Ph.D. PROSPECTUS (2022-23) Odd Semester



DEENBANDHU CHHOTU RAM UNIVERSITY OF SCIENCE &TECHNOLOGY MURTHAL (SONEPAT), HARYANA-131039

(Established by State Legislative Act 29 of 2006 & approved under Section 12 (B) &2 (f) of UGC Act, 1956) (NAAC 'A' Grade State University)

www.dcrustm.org, www.dcrustm.ac.in

July 2022

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Sh. BandaruDattatreya

Governor, Haryana

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DEANS/CHAIRPERSONS/ HEADS OF DEPARTMENTS/ CENTRES

Deans of Faculties	Phone No.	Departments		Chairperson	Phone No.
	0130				0130
Prof. Ajay Monga Faculty of Architecture, Urban and Town Planning	2484023	Architecture		Prof. Parveen Kumar	2484040
Prof. D.K. Jain Faculty of Engineering and Technology	2484124	1	Bio Medical Engg.	Prof.ManojDu han	2484201
, comining y		2	Civil Engg.	Prof.Dhirendra Singhal	2484147
		3	Electrical Engg.	Prof.D.K .Jain	2484124
		4	Elect. & Comm. Engg.	Prof.Amit Kumar Garg	2484146
		5	Mech. Engg.	Prof. M.N. Mishra	2484125
Prof. Anita Rani Faculty of Information Technology& Computer Science	2484137	Computer Sci. and Engg.		Prof. Anita Rani	2484137
Prof. Rekha Faculty of Humanities & Social Sciences	2484028	Humanities		Prof. Rekha	2484028
Prof. Anil Khurana Faculty of Management Studies	2484126	Management Studies		Prof. Anil Khurana	2484126
Prof. Kiran Nehra Faculty of Non Conventional Sou	2484128	Bio-technology		Prof. Kiran Nehra	2484128

rces of Energy and Environmental Science		Chemical Engg.	Prof.D.P. Tiwari	2484123
Science		Center of Excellence for Energy and Environmental studies	Prof.A.K. Berwal	2484037
Prof. R C Nautiyal Faculty of Science and Technology	2484121	Chemistry	Prof. Suman Lata	2484148
Interface		Mathematics	Prof. Navneet Hooda	2484121
		Physics	Prof.Rajni Shukla	2484127
Prof. Ashok Kumar Sharma Faculty of Education	2484024			

Ph.D. PROSPECTUS: 2021-22(Odd Semester)

DeenbandhuChhotu Ram University of Science & Technology, Murthal offers research programmes in its Departments/Centers leading to the award of Degree of Doctor of Philosophy (Ph.D.). The award of Ph.D. degree is in recognition of high academic achievements, independent research and application of knowledge to the solution of technical and scientific problems in Science, Technology, Architecture, Management and Humanities. The procedure and requirements spelt out in Ordinances and Regulations embody the philosophy to ensure high standards of performance in research work at the University. Notwithstanding these Ordinances and Regulations, various Departments and Centers may require the candidates to complete additional requirements so as to serve their particular academic goals. Ph.D. degree of DeenbandhuChhotu Ram University of Science & Technology, Murthal shall be conferred on a candidate who fulfills the requirements specified in the Ordinances and Regulations.

1. ELIGIBILITY CRITERIA FOR ADMISSION

1.1. Candidates for admission to the Ph.D. programme must have a Master's degree in the relevant discipline or a professional degree declared equivalent to the Master's degree in the relevant discipline by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever

grading system is followed) or an equivalent degree from a foreign educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.

As per Govt. letter no. 42/158/2016-5GS1 dated 19.01.2018 issued by the chief secretary to Govt. of Haryana, the candidates who have obtained degrees/diploma through distance education mode after getting enrolled during 2001-2005 and also who were admitted after the academic session 2001-2005, their degrees/diploma are to be treated as cancelled. Accordingly such degrees/diploma will not be considered for admission purpose.

MHRD, Govt. of India, through an order (vide OM no. 11-15/2011-AR (TS.II) dated 06.12.2012) withdrew the recognition granted to all certificates/ qualifications awarded by professional bodies / institutions in the field of technical education. The MHRD further stipulated that from 01.06.2013 onwards the courses for equivalence will cease (Refer AICTE Letter F. No.2-PC/ACITE/Gen. Dust, Edu. Policy/2018/439 Dated: 23.08.2018).

1.2 A relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, may be allowed for those belonging to SC/BC(non-creamy layer)/Differently-Abled and other categories of candidates as per the decision of the Commission from time to time, or for those who had obtained their Master's degree prior to 19thSeptember, 1991. The eligibility marks of 55% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualifying marks without including the grace mark procedures.

2. **DURATION OF THE PROGRAMME**

Ph.D. programme shall be for a minimum duration of three years for full/part time, including course work and a maximum of six years. For further details, refer Ph.D. ordinance.

3. ADMISSION PROCESS

- 3.1. Admission notice seeking applications for Ph.D. programme shall be issued once or twice in a year.
- 3.2. Numbers of seats (Slots) available for admission in different Departments are given below.

S. No.	Name of the Department	Ph. D. Slots
1.	Architecture	13
2.	Bio-Technology	3
3.	Biomedical Engg.	7

4.	Centre of Excellence in Energy & Environment Studies	11
5.	Chemical Engg.	10
6.	Chemistry	6
7.	Civil Engg.	3
8.	Computer Science&Engg.	12
9.	Electrical Engg.	11
10.	Electronics & Comm. Engg.	13
11.	Humanities	2
12.	Management Studies	13
13.	Mathematics	0
14.	Mechanical Engg.	12
15.	Physics	4

3.3. Haryana State reservation policy will be followed to distribute the total number of slots and is subject to any change / amendments by the State Governments from time to time.

For distribution of slots, refer seat matrix given at page no 13.

