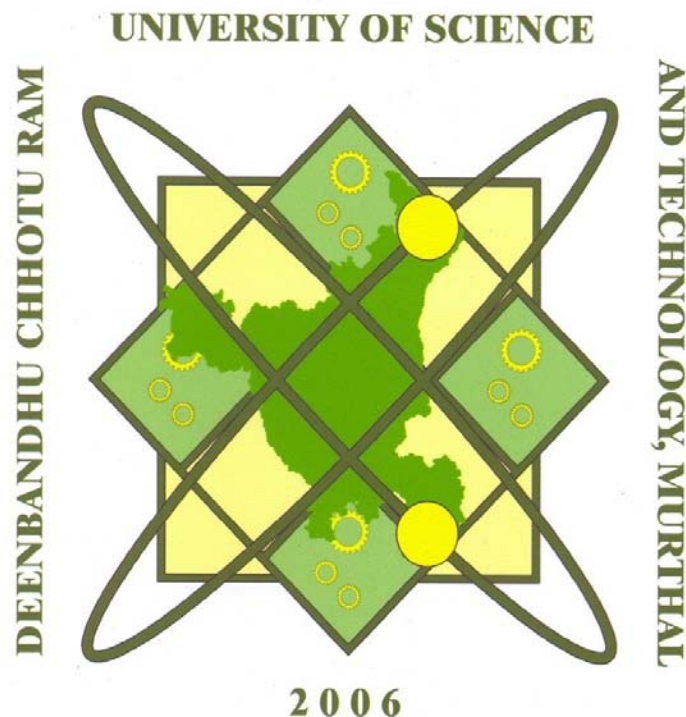


PG / DUAL DEGREE PROSPECTUS

2020-21



NAAC 'A' Grade Accredited University

**DEENBANDHU CHHOTU RAM UNIVERSITY OF SCIENCE
& TECHNOLOGY, MURTHAL (SONEPAT) HARYANA
(Haryana State Government University)**

**[Established by Haryana State Legislature Act No. 29 of 2006 and
recognized under 12(B) of the UGC Act, 1956]**

www.dcrustm.ac.in

MAY, 2020

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HON'BLE CHANCELLOR
Sh. Satyadev Narayan Arya
Governor, Haryana

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Training and Placement Office

Training and Placement Officer **Dr Virender Ahlawat** **0130-2484129**

DEANS/CHAIRPERSONS/ HEADS OF DEPARTMENTS/ CENTRES

Deans of Faculties	Phone No. 0130-	Departments	Chairperson	Phone No. 0130-
Prof. Ajay Monga Faculty of Architecture, Urban and Town Planning	2484023	Architecture	Prof Ajay Monga	2484040
Prof. J. S. Saini Faculty of Engineering and Technology	2484124	1. Biomedical Engg.	Prof. Manoj Duhan	2484201
		2. Civil Engineering	Prof. Dharendra Singhal	2484147
		3. Electrical Engg.	Prof. D K Jain	2484124
		4. Electronics & Communication Engineering	Prof. Amit Kumar Garg	2484146
		5. Mechanical Engineering	Prof. M N Mishra	2484125
Prof. Parvinder Singh Faculty of Information Technology & Computer Science	2484137	Computer Science and Engineering	Prof. Amita Rani	2484137
Prof. Rajbir Singh Faculty of Management Studies	2484126	1. Humanities	Prof. Rekha	2484028
		2. Management Studies	Prof. Rajbir Singh	2484126
Prof. A. K. Berwal Faculty of Non Conventional Sources of Energy and Environmental Science	2484010	1. Bio Technology	Prof. Anil Sindhu	2484128
		2. Chemical Engineering	Prof. Kiran Nehra	2484123
		3. Centre of Excellence for Energy & Environmental Studies	Prof A.K. Berwal	2484037
Prof. R C Nautiyal Faculty of Science and Technology Interface	2484121	1. Chemistry	Prof. Sanjeev Makin	2484148
		2. Mathematics	Prof. Sudhir Batra	2484121
		3. Physics	Prof. Satish Khasa	2484127

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CHAPTER – 1

PG / DUAL DEGREE PROGRAMMES OFFERED AND ELIGIBILITY

FACULTY OF ARCHITECTURE, URBAN AND TOWN PLANNING					
Department of Architecture					
Sr. No	Name of the Programme	Name of Course	Duration of the Course	Sancti oned Intake	Eligibility Conditions
1.	M. Arch.	Sustainable Architecture	2 Years	20	B.Arch. or any other equivalent degree recognized by the Council of Architecture with not less than 50% marks in the aggregate or equivalent grade of a recognized university or an examination recognized as equivalent thereto by this University (47.50% for SC/PH).
2.	M. Plan	Urban and Regional Planning	2 Years	20	Bachelor's degree in Civil Engg, Architecture or Planning, Master degree in Economics, Sociology, Geography from any University / Institution in India or Abroad or its equivalent degree recognized by the Government of India with not less than 50% marks in the aggregate or equivalent grade of a recognized university or an examination recognized as equivalent thereto by this University (47.50% for SC/PH). The qualification of Bachelor in Planning or B.Tech. (Planning) should be recognized by the Institute of Town Planners, India.
3.	M. Tech.	*Construction and Real Estate Management (A UGC Innovative Programme)	2 Years	18	Bachelor degree in Architecture or Civil Engg from any University/Institution in India or Abroad or its equivalent degree recognized by the Government of India with not less than 50% marks in the aggregate or equivalent grade of a recognized university or an examination recognized as equivalent thereto by this University (47.50% for SC/PH).
FACULTY OF ENGINEERING AND TECHNOLOGY					
1. Department of BioMedical Engineering					
1.	M. Tech.	Biomedical Engineering	2 Years	18	Scoring at least 50% marks(47.5% for SC/PH) in aggregate in; A. B.Tech/B.E. in Biomedical, Biomedical Instrumentation, Biotechnology, Bioengineering, Biochemical & Biotechnology, Medical Instrumentation, Medical electronics, Electronics & Instrumentation, Electrical, Electronics and Communication, Instrumentation, Mechanical, Computer Science and Information Technology, Chemical Engineering, Polymer Engineering, Instrumentation Engineering, electronics & Telecommunication, Metallurgy and Material Science, Textile Engineering and Fibre Science, Ceramic Engineering, Biochemical, Applied Electronics, Engineering Sciences and relevant (or) B. M.Sc. or equivalent (2 year) in Physics, Biophysics, Chemistry, Material science, Ceramics, Electronics, Computer Science, Life Science, Physiology, Engineering Sciences and relevant (or) C. MBBS, BDS, BPT, B.Pharm, B.VSc. (programme with 4 years and above) and relevant.
2. Department of Civil Engineering					
1.	M. Tech.	Highway Engineering	2 Years	18	B.E./B. Tech.or equivalent in Civil Engg.scoring at least 50% (47.50% for SC/PH) marks in aggregate.

