Remuneration Bill of External Examiner	□ Yes	□ No						
Observations, if any								
Dealing Assistant	(Academic)	AR (Academic - (PG) / DR						
Accepted for the Examination Board Meeting								
Associa	te Dean (Academic – PG) / Dean (A	Academic)						
	Date:							



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

CERTIFICATE FOR FINAL VERSION OF THESIS

(To be submitted after Final Viva-Voce Examination)

This	is	to	certify	that	the	soft	copy	of	thesis	entitled
"										
			nitted by Mr							
for awa	ard of Do		Philosophy (I							
correcti	ions/mod	dification	ns including t	those sugg	ested duri	ng viva-vo	oce.			
Signatu Scholar		pervisor	(s)						Sign	ature of
					_		Name:			
Date:							Date:			



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

RECEIPT OF SOFT COPY OF THESIS AT CENTRAL LIBRARY (To be submitted, in duplicate, after Viva-Voce)

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		Accession Nun	nber						
		Date							
			T					<u> </u>	
1.	Name of Sc	holar							
2.	Admission	No.			Date	of Ph.D Admis	ssion	DD/MI	M/YYYY
3.	Registration Scholar (Put	Status of the √ Mark)	Full-T	ime		Part-Time		External	
4.	Department	-				Branch (if an	ny)		
5.	Date of Pre-	-Submission Sem	ninar			D	D/MM/Y	YYYY	
6.	Date of Viv	a-voce				D	D/MM/Y	YYYY	
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10.	E-mail Add	ress							
11.	Mobile No.								
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Received the following:

- 1. A CD with the abbreviated thesis title and copyright notice pasted on it containing the PDF files of the full text and an abstract of the thesis (not exceeding 350 words)
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INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

Form No: PH18

REMUNERATION BILL OF EXTERNAL EXAMINER (INDIAN)

(To be submitted along with Report of Final Viva-voce Examination)

No				Date :		
Na	me & Address of Examiner					
En	nail id					
Ph	D Thesis of Mr. / Ms.					
Tit	le of Thesis					
Sl No			Number	Rate	Amount	
1.	Examined Thesis/ Dissertation					
2.	Miscellaneous expenses of Postage,					
۷.	Packing etc. (Attach Receipt)					
	GRAND TOTAL	: Rs.				
Tot	al amount in words: Rupees					_
	Particulars of Bank Account	t (Essen	tially require	d for wire tra	<u>nsfer)</u>	
SN		ticulars	of beneficiary	y		
1	Name & Address of Beneficiary					
2	Beneficiary Name					
3	PAN Number					
4	Bank Name & Branch Address					
5	Account No.					
6	Swift Code / BIC /IFSC					
7	IBAN					
8	ABA(Routing) No					
9	Account Type					
10	Other than above Information					
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REMUNERATION RATES

Name of Examination	Paper	Setting	Evaluation of answer books	Evaluation of Project Report/Dissertation/ Thesis
	Full paper	Part paper	per answer book	Report Dissertation Thesis
B.Tech./M.Sc./M.Sc.Tech				
M.Tech./M.Phil	-			
Tabulation	-			
PhD.				Rs. 10,000.00 (Indian Examiner
				for evaluation only)
				Rs.5,000.00 Indian Examiner for
				holding viva-voce)
				US\$ 500.00 (Foreign Examiner for
				evaluation only)
D.Sc.				

Note:

- 1. Postal expenses, supported by vouchers/certificate, will be paid to the paper setter/examiners. D.D. charges are to be borne by IIT(ISM).
- 2. For holding practical examination/composite viva-voce, examiners are paid half of the full paper setting fee plus evaluation of note book/answer book at the rate of Rs. 10.00 for UG and PG examinations respectively subject to a minimum of Rs. 300.00.
- 3. TA/DA:

The external examiners are paid upto 2^{nd} AC Railway fare by shortest route and DA etc as per Institute's TA/DA rules.



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD **OFFICE OF THE DEAN (ACADEMIC)**

Form No: PH19

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[Please send the duly filled-in form with enclosures to **certificates@iitism.ac.in**]

	Name of Scholar					
	Admission No.	Department				
	Branch (if any)					
	Email ID					
	Contact Number					
	Father's / Guardian Name					
1	Month & Year of Admission at IIT (ISM)	Month & Year of Completion of Academic Program				
N I	Communication Address (with Pin Code)					
9. Red	quest for a particular certificate and the docume	ents to be submitted:				
Sl. NO	Certificate	Document to be submitted	Ple Tic			
(i)	Ph.D Course Work Certificate	Scan Copy of Course Work Result Notification or Grade Sheets				
(ii)	Provisional Certificate	Scan Copy of ID / Final Result Notification				
(iii)	Compliance of UGC Regulations Certificate					
Date	:	Signature of the Student				
	FOR OFFIC	CE USE ONLY				
r record	s stated above are CORRECT/NOT CORRECT ds available.	Date of Receipt of Application:				
агкS, 11 	f any:	Issuing Date of Certificate:				
:		Date:				
	Signature of Dealing Assistant	AR (Academic – UG/PG)				
D1. I	D. Manual 2018	Page 50				



INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

DOCTORAL SCRUTINY COMMITTEE RECOMMENDATION ON SPECIFIC PURPOSE

1.	Name of Scholar										
2.	Admission No.			Date	of Ph.D	Admissio	on	DD/N	M/YYYY	7	
3.	Registration Status Scholar (Put √ Mark)	Registration Status of the Scholar (Put √ Mark)			Pa	rt-Time		Externa	1		
4.	Department				Br	anch (if a	ny)				
	Qualifying Degree				,						
5.	Was PG degree in the (Put √Mark)	he relevant fiel	d? Yes		No		Not Ap	oplicable			
6.	Assessment Period		From	DI	D/MM/Y	YYYY	To	DD/M	M/YYYY		
	pecific purpose of D			ted purp			• .•	(D 1 D	10.		
1.	Course work for Imp				2.			tinuation/Re	roposal Seminar	ľ _	
3.	Enhancement of Fel	lowship (JRF to	SRF)		4.	Fellows		itiliuation/ Ke	sumption of		
5.	Research Progress E				6.				al Conversion		
7.	Academic Work out	tside Institute			8.			nal Supervis			
9.	Conversion from Pro	oject JRF to IIT	(ISM) JRF		10.	Extension after exceeding the prescribed maximum duration					
11.	Termination of Ph.D) Program			11.	Any oth	Any other purpose				
8. S	pecific observations	made by the D	SC (if space	is not s	ufficient	, please atta	ach separa	ate sheet):			
9. F	Recommendation of	the DSC (if spa	ace is not suff	ficient,	please at	tach separa	ate sheet):				

Signature of DSC Members present:

Name (Department)	Position	Signature	Name (Department)	Position	Signature
	Supervisor			Chairperson	
	Member			Member	
	(Dept.)			(Dept.)	
	Member			Member	
	(Sister			(Sister	
	Dept.)			Dept.)	
	Co-Supervisor,			External Co-	
	if any			Supervisor	

	Member				Member		1
	(Sister				(Sister		
	Dept.)				Dept.)		
	Co-Supervisor,				External Co-		1
	if any				Supervisor		
Forwarded by Convener, DPG	C (Name & Signa	ture):					
	For	Office Use o	nly				
Checked Fee details			□ Yes			□No	
Verified Assessment Period		From:			To:		
Verified Fellowship details, if	applicable		□ Yes			□ No	
Observations, if any							
Dealing Assistant	(Acade	mic)	AF	R (Acader	nic - (PG) / D)R	
		Approved by					

 $Associate\ Dean\ (Academic-PG)\ /\ Dean\ (Academic)$

Date:		
Date.		



INCLUSION OF CO-SUPERVISOR (INTERNAL/EXTERNAL)

	nic Session:			Semester:	Mons	oon		Winter		Summer	
1	Name of Schol (in Block letter										
2	Admission No.					Date	e of Admi	ssion	DD/N	MM/YYYY	r
3	Department				ļ.		Branch (if any)				
4	Registration Sta (Put √ Mark)	atus F	Full-Time		Part-Ti	ime		E	External		
5	Institute E-mai	1 ID				Cont	act No				
6	Justification for the need of Co- Supervisor										
	Details of Co-S				to he iv	ncluda	ed are rea	nuired i	along with	n this form	_
	The following Consent letter (Category (Put	docum (ii) Brie	ents of the Co	o-supervisor i case of Exter		Super		•		this form	· (
7	The following Consent letter	docum (ii) Brie √	ents of the Co ef Bio-data (in	o-supervisor i case of Exter		Super	visor) External (•	ervisor	n this form	
7	The following Consent letter (Category (Put of Mark) Name of Co- Supervisor	docum (ii) Brie √	ents of the Co ef Bio-data (in	o-supervisor i case of Exter		Super	visor) External (Co-Supe	ervisor	n this form	

Signature of DSC Members recommended the inclusion of Co-Supervisor:

Signature of DSC Methods recommended the inclusion of Co-supervisor.									
Name (Department)	Position	Signature	Name (Department)	Position	Signature				
	Supervisor			Chairperson					
	Member			Member					
	(Dept.)			(Dept.)					
	Member			Member					

	(Sister			(Sister
	Dept.)			Dept.)
	Co-Supervisor,			External Co-
	if any			Supervisor
Forwarded by Convener, DPC	_	nature):	ly	
Consent Letter is Enclosed		□ Yes		□ No
Brief Bio-data of the External	Co-	_	<u> </u>	
Supervisor has been attached		☐ Yes	□ No	□NA
Observations, if any			1	
NOTE: (i) After obtaining an approval fro Convener, DPGC. (ii) At the time of processing of Pre after completion of twelve mont Dealing Assistant	-Submission Semina hs from the date of ϵ	nr, it will be verified	hat scholar is allowed for o-supervisor.	
		Forwarded by		
A	`	Academic – PG)	/ Dean (Academic)	
		Approved by		
		Chairman, Senat	e	

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Date: _____