- i. Only the candidates having the permanent disability of not less than 40% (being otherwise fit for admission of the course) will be considered for admission as physically handicapped. Disability certificate must be issued from Chief Medical Officer of the concerned District.
- ii. In the event of quota reserved for physically handicapped remain unutilized due to non-availability for suitable category of handicapped candidates, it may be offered to the Ex-Serviceman and their wards (1%) and the dependents of Freedom Fighters (1%).
- iii. Vide Notification No. 808-SW (1) dated 17 August, 2016 issued by Welfare of ScheduledCastesand Backward Classes Department, Haryana, the criteria for exclusion of creamy layer within the Backward Classes as per the Schedules appended to the Act, namely Scheduled I, II & III will be as under:-
 - "The Children of persons having gross annual income of upto three lakh rupees shall first of all get the benefit of reservation in services and admission in educational institutions. The left out quota shall go to that class of Backward Classes of citizens who earn more than Three Lakh rupees but upto Six Lakh rupees per annum. The sections of the Backward Classes earning above Six Lakh rupees per annum shall be considered as Creamy Layer under section 5 of the said Act."
- iv. CWP No. 3220 of 2019, Rakesh Dhundhara Vs Union of India and others is pending in Hon'ble Supreme Court regarding 10% reservation granted to the economic weaker section in admission by Govt.
- v. Conversion of reserve seat into All India Category / Open General Category is not permitted. However, merging of sub-category like BC(A) & BC(B) and SC & DSC are permitted if candidates are not available in sub-category/ list exhausted.
- vi. EWS quota: These seats are the part of HOGC in Ph.D seat matrix. In case, candidate is not available in EWS category then these seats may be filled from the HOGC candidates

- vii. Reserve category candidate(s) are also eligible in General Category (AIC / HOGC) provided that they scored marks in qualifying examination ≥the marks required for General Category i.e. 55% marks in qualifying examination (Clause 1.1 of Prospectus)& qualifying marks in entrance examination should be ≥ 50 (Clause 3.7).
- viii. Similarly, valid GATE / NET/ JRF qualified candidates are also eligible in General Category (AIC/ HOGC) provided that they scored marks in (GATE / NET/ JRF qualifying) ≥the marks required for General Category.
- ix. Reserve Category candidatesbelong to SC, DSC, BCA & BCB are not eligible for EWS Category.
- x. Eligibility of the candidates shall be checked at the time of presentation before DRC only. Ineligible candidates qualified in the entrance test shall not be allowed to appear in Seminar/Presentation/Interview to be conducted by respective DRC.
- **xi.** In case of part time programme, full-time teachers/officials of parent University must also avail leave from the employer for the duration**Pre Ph.D. COURSE WORK.**
- 3.4. The candidate seeking admission shall apply to the University admission portal online.
- 3.5. The applicants will have to take the Entrance Test and those further shortlisted will be required to appear for interview /viva-voce / presentation. Candidates who have valid JRF(UGC / CSIR / DBT / any other through an Entrance Test) / GATE / NET and applicants who are teacher fellowship holders/awardee of the fellowship by the DST (INSPIRE), ICMR, ICSSR or any other equivalent national level fellowship (at the level same as national Eligibility Test Qualified candidate) are exempted from the Entrance Test. However, candidate covered under the exempted categories may also appear in the entrance test, if they so desire, to improve their weightage (Refer Clause 3.11.).
- 3.6. Candidates who are exempted from the Entrance Test in Clause 3.5 may also approach the Departments or Centres round the year to apply for admission to Ph.D. programme except during the period of process of Ph.D. admission (from the date of advertisement to the date of final admission). The respective DRC/CRC will verify the eligibility and interview the applicant to take a decision. If, selected, the applicants will be admitted to research programme and will have Pre-Ph.D. course in the same or subsequent semester(s). The filled Ph.D. slots are considered as a integral part of Ph.D. seat matrix for next Pd.D. admission
- 3.7. In the Entrance Test, the candidate has to secure atleast 50% marks in case of General Category. A relaxation of 5% of marks (from 50% to 45%) shall be allowed for the candidates belonging to SC / BC (Non-Creamy layers) / Differently-abled category in the entrance examination conducted by the University. Minimum qualifying marks do not guarantee the admission. Final admission shall be made on the basis of criterion prescribed in Clause 3.11.
- 3.8. The Entrance Test shall be a Single Paper Test having 100 Multiple Choice Questions (MCQs) and duration of test shall be 120 Minutes. The candidates shall be required to answer all questions. There will be no negative marking for wrong answers. The Entrance Test shall be divided in two parts.

- (a) Part 'A' Research methodology
 Part-Ashall consist of 50 MCQs each carrying one mark. The questions which will be of general nature, intended to assess the teaching / research aptitude of the candidate. It will primarily be designed to test reasoning ability, comprehension, divergent thinking and general awareness of the candidate.
- (b) Part 'B'

This part shall contain 50 subject specific MCQs covering the topics given in the syllabus and are designed to test a candidate's knowledge of subject in which he/she has applied for Ph.D. admission.

- 3.9. The successful applicants, i.e. eligible applicants, who qualify the Entrance Test or otherwise exempted under Clause 3.5 shall be judged by the Department Research Committee (DRC) through interview/viva-voce/presentation.
- 3.10.The interview/viva-voce/presentation shall also consider the following aspects, viz. whether:
 - a) the candidate possesses the competence for the proposed research;
 - b) the research work can be suitably undertaken at the department/centre;
 - c) theproposed area of research can contribute to new/additional knowledge.
- 3.11. The DRC after due assessment of the candidate's competence for the proposed research, area of research and its contribution to knowledge and also taking due note of vacancy available in the research area will prepare a merit list.