3. Department of Electrical Engineering					
1.	M. Tech.	Electric Power System	2 Years	18	B.E./B.Tech or equivalent in Electrical Engineering / Electrical & Electronics Engineering /Power Engineering scoring at least 50% (47.50% for SC/PH) marks in aggregate.
2.	M. Tech.	Electrical Engineering (Instrumentation & Control)	2 Years	18	B.E./B.Tech. or equivalent in Electrical Engineering / Electrical & Electronics Engineering / Control & Instrumentation/ Control Engineering/ Instrumentation/ Electronics and Instrumentation/ Instrumentation & Control/ Electronics Engineering/ Electronics & Communication Engineering/ Electronics & Telecommunication Engineering/ Electronics & Control/ Biomedical Engineering scoring at least 50% (47.50% for SC/PH) marks in aggregate.
4. Department of Electronics & Communication Engineering					
1.	M. Tech.	Electronics & Communication Engg.	2 Years	18	B.E./B.Tech or equivalent in Electronics Engineering / Electronics & Instrumentation Control/ Instrumentation & Control/ Electronics & Communication Engg./Electronics & Telecommunication Engg./Electronics Instt. & Control/Electrical & Electronics Engg./ Instrumentation Engg./M.Sc. (Electronics) scoring at least 50% (47.50% for SC/PH) marks in aggregate.
2.	M. Tech.	Electronics & Comm. Engg.(VLSI Design)	2 Years	18	
5. Department of Mechanical Engineering					
1.	M. Tech.	Mechanical Engg.	2 Years	18	B.E./B.Tech.or equivalent in Mechanical Engg./ Production Engg./Automobile Engg./Industrial Engg./ Aeronautical Engg. Scoring at least 50% (47.50% for SC/PH) marks in aggregate.
FACULTY OF INFORMATION TECHNOLOGY AND COMPUTER SCIENCE					
1. Department of Computer Science & Engineering					
1.	M. Tech.	Computer Science & Engineering	2 Years	30	B.E./B.Tech.or equivalent in Computer Science & Engg./ Information Tech./Electronics/Electronics & Communication Engg./Electronics & Telecommunication/ Electronics & Instrumentation Control M.Sc. (Maths/Physics/Computer/Electronics)/ MCA scoring at least 50% (47.50% for SC/PH) marks in aggregate.
FACULTY OF MANAGEMENT STUDIES					
1. Department of Humanities (English)					
1.	M. A.	English	2 Years	30	Bachelor or Master's Degree or equivalent in any discipline scoring not less than 50% (47.50% for SC/PH) marks in aggregate. Relaxation upto 5% in the qualifying examination marks shall be provided to students with graduation in Honours in English.
2.	Dual degree B.A. (Hons.) English – M. A. English		5 Years	60	XII Standard/10+2 Level/Equivalent examination from any of the recognized central or state education boards in India or equivalent or deemed to be fit by the university. The candidate must have obtained a minimum of 50% marks in her/his XII Standard/10+2 Level / Equivalent examination (47.5 % for the SC/PH)..
3.	Beginners' Course	French/ German	6 months	30 each	10+2 or equivalent from central or Haryana Education Board (or equivalent) scoring not less than 50% (47.50% for SC/PH) marks in aggregate.
4.	Certificate Course	French/ German	1 year	30 each	10+2 or equivalent from central or Haryana Education Board (or equivalent) scoring not less than 50% (47.50% for SC/PH) marks in aggregate.

2. Department of Management Studies					
1.	Dual Degree B.B.A.- M.B.A.		5 Years	60	10+2 or equivalent from central or Haryana Education Board (or equivalent) scoring not less than 50% (47.50% for SC/PH) marks in aggregate.
2.	M.H.A. (Masters in Hospital Administration)		2 Years	30 (including 6 sponsored seats for Govt. of Haryana Candidates)	MD/MS/MDS/MBBS/BDS/M.Tech.(Bio-Medical)/B.Tech. Bio-Medical)/B.Tech (Medical-Electronic)/B.Tech. (Instrumentation) /BAMS/BPT/B.Pharma/BHMS/B.Sc.Nursing/M.Sc.(Medical)/B. Sc. (Medical) or equivalent scoring not less than 50% (47.50% for SC/PH) marks in aggregate. Note: Preference in admission will be given in the following order: (a) MD/MS/MDS (b) MBBS/BDS (c) M.Tech.(Bio-Medical)/ B.Tech.(Bio-Medical) /B.Tech. (Medical-Electronic) /B.Tech.(Instrumentation) (d)BAMS/BPT/B.Pharma/BHMS (e)B.Sc.(Nursing) (f) M.Sc.(Medical)/B.Sc.(Medical)
3.	MBA		2 Years	60	Graduation degree in any discipline scoring not less than than 50% (47.50% for SC/PH) marks in aggregate.
FACULTY OF NON CONVENTIONAL SOURCES OF ENERGY AND ENVIRONMENTAL SCIENCE					
1. Centre of Excellence for Energy and Environmental Studies					
1.	M. Tech.	Energy and Environmental Management	2 Years	18	B.E./B.Tech./ M.Sc. or equivalent degree in any discipline scoring at least 50% (47.50% for SC/PH) marks in aggregate.
2.	M. Sc.	Environmental Science	2 years	18	Graduation or higher degree in Science / Technology/ Engineering scoring at least 50% (47.50% for SC/PH) marks in aggregate.
2. Department of Biotechnology					
1.	M. Tech.	Biotechnology	2 Years	18	B.E/ B.Tech or equivalent in Biotechnology/ B.Pharma / M.Sc in Biotechnology, Microbiology, Biochemistry, Genetics, Molecular Biology, Biophysics, Bioinformatics, Biosciences, Life Sciences, Pharmacy, Medical Sciences, Veterinary Sciences scoring at least 50% (47.50% for SC/PH) marks in aggregate.
2.	M. Sc.	Biotechnology	2 Years	30	Bachelor's degree or equivalent in any discipline of Biological Sciences/ Life Sciences/Agricultural Sciences/ Veterinary Sciences/ Fishery Sciences/ Pharmacy/ Engineering/ Technology or Medical Sciences scoring not less than 50% (47.50% for SC/PH) marks in aggregate.
3.	Dual degree B.sc. (Hon.) Biotechnology- M.Sc. Biotechnology		5 Years	60	10+2 or equivalent with Physics, Chemistry and Biology from Central or Haryana State Education Board (or equivalent) scoring not less than 50% (47.50% for SC/PH) marks in aggregate.
3. Department of Chemical Engineering					
1.	M. Tech.	Chemical Engg.	2 Years	18	B.E./B.Tech. in Chemical Engg./Bio-Chemical Engg./Chemical Technology/ Food Technology/ Environmental Engg./ Polymer Tech. / Paper Tech./ Petroleum Engg. / Chemical Science/ Sugar Tech./Oil Tech./Plastic Tech./Paint Tech./ Leather Tech./Ceramic Engg./ Metallurgical Engg. Scoring at least 50% (47.50% for SC/PH) marks in aggregate.
FACULTY OF SCIENCE AND TECHNOLOGY INTERFACE					
1. Department of Chemistry					
1.	M. Sc.	Chemistry	2 Years	60	B.Sc./B.Sc.(Hons) or equivalent degree with Chemistry as regular subject at graduation level scoring not less than 50% (47.50% for SC/PH)marks in aggregate.