While preparing the merit list, weightages shall be given according to the following criteria:-

- i. 30% for the marks in the seminar/presentation/interview to be conducted by the respective DRCs/ CRCs.
- ii. 70% for the marks in the Entrance Test.

OR

50 marks to those candidates who have qualified valid **JRF** (UGC / CSIR / DBT /DST (INSPIRE), ICMR, ICSSR or any other equivalent national level fellowship (at the level same as national Eligibility Test Qualified candidate).

OR

35 marks to those candidates who have qualified valid GATE / NET.

However, candidate covered under the exempted categories may also appear in the entrance test, if they so desire, to improve their weightage.

Note: The merit of the candidates who are availing weightage of valid JRF (UGC / CSIR / DBT / any other through an Entrance Test) / GATE / NET / DST (INSPIRE), ICMR, ICSSR or any other equivalent national level fellowship (at the level same as national Eligibility Test Qualified candidate)will be considered in the category in which they were issued certificate by UGC / other equivalent agencies or in their own category.

The candidates, who qualified the entrance test conducted in July, 2021 may opt the same score for admission in Ph.D. (2022-23OddSemester). However, they have to register afresh & may also appear in entrance examination to improve their score.

Number of vacant slots may be decreased depending on the suitability of applicants.

- 3.12. In every case, the Department/Centre will have disciplinary and general control over the research students.
- 3.13. The DRC will verify the eligibility conditions and other required documents with originals before allowing him/her to give presentation before DRC. The recommendation of DRC including merit list shall be approved by Dean Academic Affairs. (Chairman, DRC is requested to attach merit list of all candidates present during presentation, Attendance sheet of candidates, Recommended candidates for Ph.D. admission category wisealongwith proposed internal supervisor only, result of entrance test conducted by university, a set of all relevant documents mentioned in clause 12) On the basis of above recommendations, Academic Branch will issue the admission letters to the candidates within a week and candidate has to deposit his/her fees as per instructions given in admission letter. The date of reporting in the Department/Centre concerned shall also be specified in the admission letter.
- 3.14. The list of admitted candidates will be placed before the forthcoming meeting of the Academic Council to take a note and for ratification of the selections made and admitted candidates.

4. PRE Ph.D. COURSE WORK

The admitted candidates will be allowed to register for Pre-Ph.D. Courses after their admission.

4.1 COURSE WORK AND CREDITS

All research students shall have to complete the specified course work as per the academic semester schedule. Details are given in Ph.D. ordinance.

5. ONLINE FILLING OF APPLICATION FORM

The candidate seeking admission shall apply to the University online.(link is available on the university website www.dcrustm.ac.in / dcrustadmission.org)

- Please keep your scanned photograph, saved in a file in jpeg format, ready to upload on the application form. The file size should be between 20kB to 40 kB.
- Please keep your scanned signature, saved in a file in jpeg format, ready to upload on the application form. The file size should be between 10 kB to 20 kB.

Please read the instructions given below to complete and submit the Online Application form:

- a. Check eligibility for admission to a programme of your choice by clicking on the 'Programme and Eligibility Details' tab.
- b. Keep details of your qualification from matriculation onwards ready.
- c. All the details required in the Online Application form should be filled in.
- **d.** Last date for submitting the duly completed application along with the requiredapplication fee is 12.10.2020 up to 11.59 P.M. (mid night).
- e. Application fee must be paid online through "Pay Fee" link which is activated after theapplication form is completed and submit button is clicked. Application fee to be paidis:-
 - General category and all others candidates: (₹) 1000.00 (One Thousand Rupees only)

- SC/DSC/BC candidates of Haryana State only:(₹) 250.00 (Two Hundred Fifty Rupeesonly)
- f. After submitting the Online Application, the registration number and password will begenerated.
- g. Note down the registration number and password for future reference. These will berequired for admission test (if applicable).
- h. Fees once paid shall not be refunded / transferred.

6. ENTRANCE TEST & SYLLABI

- 6.1 Candidates seeking admission to Ph.D. programme shall have to appear in the Entrance Test. The eligible applicants will have to qualify the prescribed Entrance Test meant for registration to Ph.D. programme. For details information see Clause 3. ADMISSION PROCESS.
- 6.2 Entrance Tests for admission to various Ph.D. programmes shall be conducted at University level on the basis of prescribed syllabi of concerned discipline.
- 6.3 A candidate can apply for admission to one department/discipline only. The entrance test will be held at the University Campus as per the schedule.
- 6.4 Syllabi for Entrance Test
- In case of Physics, Chemistry and Mathematics the syllabus shall be of CSIR-NET-2021
- In case of English and Management, the syllabus shall be of UGC-NET-2021
- In case of Centre of Excellence in Energy & Environment Studies the syllabus is given in Annexure-A
- In case of disciplines (Computer Science & Engg. /Electronics & Communication Engg./Electrical/Mechanical/Biotechnology/ Biomedical Engineering /Chemical/Civil/Architecture) on the basis of GATE -2022 syllabi.
- 6.5 The entrance test shall be a single paper test of 120 minutes duration consisting of 100 multiple choice questions. The candidates shall be required to answer all questions.
- 6.6 There shall be no negative marking.
- 6.7 The candidates, who qualified the entrance test conducted in July, 2021 may opt the same score for admission in Ph.D. (2022-23odd semester). However, they have to register afresh & may also appear in entrance examination to improve their score.

$6.8\,$ Important Instructions to the candidates for appearing in Entrance Test

- i. The Candidate must bring his / her Admit Card for appearing in the test.
- ii. The Candidates will be provided with computer system in case of online examination and question bookletalongwith OMR Sheet for offline examination.
- iii. In case of online examination, the Candidates are advised to contact the HELP DESK at University Computer Centre, Saraswati Library Building, DCRUST Murthal, at least 30 minutes before the scheduled startof examination to get their computer system location. (The venue of examination shall be notified on the university website/admit card).

- iv. No candidate will be allowed to take the entrance examination 15 minutes after the scheduled start of examination.
- v. The Candidates should NOT tamper with the computer system /questions booklet/OMR sheet in any form which may lead to disqualification.
- vi. Wrist Watch / Mobile Phones/Blank Papers/ Clip Boards/Log Tables/Pagers and any other Electronic Gadget, are not allowed in the Examination hall. However, scientific calculator is allowed.
- vii. The Possession of Books, loose papers, written notes, and/or adoption of unfair means/impersonation / misconduct during the examination shall automatically lead to cancellation of the candidature.
- viii. In case of online examinations, the Candidates shall be provided with A4 sheet for rough work which is to be handed over to the invigilator before leaving the Examination hall at the end of the test.
 - ix. The candidates shall bring any of his identity proof with photograph such as Driving License, Pan Card, Passport, Voter Card, Aadhar Card etc. at the time of entrance test.
 - x. Candidates with valid JRF(UGC/CSIR/DBT/any other through entrance test) may also appear in the Entrance Test, if they so desire, to improve their weightage (Refer Clause 3.11).

7. FEE STRUCTURE/FEE CONCESSION/SCHOLARSHIP

The fee structure for Ph.D. programme 2021-22(Odd Semester) will be as under:

S. No.	Туре	Indian Students (₹)	Foreign Students (USD)	DCRUST Employees and their dependents (₹)
1	To be paid at the time of admission Security deposit (refundable)	5000/-	500/-	5000/-
2.	One-time payment to be paid at the time of admission Admission and development fees (Non-Refundable)	10000/-	1000/-	7500/-
3.	Semester fees (non-refundable)	10000/-	1500/-	5000/-
	TOTAL (to be paid at the time of admission)	25000/-	3000/-	17500/-

Notes:

- i. The fees include Tuition Fee, Examination Fee, University and Student Fund Charges etc.
- ii. No other concession, of any kind, will be admissible to the DCRUST employees and their dependents.
- iii. The Semester Fees will be payable as per the provisions given in ordinance.

iv. The cut of date of refund of fee against cancellation of admission for the candidates admitted in pre Ph. D course work will be one month after the commencement of classes for pre Ph.D. Course. ₹ 1,000/- will be deducted as a processing fee. Thereafter, fee paid by them shall be forfeited except refundable security.

v. Hostel Room Rent(Yearly) for all students

S. No.	Category of Occupancy	Room Rent	Remarks
1.	Single accommodation	₹ 6000/-	In the beginning of Academic
2.	Sharing accommodation	₹ 4000/-	Session

Students who want to stay in the hostel, they are directed to approach to the respective Chief Warden/Warden to deposit the hostel room rentalongwith the other charges of hostel. Respective Chief Warden is requested to deposit the entire amount collected towards hostel room rent charges to the university fund along with the list of students.

If the curriculum/regulations of the University permit any student to reside only for one semester in any academic year, then hostel room rent will be charged equal to half of the amount as mentioned above.

Note: Due to COVIDand to make sure social distancing and considering health, safety and welfare of the students, it would not be possible to allot the hostel till further orders.

8. SCHOLARSHIPS

8.1 University Scholarship/Assistance-Ship

University Scholarship/Assistance-ship by the University will be offered to the Topper of Pre Ph.D. course work done in the University provided the candidate is not availing any other scholarship. In case two or more candidates have same highest SGPA in coursework then topper shall be decided by existing rule to award Gold-Medal to break the tie.

8.20THER SCHOLARSHIPS

The students can avail the Scholarships granted by other organizations like UGC / TEQIP etc.

9. COUNSELING AND ADMISSION

- 9.1 The final eligibility of candidates shall be determined at the time of presentation/interview before Departmental Research Committee to be conducted by the respective departments and accordingly the admissions shall be made as per Ph.D. ordinance.
- 9.2 The admission to Ph.D. programme shall be open to the candidates having qualifying degree examination as per clause 1.1

10. SCHEDULE OF EVENTS

Schedule of events for Ph.D. admission 2021-22 (Odd Semester)

Sl.No.	Event	Date
1	Start of Online submission of form	01.07.2022
2	Last date for online submission of forms	25.07.2022
3	Availability of admit cards on the website	28.07.2022
4	Entrance test examinations	30.07.2022 to 01.08.2022
5	Declaration of result	03.08.2022
6	DRC meetings* and provisional admission	05.08.2022 – 12.08.2022
7	Last date for deposition of fee	19.08.2022
8	Start of Pre Ph.D.course work classes	22.08.2022

^{*}Department wise DRC meeting schedule will be uploaded on the website separately.

- 1. The date & time of entrance examination printed on Admit Card shall be final and admit cards shall be made available on login portal of the candidates.
- 2. Result of the entrance test shall be displayed on the website of the university / login portal of the candidate.
- 3. Refer university website regularly for any update.

11. Seat Matrix

S.	Name of	Total	AIC	SQ	HOGC	SC	DSC	BCA	BCB	PH	EWS
No.	Department	seat	15% of	85% of	50%	10%	10%	16%	11%	3%	10%
			total	total	of SQ	of	of	of	of	of	of
			seats	seats		SQ	SQ	SQ	SQ	SQ	SQ
1	Architecture	13	2	10	5	1	1	1	1	1	1
2	Bio-Technology	3	0	3	1	0	0	1	1	0	0
3	Biomedical Engg.	7	1	5	2	0	1	1	1	0	1
4	CEEES	11	1	9	4	1	1	2	1	0	1
5	Chemical Engg.	10	1	8	4	1	1	1	1	0	1
6	Chemistry	6	1	4	2	0	1	1	0	0	1
7	Civil Engg.	3	0	3	1	1	0	1	0	0	0
8	Computer Science &Engg.	12	2	9	5	1	1	1	1	0	1
9	Electrical Engg.	11	1	9	4	1	1	2	1	0	1
10	Electronics & Communication Engg.	13	2	9	5	1	0	1	1	1	2
11	Humanities	2	0	2	1	0	0	1	0	0	0
12	Management Studies	13	2	9	5	1	1	0	1	1	2
13	Mathematics	0	0	0	0	0	0	0	0	0	0
14	Mechanical Engg.	12	2	9	5	1	1	1	1	0	1
15	Physics	4	1	3	2	0	0	1	0	0	0
	Total	120	16	92	46	9	9	15	10	3	12