2.	Dual degree B.Sc. (Hons.) Chemistry-M.Sc. Chemistry	5 Years	60	10+2 or equivalent with Physics, Chemistry and Mathematics (or Biology) from Central or Haryana State Education Board (or equivalent) scoring not less than 50% (47.50% for SC/PH) marks in aggregate.	
2. Department of Mathematics					
1.	M. Sc.	Mathematics	2 Years	60	B.Sc./B.Sc.(Hons.)/B.A./B.A.(Hons) or equivalent degree with Mathematics as regular subject at graduation level scoring not less than 50% (47.50% for SC/PH)marks in aggregate.
2.	Dual degree B.Sc. (Hons.) Mathematics – M.Sc. Mathematics	5 Years	60	10+2 or equivalent with Mathematics as one of the main subject from Central or Haryana State Education Board (or equivalent) scoring not less than 50% (47.50% for SC/PH) marks in aggregate.	
3. Department of Physics					
1.	M. Sc.	Physics	2 Years	60	B.Sc./B.Sc.(Hons) degree or equivalent with Physics as regular subject at graduation level scoring not less than 50% (47.50% for SC/PH)marks in aggregate.
2.	Dual degree B.Sc. (Hons.) Physics - M. Sc. Physics	5 Years	60	10+2 or equivalent with Physics, Chemistry and Mathematics from Central or Haryana State Education Board (or equivalent) scoring not less than 50% (47.50% for SC/PH) marks in aggregate.	

***Not under the preview of AICTE**

Note:

1. Equivalency is to be decided by the Chairperson of the Concerned Department along with Departmental Admission Committee.
2. There is a provision of exit with Graduate degree after 3 Years from the 5 years dual degree programmes of M.Sc. M.B.A. and English.
3. For B.A. (Hons.) English – M. A. English and M.B.A. 5 Year dual degree programme the % of marks obtained by the candidate in XII standard/ 10+2 level/ equivalent examination would be calculated based best four subject marks irrespective of board / institution.

Programme running in Affiliated Institutes:

Sr. No.	Name of the Programme	Duration of the course	Eligibility conditions
1.	MCA Programme	3 Years	Bachelor's degree of minimum 3 years duration of a recognized University with 45 % (42.75% for SC/ST candidates of Haryana only) marks in aggregate and Mathematics as one of the subjects at 10+2 level or at graduation. However, a candidate who does not have Mathematics background as per above, could also be considered for admission to the programme on the recommendations of the Personal Interview panel, if it is adjudged that the candidate would be able to cover his deficiency through a Mathematics audit course in the first semester.
	MCA (Lateral Entry)	2 years	Bachelor's degree of minimum three years duration in BCA, B.Sc. (Information Technology/Computer Science) or B.Voc. (Software Development/Information Technology) or any other examination recognized by DCRUST University, Murthal as equivalent thereto having 50% marks (47.50% for SC/ST candidates of Haryana only) in aggregate with Mathematics as a course at 10+2 level or at Graduation level) Or Master degree in Computer /Information Technology/Software/Mathematics/Physics/Statistics or

Approved by Vice – Chancellor on 20.05.2020

			equivalent from a recognized University. Or Post Graduate Diploma in Computer Science/Application or equivalent from a recognized University.
3.	Bachelor of Interior Design	4 Years	Passed 10+2 examination or equivalent from a recognized Board/University with English as one of the subject. Admission based on merit of NATA/JEE-2019/Entrance test/qualifying examination (in order of preference).
4.	Bachelor of Hotel Management & BBA	4 Years 3 Years	Passed Senior Secondary Examination i.e. 10+2 from a recognized Board of Education or an equivalent examination.
5.	B.Ed	2 Years	Candidates with at least fifty percent marks either in the Bachelor's Degree and/or in the Master's Degree in Science/Social Sciences/Humanities, Bachelor's in Engineering or Technology with specialization in Science and Mathematics with 55% marks or any other qualification equivalent thereto, are eligible for admission to the programme (As per NCTE Regulations 2014 mentioned in the Gazette of India (Part-II-Sec.4)) (b)The reservation and relaxation for SC/ST/OBC/PWD and other categories shall be as per the rules of the Central Government/State Government, which is applicable.
6.	M.Ed	2 years	Candidates seeking admission to the M.Ed programme should have obtained at least 50%marks or an equivalent grade in the following programme i) B.Ed II) B.A., B.EAd, B.Sc,B.ED III)B.El.Ed IV) D.E.I.Ed with an undergraduate degree (with 50% marks in each) (As per NCTE Regulations 2014 mentioned in the Gazette of India (Part-III-Sec.4)) (b) Reservation and relaxation for SC/ST/OBC/PWD and other categories shall be as per the rules of the Central Government/State Government, which is applicable

Note:- Affiliated institutes may enhance the eligibility conditions and are authorized to complete the process of admission for the Academic Session 2020-21.

Institutes are required to follow the instructions /guidelines/procedure of respective agency wherever required.

The last date of admissions for all AICTE approved courses: 31st August, 2020.

For other courses:

University Teaching Department : 31st August, 2020

Affiliated Institute : 31st August, 2020

CHAPTER – 2

RESERVATION OF SEAT FOR RESIDENT OF MURTHAL-2020 - 21

S. No.	Name Of Programme	Name Of Course	Category	No. of Seats
1.	M.Tech.	Electronics And Communication Engg.	Female	01
2.	M.Tech.	Mechanical Engg.	Male	01
3.	MBA 2 (Years)	One Seat for male and one Seat for female candidate		

(WITH IN HOGC CATEGORY)

Eligibility Criteria for Resident of Murthal (ROM)

The candidate who fulfills any one or more conditions of the following criteria be considered for Bonafide resident of the Village Murthal for giving such benefit:-

- (a) **The candidates, who have passed the examination qualifying there for selection in any Institution from a school/college in the purview of the village Panchayat of that Village.**
- (b) Children/wards (if parents not living) dependents of persons who after retirement have permanently settled in that village and are residing for more than three years from the date of issue of such certificate.
- (c) Children/wards (if parents not living) dependents of pensioner of Haryana Government irrespective of the fact that the original home of the retiree is in that village and after retirement he has settled in that village or outside.
- (d) Children/ward (if parents are not living) dependents of persons, who have permanent home in that village and include persons who have been residing in that village for a period of not less than 15 years or who have permanent home in that village but on account of their occupation they are living outside that village.
- (e) The wives of such persons who are bonafide residents of that village irrespective of the fact that they had belonged to any place before marriage.
- (f) Persons who were born in that village and produce a certificate to that effect; provided that the parents/guardians (if parents are not living) of persons belonging to any one of the above mentioned categories are Citizen of India.
- (g) Children/wards (if parents are not living) dependents of persons, who have immovable property in that village but may be living in that village or other place than that village.