12. GENERAL INSTRUCTIONS, CODE OF CONDUCT AND ANTI-RAGGING GUIDELINES AND MEASURES, ABOUT THE UNIVERSITY AND DEPARTMENTAL INFORMATIONETC: REFER UNIVERSITY BROCHURE AVAILABLE ON THE UNIVERSITY WEBSITE.

Note: Any doubt or dispute about the interpretation of this prospectus or the Regulationsshall be referred to the Vice Chancellor whose decision shall be final.

Note: Candidates shall bring **ONE SET** of Self attested copies of following documents (as applicable) at the time of counseling/presentation along with print out of online filled application form (as applicable) for admission in Ph.D. Programmes and submit the same in respective department.

- Fee receipt.
- Three Passport size photographs.
- Certificates showing the detailed marks / grades in all subjects in the qualifying examination
- Matriculation/Hr. Secondary Examination Certificate as proof of age.
- Conversion Table/Formula showing equivalence between percentage and CGPA of the qualifying degree.
- Valid JRFscore card / GATE Score / NET/ DST (INSPIRE), ICMR, ICSSR or any other equivalent national level fellowship letter (wherever applicable).
- Medical Fitness Certificate from a Gazetted Medical Officer.
- Character Certificate (Annexure I).
- For gap period, if any, the candidate will submit an affidavit from the notary / first class magistrate certifying his/her good conduct.
- Haryana Resident Certificate (Annexure II).
- Certificate from the Employer (Annexure-III)
- SC/DSC/BC-A or BC-B (OBC is not valid)/PH/FF/DFF/ESM (Annexure -IV, V, VI, VII, VIII, IX, X).
- Declaration by parents (Annexure XI).
- Sponsorship and Relieving Certificate (Annexure XII, XIII)
- Income certificate from competent authority (Annexure-XVI)
- Economically Weaker Section : Income and assets certificate applicable for the state of Haryana (Annexure-XVII)

CHARACTER/BONAFIDE CERTIFICATE (From the institution last attended)

Certified that Mr./Km./S	mt./	son/daughter of
Shri	has been a bonafide student of this So	chool/College during the
period	He/She appeared in the	Examination of
the	(University/Board) held in	under Roll No.
and	*passed obtaining	marks out of
	marks or * failed/* placed under compartm	ent in the subject of
		·
It is to further certified tha	t Mr./Ms.	bears
(good/b	ad) moral character and his/her general conduct d	uring his/her stay in the
institution was found	(satisfactory/unsatisfactory	tory)
No. :		nature of Principal
Date :	(wi	th office seal)

^{*} Strike out whichever is not applicable.

ANNEXURE – II

HARYANA RESIDENT CERTIFICATE (for bonafide residents of Haryana only)

Certified that Mr./Km./Smt./	son/daughter of
Shri	
(Complete Address) since	
Engineering/Technical Courses in Haryana, is a bonaf	ide resident of Haryana State in terms of Chief
Secretary, Haryana letter no. 62/17/95-6 GS1 dated	03.10.1996, letter no. 62/32/2000-6GSI dated
23.05.2003, letter no. 62/27/2003/6 GS1 dated 29.07.200	03, letter no. 22/28/2003-3GS-III dated 30.01.2004
under clause	
No	Signature of the issuing authority
Date:	Name
Place:	Designation(with office seal)

Note: i) The competent authorities to issue Haryana Resident Certificate will be as per State Govt. Letter no. 22/28/2003-3 GS III dated 30.01.2004. ii) The candidates, who have passed their qualifying examinations from the Universities/Board/Institutes located in Haryana are not required to produce Certificate of Haryana Resident. iii) The certificate must have been issued on or after 31.01.2005.

ANNEXURE – III

CERTIFICATE FROM THE EMPLOYER

Certified that Mr./Km./Smt./	son/daughter/wife of
Shri	is serving as a Regular
employee of	
	Presently, he/she is posted as
	in the Department of
at	(place of posting). If he
/ she is got admission in Ph. D Course at DO	CRUST, Murthal then he / she shall be relieved from his / her
service for the duration as mentioned in Ph. D	Ordinance applicable to him.
No	Signature of the issuing authority
Date:	Name
Place:	Designation
	(with office seal)

SCHEDULED CASTE CERTIFICATE

Certified that Mr./Km./Smt./	son/daughter of
Shri	
(Complete Address) belongs to	Caste which has been notified as Scheduled
Caste by the Haryana Government. This certific	ate is being issued to him/her according to the Haryana
Govt. Circular letter no. 333(1)-97, dated 25.02.19	997, No. 22/28/2003-3 GS III dated 30.01.2004 and letter
dated 21.06.2004.	
No	Signature of the issuing authority
Date:	Name
Place:	Designation
	(with office seal)

BACKWARD CLASS CERTIFICATE BLOCK 'A' OR 'B'

Certified that Mr./Km./Smt./	son/daughter of
Shri	
(Complete Address) belongs to	
Class by the Haryana Government and is placed in Block	(mention Block A
or B). Further, certified that he/she is not covered in Cream	y Layer (Reference from the Chief Secretary,
Haryana letter no. 1170-SWL1-95 dated 07.06.1995 & No.	. 62/17/95-6 GSI dated 03.10.1996 and No.
22/36/2000 3GSIII dated 09.08.2000). This certificate is being	ing issued to him/her in terms of notification
issued by Chief Secretary, Haryana vide memo no. 22/282003-	-3 GS III dated 30.01.2001.
No	Signature of the issuing authority
Date:	Name
Place:	Designation
	(with office seal)