RESERVATION OF SEAT FOR SINGLE GIRL CHILD IN UGC PROGRAMMES

University has created one supernumerary seat for single girl child in the following UGC programmes;

1. M.Sc. Physics
2. M.Sc. Chemistry
3. M.Sc. Mathematics
4. M.Sc. Biotechnology
5. M.Sc Environmental studies
6. Dual degree B.Sc. (Hons.) Physics- M.Sc. Physics
7. Dual degree B.Sc. (Hons.) Chemistry- M.Sc. Chemistry
8. Dual degree B.Sc. (Hons.) Biotechnology- M.Sc. Biotechnology
9. Dual degree B.Sc. (Hons.) Mathematics- M.Sc. Mathematics
10. Dual degree B.A. (Hons.) English- M.A. English
11. MA English

Approved by Vice – Chancellor on 20.05.2020

THE FOLLOWING GUIDELINES WILL BE FOLLOWED

- a) One supernumerary seat has been created by the University in UGC courses/programmes(Except AICTE programmes) being run in the University teaching departments for a single child of her parents or one amongst the only two girl children with no male child. This superannuity seat will be available to only one of the two girl children of her parents.
- b) The admission on this supernumerary seat in a UGC course will be made on the basis of the entrance test conducted by the University for course as per schedule mentioned in the University PG prospectus 2020-21.
- c) The eligible single girl child claiming for the supernumerary seat in a UGC course is required to submit an affidavit on stamp paper worth Rs 20 duly attested by 1st class magisterate to be obtained from the parents of the girl children declaring therein that the benefit of this scheme is being claimed for only one girl child out of the two girl children and the parent shall not claim the same for the 2nd girl child. The specimen of the affidavit is attached at annexure XV. (Refer University Brochure)
- d) If the supernumerary seat in a course remains vacant due to non availability of suitable candidate, it will not be offered to candidate of any other category.
- e) The supernumerary seat should be offered to only single girl child of Haryana state provided she is otherwise eligible from all angles.
- f) If there are more than one claimant to the seat under this category, the admissions will be made as per the merit list of entrance test.

SEATS FOR CHILDREN OF THE PERMANENT EMPLOYEE OF DCRUST, MURTHAL

University has created one supernumerary seat in the following programmes over and above the sanctioned intake for the children (Son/ daughter) of the permanent University Employees:

M.Sc. (Biotechnology)

M.Sc. (Chemistry)

M.Sc. (Environmental Sciences)

M.Sc. (Mathematics)

M.Sc. (Physics)

Dual Degree B.Sc. (Hons.) Biotechnology- M.Sc. Biotechnology

Dual Degree B.Sc. (Hons.) Chemistry-M.Sc. Chemistry

Dual Degree B.Sc. (Hons.) Mathematics-M.Sc. Mathematics

Dual Degree B.Sc. (Hons.) Physics-M.Sc. Physics

Dual degree B.A. (Hons.) English- M.A. English

MA English

- (a) The eligible children (son / daughter) of the University Permanent Employee claiming for this supernumerary seat is required to submit a certificate by his / her parents holding a permanent position in the University issued by the Establishment Branch in case of Non-Teaching employees and Faculty Branch in case of Teaching Employees.
- (b) The admission to the supernumerary seats will be made on the basis of the merit prepared keeping in view the following order of priority:
 - (1) The entrance test conducted by the university.
 - (2) Qualifying Examinations.
 - (3) Age of the candidate (older shall be given the preference).

SPORTS WEIGHTAGE IN ADMISSIONS (subject to the approval of Academic Council)

Supernumerary seats have been created in all courses of University (Except courses run under PCI, AICTE and NCTE), whose admissions are made at University level. The details of number of seats for outstanding sports persons in different courses are as under:

- (i) 01 (where number of sanctioned seats is less than or equal to 30)
- (ii) 02 (where number of sanctioned seats is more than 30)

The Outstanding Sports Person means a person who has represented in the tournaments and full filling other conditions as prescribed in ANNEXURE-I (A) to ANNEXURE-I (E).

In case of tie in the sports achievement level/Merit as per Annexure-I(D) then the merit of Entrance Test considered for respective course will be considered for deciding the merit. In case of admissions made on merit of qualifying exam, than merit of qualifying exam will be considered. If still there is tie, then the age will be considered for the merit (Higher in the age will be considered for the merit).

Registered applicants must report to Director of sports with all prescribed documents on the notified dates. The sports committee will conduct all tests and will prepare a merit list for various programmes.

Annexure -I (A)

Undertaking for Achievements in Sports

I, _____ (name), son/daughter of Shri _____, born on _____ of _____ (address) hereby solemnly declare and affirm as under:-

1. That as Sportsman/Sportswoman in _____ (name of discipline), I have represented the team(s) in the competition(s) on date(s) and also of named position(s) as indicated in the table below :-

Sr. No.	Sports Disciplines	Team represented	Name of the competition & year	Venue/ Date	Position secured
1.					
2.					
3.					
4.					
5.					

2. That the certificate(s) mentioned below are produced by me in support of the above are authentic
- (i)
 - (ii)
 - (iii)

3. I understand that in case the information/documents supplied by me are found to be false, incorrect or forged, my admission will stand cancelled and I shall be liable for criminal action.

(Signature of the candidate)

NOTE: IN CASE OF MINOR, THE UNDERTAKING SHALL BE FILLED IN BY HIS/HER PARENTS GUARDIANS WITH SUITABLE AMENDMENTS.

ANNEXURE-I (B)

Document required for admission under sports category:

The following documents are required for admission under sports category:

1. Self-attested photocopies of sports certificates with photograph duly attested by the respective issuing authority or Head of the Institution of last attended along with their originals.
2. Undertaking of sports achievements (Annexure I-(A)) and attendance in sports grounds (Annexure I –(E)) both in original.
3. Roster form/list of players/ competitors of the concerned tournament duly attested by the respective issuing authority or Head of Institution last attended.

LIST OF SPORTS DISCIPLINES ELIGIBLE FOR ADMISSION UNDER CATEGORY OF SPORTS

Sports disciplines to be considered for admission under reserved category of sports will be based on the following conditions:-

1. The sports disciplines should also be part of proceeding Olympic / Asian Games / Commonwealth Games immediately preceding the year of admission.
2. Apart from the above the following four sports disciplines are included based on popularity / indignity.
 - a) Chess b) Cricket

ANNEXURE-I (C)

CRITERIA FOR GENERAL FITNESS TEST, SKILL & GAME PERFORMANCE TEST FOR ADMISSION UNDER CATEGORY OF SPORTS

General Fitness Test

It is essential for the candidates to qualify any one of the following General Fitness Test items for considerations of admission in Archery, Chess, Shooting and any two of the following fitness test items for consideration of admission in other games / sports as per the following standards.

1.	Strength	Standing broad jump 1.65 mts. For Men 1.15 mts. For Women	Two attempts allowed
2.	Endurance	1000 mts. Run/Walk 5.00 minutes for Men 6.00 minutes for Women	One attempt allowed
3.	Speed	50 mts. Dash 8.00 seconds for Men 9.00 seconds for Women	One attempt allowed

Note: It is essential to qualify the General Fitness Test for appearing in the Skill & Game Performance test.