AFFIDAVIT

(by the parents of the backward class category candidates)

I,Father/Mother	ofResident of
Tehsil	District seeking
admission to	course in Haryana do hereby solemnly affirm
& declare that I belong to Ca	ste, which is included in the list of Backward Classes
Block 'A'/'B' approved by the Haryana Govt. I furthe	r declare and affirm that, I and my wife/husband are
not covered under the criteria fixed by Haryana Gov	t. (Refer Chief Secretary, Haryana letter no. 1170-
SWL1-95 dated 07.06.1995 & No. 62/17/95-6 GSI d	ated 03.10.1996 and No. 22/36/2000 3GSIII dated
09.08.2000) for excluding socially advanced persons/s	ections (Creamy Layer) from Backward Classes. I
further undertake that in case the information containe	ed in the above para is found false at any stage, the
Competent Authority will be entitled to cancel the admis	ssion.
Date:	DEPONENT
Place:	
VERIFICA	ATION
Verified that the above statement is true and correct to the	the best of my knowledge and belief and nothing has
been concealed therein.	
Date:	DEPONENT
Place:	

PHYSICALLY HANDICAPPED CERTIFICATE

OFFICE OF THE CHIEF MEDICA	AL OFFICER	
No	Dated : _	
Certified that Mr./Km./Smt./		son/daughter/wife of
Shri		resident of
	District	appeared before
the Medical Board for medical ch	neck-up. On his/her Medical Examination, it is	is found that the nature of
handicap/disability is	% and (as applicable), is as under:	
1. Blind or Low Vision	<u>-</u>	
2. Hearing impairment		
3. Locomotor disability/cereb	oral palsy	
Thus, the candidate is physically ha	andicapped as per standard norms of Haryana.	
(Signature of the applicant)		Chief Medical Officer
Date:		(with office seal)
Place:		
Note: The handicap disability sho professional career.	ould not be less than 40% and should not interfe	ere with the requirement of

ANNEXURE - VIII

DECLARATION BY THE FATHER / GUARDIAN OF THE CANDIDATE

I certify that my son / daughter / ward	has applied the application with		
my knowledge and consent and that I hold myself responsible for his /	her good conduct and its maintenance		
and payment of fees during the period he / she will be on the University	Rolls.		
I am fully aware of the Supreme Court directives in regard to ragging a	and my son / daughter / ward will not		
indulge in any act of ragging and will strictly adhere to code of conduct prescribed by university.			
Place			
Date: Signat	ture of the Father / Guardian		

SPONSORSHIP CERTIFICATE

(On the letter head of the organization)

Certified that Mr. / Ms			Son / Daughter/wife of Mr.		
	has been working a	S	in the department		
of	from	to	in this Organization		
His / her name is hereby s	ponsored for Full Time / Part T	ime PG Progran	nme at Deenbandhu Chhotu Ram		
University of Science & Te	echnology, Murthal.				
It is further certified that no	o enquiry is pending against him.	/her and he/she v	will be relieved to join the course		
if selected.					
Place:		0	of the sponsoring		
Date		Authority	with Stamp		

RELIEVING CERTIFICATE

(On the letter head of the organization)

Certified that Mr. / Ms.	Son / Daughter/wife of
Mr	
in the pay	scale of Rs on
permanent / temporary basis in our organization/departme	ent has been relieved to join PG / Ph. D.
Programme at Deenbandhu Chhotu Ram University of Science	e & Technology, Murthal and that no vigilance
/ departmental or any other enquiry is pending against him / he	er.
Place: Date:	Signature of the sponsoring Authority with Stamp
Tehsildar/Sub Division Magistrate/Distric Magistrate/Gener	ral Assistant to Dy. Commissioner or Sub-
Divisional Officer (Civil) of the District/Sub Division	

Government of Haryana Income Certificate

(For educational purpose only)

	Certified that Mr		- S/o	resident of
		Tel	ısil	
District	i	s having annual fami	ly income from a	ll sources Rs as
verified by Pa	atwari/competent authorit	y, if employed.		
No.:				Issued by
Date :				
Place :				Tehsildar

Note: The gross annual income of parents shown in the certificate should be of financial year 2021-22 and certificate should be issued on or after 01.04.2022.

Government of Haryana (Name and address of the authority issuing certificate) (ECNOMICALLY WEAKER SECTIONS)

Income and assetsCertificate (For educational purpose only)

Certificate No.	VALID FOR THE Y		Dated:-	
	This is to certify that Sh./Smt./Kumari	Son/daug	thter/wife of	
	is permanent resident of	Village/Street	Post. Office	
	- DistrictPin-code	whose photograph is affixed	d below and attested below	
belongs to econo	omically weaker sections since the gross inco	ome of his/her family is below R	s. Six Lakhs for the	
financial year				
	It is further certified that his/her family do	es own or possess any of the foll	lowing assets	
0	Fiveacresofagriculturallandandabove			
0	Residential flats of 1000 sq.ft. and above			
0	Residentialplot of 100 sq. yards and above on notified municipalities			
0	Residential plot of 200 sq. yards and above in areas other than the notified municipalities			
0	Total immovable assets owned are valued	at Rs. One Crore or more		
Sh./Smt./Kumar	belongs to the case	ste which is not recognized as so	heduled caste, backward	
class (block-a),b	ackward class (block-b)			
		Signature with seal of	of office	
		Name		
		Designation		
Recent passport	size attested photograph of the applicant			

- 1. The gross annual income of parents shown in the certificate should be of financial year 2021-22 and certificate should be issued on or after 01.04.2022.
- 2. Thepropertyheldbya "family" in different locations or different places/cities would be clubbed while applying the land or property holding test to determine EWS status.
- **3.** The term 'family' for this purpose will include the persons who applies for benefits of reservation, his/her parents, spouse as well children and sub links below the age of 18 years
- **4.** The competent authority or EWS income certificate shall be Tehsildar of the area where the applicant normally resides/ same as prescribed for issue of resident/income certificate as specified in instruction No. 22/28/2003-3GS-3 dated 30.1.2004

Note:

State-wise List of fake Universities as on Oct. 2020 (Refer UGC Website for updated information): https://www.ugc.ac.in/pdfnews/3958086_Fake-Universities.pdf

Delhi

- 1. Commercial University Ltd., Daryaganj, Delhi.
- 2. United Nations University, Delhi.
- 3. Vocational University, Delhi.
- 4. ADR-Centric Juridical University, ADR House, 8J, Gopala Tower, 25 Rajendra Place, New Delhi 110 008.
- 5. Indian Institute of Science and Engineering, New Delhi.
- 6. Viswakarma Open University for Self-Employment, Rozgar Sewasadan, 672, Sanjay Enclave, Opp. GTK Depot, Delhi-110033.
- 7. Adhyatmik Vishwavidyalaya (Spiritual University), 351-352, Phase-I, Block-A, Vijay Vihar, Rithala, Rohini, Delhi-110085

Karnataka

8. Badaganvi Sarkar World Open University Education Society, Gokak, Belgaum, Karnataka.

Kerala

9. St. John's University, Kishanattam, Kerala.

Maharashtra

10. Raja Arabic University, Nagpur, Maharashtra.

West Bengal

- 11. Indian Institute of Alternative Medicine, Kolkatta.
- 12. Institute of Alternative Medicine and Research,8-A, Diamond Harbour Road, Builtech inn, 2nd Floor, Thakurpurkur, Kolkatta 700063

Uttar Pradesh

13. Varanaseya Sanskrit Vishwavidyalaya, Varanasi (UP) Jagatpuri, Delhi.

- 14. Mahila Gram Vidyapith/Vishwavidyalaya, (Women's University) Prayag, Allahabad, Uttar Pradesh.
- 15. Gandhi Hindi Vidyapith, Prayag, Allahabad, Uttar Pradesh.
- 16. National University of Electro Complex Homeopathy, Kanpur, Uttar Pradesh.
- 17. Netaji Subhash Chandra Bose University (Open University), Achaltal, Aligarh, Uttar Pradesh.
- 18. Uttar Pradesh Vishwavidyalaya, Kosi Kalan, Mathura, Uttar Pradesh.
- 19. Maharana Pratap Shiksha Niketan Vishwavidyalaya, Pratapgarh, Uttar Pradesh.
- 20. Indraprastha Shiksha Parishad, Institutional Area, Khoda, Makanpur, Noida Phase-II, Uttar Pradesh.

Odisha

- 21. Nababharat Shiksha Parishad, Anupoorna Bhawan, Plot No. 242, PaniTanki Road, Shaktinagar, Rourkela-769014.
- 22. North Orissa University of Agriculture & Technology, Odisha.

Puducherry

23. Sree Bodhi Academy of Higher Education, No. 186, Thilaspet, Vazhuthavoor Road, Puducherry-605009

Andhra Pradesh

- 24. Christ New Testament Deemed University, # 32-23-2003, 7th Lane, Kakumanuvarithota, Guntur, Andhra Pradesh 522 002 or # fit No. 301, Grace Villa Apts., 7/5, Srinagar, Guntur, Andhra Pradesh 522 002
- * Bhartiya Shiksha Parishad, Lucknow, UP the matter is subjudice before the District Judge Lucknow

This list is tentative, the latest / updated list (if any) at the time of admission shall be considered to verify the academic qualifications.

Reference letter No.F.2-19/2007 (AMPC) pt.III dated May, 2017 from UGC

Subject: -Unrecognized Status of IIPM. New Delhi

It is hereby informed to the students and public at large that Indian Institute of Planning and Management (IIPM). 133/4, Qutub Enclave. Phase-II, New Delhi-16 is not a University within the meaning of the section 2(f) of the UGC Act. 1956. It does not have the right of conferring or granting degrees as specified by the University Grants Commission under Section 22(3) of the University Grants Commission Act. It is further clarified that IIPM is neither entitled to award any UG or PG degree, including BBA/BCA/MBA nor it is recognized by UGC. Hon'ble High Court of Delhi in the matter B. Mahesh Sharma Vs. UOI and Ors. has also refrained IIPM from offering any degree programme vide its Order dated 26th September. 2014.

Annexure-A

SYLLABI FOR ENTRANCE TEST

For the subjects/courses where JRF/NET/GATE examination is not conducted the syllabi is as under:

ENERGY AND ENVIRONMENT STUDIES (CEEES)

Energy and Environment Relationship: Basics of Clean Energy Sources, Conventional and Non-Conventional Energy Sources, Problems to Environment from These Sources, Quality and Quantity of Their Magnitude, Comparative Study of Different Pollution Problems in Our Country, Future Scenario of Environmental Degradation Due To Conventional Sources.

Classification of Energy Sources: Principle fuels for energy conversion: Fossil fuels, Nuclear fuels. Conventional and Renewable Energy, Energy Sources: prospecting, extraction and resource assessment and their peculiar characteristics, Direct use of primary energy sources, Conversion of primary into secondary energy sources such as Electricity, Hydrogen, Nuclear energy etc, Energy Conversion through fission and fusion, Nuclear power generation etc.