1. No Physical Fitness Test for specially challenged candidates/ players.
2. All the candidates are to appear in the General Fitness Test in proper sports kit.
3. Any injury / casually caused to the applicant during sports trials shall be the sole responsibility of the applicant.

Skill and Game Performance Test

It is essential for the candidate to qualify the Skill and Game Performance Test for consideration of admission.

1.	Fundamental Skills in the concerned game
2.	Game Performance in Trials.

Merit / Participation Sports Certificates

Maximum 100 Marks for Merit / Participation Sports Certificates

Maximum 100 Marks for Merit / Participation Sports Certificate as per the criteria in Annexure-I(D). Only the Highest Merit / Participation Sports Certificate will be considered for Marking.

ANNEXURE-I (D)

CRITERIA FOR MARKING OF MERIT / PARTICIPATION SPORTS CERTIFICATE OUT OF MAXIMUM 100 MARKS

Note: – Tournaments/Championships other than Inter University/Inter College/Inter School will be considered for Gradation provided they are recognized by International Olympic Committee/ Indian Olympic Association/respective National Federation / State Association / BCCI / SGFI / MYAS*

Sr. No.	Level of Game/ Sport Competition(s)	I	II	III	Participation
	CATEGORY 'A'				
1.	Sports performance as a player in Olympic Games / Paralympic Games (under senior / open category).	100	97	95	91
2.	Sports performance as a player in World Cups/ Championship (Four Year Cycle) under senior / open category	97	95	93	89
3.	Sports performance as a player in Asian Games (under senior / open category)	95	93	91	87
4.	Sports performance as a player in Asia Cup / Asian Championship (Four Year Cycle) under senior / open category	93	91	89	85
5.	Sports performance as a player in Common wealth Games (under senior / open category).	91	89	87	83
6.	Sports performance as a player in Common wealth Championships (Four Year Cycle) (under senior / open category).	89	87	85	81
7.	Sports performance as a player in World cups / World Championships (Two Years Cycle) under senior / open category	87	85	83	79
8.	Sports performance as a player in Asia Cup / Asian Championship (Two Years Cycle) under senior / open category.	85	83	81	77
9.	Sports performance in Common wealth Championships (Two Years Cycle) under senior / open category.	83	81	79	75
10.	Sports performance as a player in World University games / World University championships (Two year Cycle)	81	79	77	73
11.	Sports performance as a player in World Cup / Championship (one year cycle) under senior / open category.	79	77	75	71
12.	Sports performance as a player in Asia Cup / Asian Championship (One Year Cycle) under senior / open category / Sports performance as a player in Common Wealth Championships (One Year Cycle) under senior / open category / Sports performance as a player in South Asian Games (under senior / open category), Asian University Games and Championships.	77	75	73	69
	Note: Marks for World Cup/ Championships, Asian Cup/ Championships / Common wealth Championships under Junior/ Youth/ Cadet categories will be awarded $\frac{3}{4}$ of marks awarded to the respective senior categories of same tournament / championship / category e.g. for Junior World Cup / Championship for 1st $87 \times \frac{3}{4} = 65.25$, for IIrd $85 \times \frac{3}{4} = 63.75$, for IIIrd $83 \times \frac{3}{4} = 62.25$ and so on.				

	Level of Game/ Sport Competition(s)	1 st	2 nd	3 rd	Participation
	CATEGORY 'B'				
1.	Sports performance as a player in National Games (under senior/ open category)	50	48	46	42
2.	Sports performance as a player in National University Games / Inter Zonal Universities Games for Universities (under senior / open category) / Sports performance as a player in senior National / Inter State Championships for seniors / Federation Cup for seniors / khelo India school games / Khelo India University Games (under 21) // Sports performance as a player in Khelo India School Games / SGFI National School Games. Sports performance as a player in Junior National / Cadet Nationals / Youth Nationals	48	46	44	40
3.	Sports performance as a player in Zonal University Championships / National Zonal Championships (under senior and open category)	46	44	42	38
	CATEGORY 'C'				
1.	Sports performance as a player in A division Inter College tournaments other than professional Universities/ Deemed Universities / Agricultural Universities / Law Universities / Technical and Management Universities /Senior State Championship / Inter District Championships / State School Games / Junior / Cadet / Youth State Championship. Position as a player in Inter University Tournament / Competitions for professional Universities / Deemed Universities / Agricultural Universities / Law Universities / Technical and Management Universities, School Nationals other than SGFI	36	34	32	28
	CATEGORY 'D'				
1.	Sports performance as a player in inter college of professional universities / residential universities / DCRUST Campus Championships / B and C division Inter college.	26	24	22	Not Eligible
	Note: The certificates not mentioning the level of tournament i.e. Senior /Junior / Youth / Schools will be considered as per the following age criteria: 1. Under 17..... Junior 2. Under 19..... Youth 3. Above 19.....Senior * BCCI: Board of Control for Cricket in India * SGFI: School Games Federation of India * MYAS: Ministry of Youth Affairs & Sports				

1. Sports Certificate of Invitational / Memorial /Open/ Prize Money League/ Ranking competitions will not be considered for admission under category of sports.
2. Merit/Participation Sports Certificates of preceding three years will be considered from admission session/year in this University.
3. Applicants are required to upload Self-Attested copies of at least two Merit/Participation Sports Certificates.
4. Only the Highest Merit / Participation Sports Certificates will be considered for Marking.

Annexure- I (E)

Undertaking for Attendance in Sports Ground

I, _____ son/daughter of _____ resident
of _____ do hereby declare as
under:-

- (i) That I am seeking admission in Deenbandhu Chhotu Ram University of Science & Technology(DCRUST), Murthal under the Sports Category.
- (ii) That in case I am admitted to the above said institute, I shall regularly attend the grounds for practice and I shall also participate in DCRUST Sports Activities including DCRUST Campus Annual Athletic Meet/Inter-College/Inter-University/ National/International Sports Tournament on behalf of the Deenbandhu Chhotu Ram University of Science & Technology if selected
- (iii) That in case I fail to regularly attends the Grounds for practice or fails to participate in the tournaments as and when required; my admission to the allotted institute shall be liable to be cancelled.
- (iv) That in case my admission to the allotted course is cancelled due to my failure to regularly attend the grounds for practice or to participate in the DCRUST Sports Activities including DCRUST Campus Annual Athletic Meet/Inter-College/Inter-University/ National/International Sports Tournament as may be required by the Sports Department, Deenbandhu Chhotu Ram University of Science & Technology, Murthal, Sonipat, Haryana. I shall have no claim on any account whatsoever against the institute or against the University.

(Signature of the candidate)

Countersigned by Parent(s)

ECONOMICALLY WEAKER SECTION QUOTA

The persons belonging to EWS who are not covered under the existing scheme of reservation for SC/BC-A and BC-B shall get 10% reservation in admission to govt. aided /govt. educational institutes in the state of Haryana (information received from Director Technical Education, Sector-4 Panchkula vide Memo No. 220 dated 8.5.2019 Govt. notification No.22/12/2019-1GS-III dated 13th March,2019)

Criteria of income and assests:-

1. Persons who are not covered under the existing scheme of reservation for SC/BC-A and BC-B and whose family has gross annual income below Rs. 600000/- (Rs. Six Lakhs Only) are to be identified as EWS for benefit for reservation. Income shall also include from all sources i.e. salary, agriculture, business, profession etc for the financial year prior to be year of application.
2. All persons whose family owns or possesses any of the following assests shall be excluded from being identified as EWS irrespective of the family income.
 - Five acres of agricultural land and above
 - Residentail flats of 1000 sq.ft. and above
 - Residentail plot of 100 sq. yards and above on notified munciplities
 - Residentail plot of 200 sq. yards and above in areas other than the notified munciplities
 - Total immovable assests owned are valued at Rs. One Crore or more
3. The property held by a “family” in different locations or different places/cities would be clubbed while applying the land or property holding test to determine EWS status.
4. The term ‘family’ for this purpose will include the persons who applies for benefits of reservation, his/her parents, spouse as well children and sublinks below the age of 18 years
5. The competent authority of 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
6. Prescribed format for EWS income and assests certificate is provided in at Annexure XVII (University Brochure).

TUITION FEE WAIVER SCHEME (TFW)

- a) Scheme shall be applicable to all approved Technical Institutions offering Diploma, Post Diploma, Under Graduate Programme(s), MCA, PGDCA, MBA Programme(s) and Lateral Entry provisions of these Programme(s).
- b) The scheme shall be mandatory for all Institutions approved by the Council.
- c) **Requirements and Eligibility**
 - Sons and daughters of parents whose annual income from all sources does not exceed Rs. 8.00 Lakh.
 - The Waiver is limited to the tuition fee as approved by the State Level Fee Committee for Self-Financing Institutions and by the Government for the Government/ Government Aided Institutions. All other fee except tuition fee shall have to be paid by the beneficiary.
- d) **Admission Procedure**
 - Under this Scheme, up to a maximum of 5% of “Approved Intake” per Course shall be available for this admission. These seats shall be supernumerary in nature. These supernumerary seats shall be available only to such Course(s) in an Institution, where a minimum of 30% of “Approved Intake” are filled up.

- The Competent Authority to effect this admission is the State Government/ UT or its designated authority.
- In the event of non-availability of students in this category the same shall not be given to any other category of Applicants.
- The State Admission authority shall invite applications under this category; make a separate merit list for this category and effect admission on the basis of the merit list so generated.
- The Institutions shall publish in their Brochure and Web site the details of this scheme.
- Competent Authority for admission shall submit a separate list of the students admitted under this category to the Institution to which they are admitted for compliance.
- A letter in this respect shall be issued by the Competent Authority for admission to each beneficiary student admitted under this scheme and he/ she shall not be allowed to change Institution/ Course under any circumstances.
- The Institutions shall also display information regarding admitted candidates in their Web site for information to the students and other stakeholders.

Kashmiri Migrant as well as Kashmiri Pandits/ Kashmiri Hindu Families (Non-Migrants)

As per Notification F. No. 3-4/2017-NER dated 15.10.2019 of Ministry of Human Resource Development, Department, Department of Higher Education, New Delhi the following concessions to the wards of Kashmiri Migrants as well as Kashmiri Pandits/ Kashmiri Hindu Families (Non-Migrants) who are living in Kashmir Valley for admission in Higher Education Institution are applicable in admissions:

- (i) Relaxation in cut-off percentage upto 10% subject to minimum eligibility requirement.
- (ii) Increase in intake capacity upto 5% course-wise.
- (iii) Reservation of at least one seat in merit quota in technical/ Professional institutions.
- (iv) Waiving off domicile requirements for Kashmiri Migrants only. Kashmiri Pandits/ Kashmiri Hindu Families (Non-Migrants) living in the Kashmiri Valley need domicile certificate.

CHAPTER-3

ONLINE FILLING OF APPLICATION FORM

- Please keep your scanned photograph, saved in a file in *jpeg* format, ready to upload on the application form. The file size should be less than 40 kB (size H: 150xW:130).
- Please keep your scanned signature, saved in a file in *jpeg* format, ready to upload on the application form. The file size should be less than 20 kB (size H: 60xW:75).

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

1. Please read the Admission Prospectus carefully before you start filling the Online Application Form. Candidates must see their eligibility for admission in any course / programme.
2. Blurred / Distorted / Illegible Images of Photograph and Signature shall lead to cancellation of your Application Form.
3. Keep details of your Aadhar Number, qualification from matriculation onwards ready.
4. All the details required in the Online Application form should be filled in.
5. Last date for submitting the duly completed application along with the required application fee is **09.07.2020 up to 11.59 P.M. (night time)**.
6. Application fee must be paid online which is activated after the application form is completed. Application fee to be paid is as under. Fee payment is made ONLY through online mode via State Bank Collect. No OTHER PAYMENT MODE is acceptable.

Category	Application Fee
SC/BC candidates of Haryana only	Rupees 250.00 (Two Hundred Fifty Rupees only)
General and all others	Rupees 1000.00 (One Thousand Rupees only)

7. Follow the instruction provided by State Bank Collect for online payment.
8. Status of Fee payment will be uploaded 24 Hrs after the online fee payment is verified by the bank. You can Login and Check your Fee payment status.
9. DO NOT forget to write your Correct Application No. at the time of Online Fee payment. Wrong / Incorrect Application No. will lead to cancellation of your Application Form.
10. No changes can be made in your application after fee payment.
11. Fee once paid is not refundable / transferable.
12. After submitting the Online Application, your application number will be generated.
13. Note down your application number and password for future reference. These will be required for entrance test (if applicable) and for counseling.
14. You can login in your account to download admit card for examination. **Admit Card can be downloaded 3 days after last date of submission of application forms.**
15. For any further query you can Contact Us.

I have read the instructions and accept the terms and conditions.