Basics of Thermodynamics: Basic Units, Dimensions and Conversions For Energy, Concepts of Energy, Heat and Work, Ideal gas law, Ist and IInd law of thermodynamics (Closed and Open

Systems)Thermodynamics power cycles, Reversible heat Engine cycle, I.C. engine cycles, Carnot Cycle, Rankin Cycle, Otto Cycle, Vapor Refrigeration and power Cycle etc.

Solar Energy: Nature of Solar Radiation, Global, Beam and Diffuse Radiation, Hourly, Daily and Seasonal variation of solar Radiation, Estimation of Solar Radiation, Measurement of Solar Radiation, Sun as Source of Energy, Availability of Solar Energy, Nature of Solar Energy, Solar Energy and Environment, Various Methods of using solar energy –Photo thermal, Photovoltaic, Photosynthesis, Present and Future Scope of Solar energy. Basics of Semiconductors Physics: Intrinsic and Extrinsic Semiconductor, Direct and indirect transition, inter-relation between absorption coefficients and band gap recombination of carriers.

Basics of Photovoltaic Technology: Types of Solar cells, crystalline silicon deposition techniques, description and principle of working of single crystal, polycrystalline and amorphous silicon solar cells and new materials for solar cells applications.

Hydrogen Energy: Hydrogen as a renewable energy source, Sources of Hydrogen, Fuel for Vehicles, Hydrogen Production: Direct electrolysis of water, thermal decomposition of water, biological and biochemical methods of hydrogen production. Storage of Hydrogen: Gaseous, Cryogenic and Metal hydride, Structural characterization of hydride materials, safety related issues, Fuel cell – Principle of working, construction and applications.

Bio-Fuels: Concept of Bio-energy: Photosynthesis process, Bio-fuels, Biomass resources Bio basedchemicals and materials, Thermo-chemical Conversion: Pyrolysis, Combustion, Gasification, and Liquefaction. Bio-Chemical Conversion: Aerobic and Anaerobic conversion, Fermentation etc. Bio-fuels: Importance, Production and applications. Bio-fuels: Types of Bio-fuels, Production processes and technologies, Bio fuel applications, Ethanol as a fuel for I.C. engines, Relevance with Indian Economy. Bio-based Chemicals and Materials: Commercial and Industrial Products. Biomass, Feed stocks, Chemicals. Plastics, Fibers etc.

Nuclear Energy: Potential of Nuclear Energy, International Nuclear Energy Policies and Regulations. Nuclear Energy Technologies – Fuel enrichment, Different Types of Nuclear Reactors, Nuclear Waste Disposal, and Nuclear Fusion.

Environmental Biology and Biodiversity: Fundamental concepts of ecology, Ecosystems, Influenceof environmental factors (including temperature, light, moisture, soil, nutrients) on organisms and their adaptations in response to them. Global and National Biodiversity Evaluating nature, scale and intensity of the threats to biodiversity. Developing measures for conservation of biodiversity and approaches to its sustainable utilization. Strategy for Conservation of Bio-Resources International conventions and treaties for conservation of bio-resources.

Environmental Chemistry: Chemistry of Water, Physico-chemical methods for analysis of environmental samples - Estimation of various elements

at major, minor trace, ultra trace level concentrations: choice of a technique, principle, merits and demerits of the techniques - neutron activation analysis, isotope dilution analysis, colorimetry, atomic absorption spectroscopy, ICPAES, gas chromatography, HPLC, ion exchange chromatography and polarography.

Introduction to Atmospheric and geosciences: Dynamics and structure of the Earth: Structure and composition of Earth. Geochemical cycle, Earth's material; Rocks and minerals. Earthquakes, Volcanoes and Earth's interior. Earth surfaces processes and landforms: Weathering and soils, Mass wasting. Impact of anthropogenic activities such as urbanization, mining, river-valley projects, excess withdrawal of ground water. Atmosphere as a part of biosphere ecosystem, Elements of

weather and climate, Evolution of atmosphere, Atmosphere and environmental issues, Composition and structure of the atmosphere, Need of atmospheric studies in environmental science. Atmospheric hazard: Thunderstorm, Tropical cyclone hurricanes, Global warming, Ozone depletion and droughts.

Environmental Pollution and control: Water Pollution, Water Quality Standards: BIS and WHO fordrinking and agricultural water. Determination of various physicochemical parameters of water. Waste water treatment processes: primary, secondary and tertiary.

Air Pollution: Classification of air pollutants, sources, atmospheric reactions, formation of secondarypollutants, permissible limits of air pollutants. Effect of meteorological parameters on transport and diffusion of air pollution, effect of air pollutants on climate. Ozone layer depletion and green house effect. Radiation pollution: Radioactivity and its detection: decay types, various detectors used for measurement of radiations, Management of radioactive wastes: liquid, solid and gases. Noise Pollution: Sources, Measurement, permissible limits, Prevention and control of noise pollution.

GIS and remote sensing: Basics of GIS: Definition and Objectives of GIS, History of GIS, Conceptof space and time, Elements of GIS, Map Projection: Conical, Azimuthal and Cylindrical. LCC Projection, UTM and Polyconic projections, EMR spectrum, Radiation laws, Active and Passive remote sensing: Optical, Thermal, Microwave, Resolution in Remote sensing data.

Environmental Impact assessment and Environmental Management: Environmental ImpactAssessment: Concept, origin and development of EIA, Historical perspective and definition of EIA and EIS; Need of EIA; Scope, objectives; Negative and positive aspects and uncertainties in EIA, Methodology, Baseline studies, assessment of Impact and management plan, Public Participation, Environmental management system (EMS), Principles and elements, Preparation of Environmental Management Plans (EMS): Environmental management, Overview of ISO 14000 series, Environmental law, rules and regulation.

Watershed Management: Concept of Watershed Management: Definition, Principle, Objectives, Benefits and causes of deterioration, Problem identification Environmental Management: scope, importance, Objectives, Environmental Management tools.