APPLY ONLINE

CHAPTER – 4

ENTRANCE TEST

1. Entrance Tests for making admissions to various PG / Dual Degree Programmes of the university will be held at the University Campus as per schedule of events.
2. Candidates with valid GATE score need not to appear in the entrance test for admission to M. Tech.
3. Details of Counseling and Admissions shall be made available on university website after the last date of submission of application forms.
4. All Eligible candidates including those appearing in final year of qualifying degree in academic session 2019-20 can appear in the entrance test (as applicable). Mere taking of the entrance test shall not entitle a candidate for admission. However, the eligibility of candidates shall be determined at the time of counseling and admission.
5. Entrance Test for admission to all academic programs except Master in Hospital Administration (MHA) shall have 120 Multiple Choice Questions with only one correct choice and time allotted to answer the questions shall be 120 minutes. There shall be no negative marking; each question will have equal weightage.
6. (a) In case of M.Tech, M.Sc (2-years), M.Plan, M.Arch, M.A (2-years), MBA (2-years), Dual Degree B.Sc(Hons)-M.Sc (Mathematics), Dual Degree BBA-MBA and Dual Degree B.A(Hons)-M.A (English) there shall be 100 questions on particular subject (subject specific) the syllabus for which is mentioned in point 9 below, 10 questions shall be on General English and 10 questions on General Aptitude.
(b) For Dual Degree B.Sc(Hons)-M.Sc (Physics), Dual Degree B.Sc(Hons)-M.Sc (Chemistry), Dual Degree B.Sc(Hons)-M.Sc (Biotechnology) the distribution of questions in entrance test is Chemistry – 33 questions, Physics – 33 questions, Mathematics/Biology – 34 questions, General English – 10 questions and General Aptitude – 10 questions and syllabus is mentioned in point 9 below.
7. If a candidate applies for admission to more than one programme/course, he/she has to apply separately for each program and appear in the entrance test for each applicable cluster.
8. In case of excess application entrance test may be got conducted in any affiliated college(s).
9. Information about the syllabus for entrance test is given as under:

Cluster No.	Name of the Program	Name of Course	Syllabus for Entrance Test
1.	M. Tech.	Electric Power System	Syllabus for GATE 2020 in Electrical Engg.
	M. Tech.	Electrical Engineering (I & C)	
2.	M. Tech.	Electronics & Communication Engg.	Syllabus for GATE 2020 in Electronics&Comm. Engg.
	M. Tech.	Electronics & Communication Engg.(VLSI Design)	
3.	M. Tech.	Bio Medical Engineering	Given in Chapter-5
4.	M. Tech.	Highway Engineering	Syllabus for GATE 2020 in Civil Engg.
	M. Tech.	Construction and Real Estate Management (for those holding Civil Engg. degree)	
5.	M. Arch.	Sustainable Architecture	Syllabus for GATE 2020 in Architecture and Planning
	M. Tech.	*Construction and Real Estate Management (for those holding Architecture degree)	
6.	M. Tech.	Mechanical Engg.	Syllabus for GATE 2020 in Mechanical Engg.
7.	M. Tech.	Computer Science & Engineering	Syllabus for GATE 2020 in Comp. Sc. & Information Tech.
8.	M. Tech.	Chemical Engg.	Syllabus for GATE 2020 in Chemical Engg.
9.	M. Tech.	Bio technology	Syllabus for GATE 2020 in Biotechnology
10.	M. Tech.	Energy & Environmental Management	Given in Chapter-5
11.	M. Plan	Urban and Regional Planning	Given in Chapter-5
12.	M.Sc.	Biotechnology	Given in Chapter-5

13.	M. Sc.	Chemistry	Given in Chapter-5
14.	M. Sc.	Mathematics	Given in Chapter-5
15.	M. Sc.	Physics	Given in Chapter-5
16.	M.Sc	Environmental Science	Given in Chapter-5
17.	M. A.	English	Given in Chapter-5
18.	MBA	Masters of Business Administration	Given in Chapter-5
19.	MHA	Master in Hospital Administration	Admission on academic merit
20.	Dual Degree BBA-MBA		Given in Chapter-5
21.	Dual degree B.Sc. (Hons.) Mathematics-M.Sc. Mathematics		Given in Chapter -5
22.	Dual degree B.Sc. (Hons.) Physics - M. Sc. Physics		Syllabus for Physics, Chemistry, Mathematics portion shall be same as of JEE (Mains) - 2020 and syllabus of biology portion shall be same as of NEET - 2020.
	Dual degree B.Sc. (Hons.) Chemistry-M.Sc. Chemistry with Mathematics at 10+2 level		
23.	Dual degree B.sc. (Hon.) Biotechnology-M.Sc. Biotechnology.		
	Dual degree B.sc. (Hon.) Chemistry-M.Sc. Chemistry with Biology at 10+2 level		
24.	B.A (Hons)-M.A (English)		Given in Chapter-5

***Not approved by AICTE**

Note: 1. Candidates have to fill single application form for seeking admission in the Programs under one Cluster.

2. GATE 2020 syllabus can be downloaded from www.gate.iitd.ac.in/syllabi.php and of JEE (Mains) syllabus from www.jeemain.nic.in and of NEET from www.ntaneet.nic.in

Important Instructions to the candidates for appearing in Entrance Test

1. The Candidate must bring his / her Admit Card for appearing in the test. Admit Card can be downloaded 3 days after last date of submission of application forms. **The date, time and venue of entrance examination printed on Admit Card shall be final.**
2. No candidate will be allowed to take the examination 15 minutes after the scheduled start of examination.
3. The Candidates should NOT tamper with the OMR Sheet in any form which may lead to disqualification.
4. 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.
5. 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.
6. The candidates shall bring any of his identity proof with photograph such as Driving License, Pan Card, Passport, Voter Card etc. in addition to Admit Card at the time of entrance test.

SCHOLARSHIPS

Following scholarships are available in the university for full time PG students.

1. GATE Scholarship for M. Tech. students as released by the AICTE (Except M. Tech. in Construction & Real Estate Management).
2. Promotion of Science Education (POSE) Scholarship scheme for M.Sc. students paid by the Director, Department of Science & Technology, Haryana, Panchkula.
3. Post Matriculation Scholarship to SC/ST students for UG/PG courses from the Department of Technical Education, Haryana through Govt. Polytechnic, Sonapat. (The eligible SC students will submit the post metric scholarship forms every year on prescribed format. The University fee will be compensated from his / her scholarship amount. In case the student does not apply for the scholarship in prescribe time limit or is found ineligible or he / she does not submit complete documents for award of scholarship, he /she will be liable to pay part / full fee along with late fee as per rules.
4. Post Matriculation Scholarship to BC students for UG/PG courses from the District Welfare Department, Sonapat.
5. Merit-cum-Means Scholarship for students belonging to the Minority Communities for M.Tech. Students.
6. Alumini Yuva Rattan Scholarship to UG/PG students by the University.
7. National Scholarship for person with disability by Ministry of Social Justice and Empowerment, Govt. of India.
8. All SC category students are exempted from **Room rent** as per implementation of UGC Guidelines under item no.25_T-4 (i) of Twenty Fifth minutes of meeting of the Executive Council held on 02nd March 2016 of the University.

CHAPTER – 5

SYLLABI/COURSE CONTENT FOR ENTRANCE TEST

GATE 2020 syllabus can be downloaded from www.gate.iitm.ac.in/syllabus and of JEE (Mains) syllabus from www.jeemain.nic.in and of NEET from www.ntaneet.nic.in

The syllabus for entrance for **other PG courses** is given here under:

M.Tech (Bio Medical Engineering)

1. **Human Anatomy and Physiology:** Structure & functions of a cell, tissue structure and functions, Organ systems: Cardiovascular, Respiratory, Nervous, Muscle, skeletal, Integumentary, Digestive. Sense organs: Eye, Ear. Homeostasis, Anatomical position and terminology, Body regions and Body cavities.
2. **Fundamentals of Electronics & Electrical Engineering:** A.C. & D.C. circuits, Transient Response, Network Theorems, Two port network parameters. Electronic Devices and Circuits: Semiconductor physics, Diodes and their Circuits, Transistors and biasing circuits. Analog Electronics: linear and nonlinear applications of Op-amps, A/D and D/A converters, timing circuits. Basics of digital electronics: number system, K-Maps, Flip-flops, logic families, type of memories, basics of 8085 and 8051. Basics of analog and digital communication. Control Systems: Transfer Function, Signal Flow Graphs, Root Locus Technique, Time & Frequency Domain Analysis.
3. **Biomedical Signal and Image processing:** Classification of signals and systems, LTI systems, Fourier representations, Laplace transform, Z- transform, filters. Digital Image fundamentals: image enhancement, restoration, compression, segmentation.
4. **Biomedical Sensors and Bioinstrumentation:** bio-potentials and electrodes, analytical and optical sensors, static and dynamic characteristics of an instrument, basics of EEG, ECG and EMG machine. Fiber optics and lasers in medicine. Basic concepts of X-ray, CT-Scan, MRI, Ultrasound and PET imaging techniques. Basics of pacemakers, ventilators, dialysis, bedside monitors and physiotherapy equipment.
5. **Biomechanics & Rehabilitation Engineering:** Basic Dynamics to Human Motion: linear and angular kinematics; Kinetic equations of motion; Work & energy methods; Momentum methods. Mechanics of hard and soft tissues. Basics of bio-fluid mechanics, Upper Limb prosthesis, Lower Limb prosthesis, Spinal Orthosis, Neural Prosthesis, Introduction to Rehabilitation, Sensory Rehabilitation- Tactual, Auditory, Visual, Speech.
6. **Tissue engineering and Biomaterials:** Biomaterials and their Classification, Properties of different biomaterials, biomaterials-tissue interactions. Basic Immunology, Wound Healing Process, Scaffolds and their Properties. Nanoparticle Synthesis and Properties, Nanosensors, Nanoparticles for Drug Delivery, Artificial organs.

M. Tech. (Energy and Environmental Management)

Fundamentals of Physics, Fundamentals of Chemistry, Fundamentals of Biology, Fundamentals of Math, Environmental engineering, Basics of Conventional and Non conventional sources of energy, sources of energy, classification of energy sources, Basic science of energy conversion. Environmental engineering, Thermodynamics of Energy Conservation, Basic principles, Origin of the earth. Earth's temperature and atmosphere, Sun as a source of energy, nature of its radiation, Fossil fuels, Solar cells, Solar radiation, Flat plate collectors, Fission and fusion, laws on criterion, Power generation, Distribution & Transmission, Sources and classification of hazardous wastes, environmental policy, Energy and environmental correlation, Power plants.

M. Plan (Urban and Regional Planning)

History of Human Settlement, Town Planning practice and process in India, Urban structure and form, neighbourhood, bye laws, planning norms/standards, urban and rural governance in India, Planned cities of India.

Housing, housing scenario in the context of the nation and the state, laws and legislation related to housing, factors influencing land value, zoning, housing finance, planning norms and standards in

housing, types of housing, slums, national housing policy, role of housing boards, HUDCO, village

housing, rural development patterns and issues, rural social structuring, rural morphology, rural economy, public spaces in the villages, community participation in rural projects.

Approved by Vice – Chancellor on 20.05.2020

Urbanization and transport problem, traffic and environment, traffic and transportation planning, types of traffic system for urban and rural areas, public and private transport systems, urban transport planning process and policies, transport planning in small and medium cities, parking characteristics, traffic management and regulations.

Ecology and its importance, its relationship with environment, structure and function of ecological system, environmental planning and its importance, types of environmental problems and pollution. Sustainable environmental measures, urbanization and its impact on environment, growing importance of ecology in an urbanized and technological world.

Basics of economics, basic of market, law of demand and supply, factor of production, elasticity of demand, price determination.

M.A. (English)

English Language & Grammar: Tense, Subject verb Concord, Voice, Narration, Idioms and phrases, Clauses, Preposition, Verb, Adjective, Articles, Gerund, Infinitives, Antonym, Synonym, One Word Substitute.

English Literature: Literature offered at undergraduate level (both Pass course and Honours course) in the universities of Haryana and neighbouring states. Literature & Culture related contemporary Events/News; National, International Literary Awards.

Dual degree B.A. (Hons.) English - M. A. English

Section Number	Section Description	Number of Questions
Section 1	Language Comprehension	25 (Twenty five)
Section 2	Literary Aptitude (Knowledge of English language, culture and literature)	25 (Twenty five)
Section 3	Logical and Critical Reasoning	25 (Twenty five)
Section 4	General Awareness	25 (Twenty five)

BBA- MBA – 5 Year Dual Degree Programme

The entrance test shall consist of four (04) sections:

1. Language Comprehension
2. Quantitative Aptitude
3. Logical and Critical Reasoning
4. General and Business Awareness

There will be 100 questions (25 questions from each of these four sections) of one mark each.

MBA (2 Years programme)

The entrance test shall consist of five (04) sections

Section 01: Language Comprehension

Reading Comprehension, Para Jumbled, Sentence correction, paragraph completion, Idioms and Phrases, Synonyms and Antonyms, English Usage Errors, English Grammar, One Word Substitution, Sentence Improvement

Section 02: Quantitative Techniques and Data Interpretation

Number System, Fraction and Decimals, Geometry, Ratios and Proportion, Percentages, In-equations, Quadratic and linear equations, Algebra, Profit and Loss, Averages, Partnership, Time-Speed-Distance, Work and time, Mensuration, Alligation & Mixtures, Pipes and Cisterns, Simple Interest and Compound Interest, Probability, Permutations & Combinations, Tabulation ,Pie chart ,Bar Chart, Line Graph(DI)

Approved by Vice – Chancellor on 20.05.2020

Section 03: Logical Reasoning

Analytical reasoning, Statements Assumptions, Non Verbal Tests (Visual reasoning), Analogy Test, Inferences, Statements and assumptions, Statements Arguments, Cause and effects, Statements and conclusion, Ranking Tests, Linear arrangements, Matrix arrangements, Blood relationship test, Matrix arrangements, Symbol based problems, Sequencing, coding and decoding problem, Number series, Direction and Distance test

Section 04: General Awareness

Current Affairs of National ,International, Economics etc, Personalities in News, Sports News, Trade Awareness (Corporate news), History, Culture, Geography, Economy, Politics, Indian Constitution, Sports, Literature, Science in everyday life

M.Sc. (Chemistry)

Physical Chemistry

Theory of Gases: Kinetic theory of gases. Van der Waals equation and applications, Maxwell-Boltzmann distribution law, critical phenomena.

Chemical Thermodynamics: Reversible and irreversible processes, First law and its application to ideal and nonideal gases, Thermochemistry, Second law, Entropy and free energy, Criteria for spontaneity. Third law and its application.

Chemical and Phase Equilibria: Law of mass action, K_p , K_c , K_x and K_n , Effect of temperature

on K , Ionic equilibria in solutions, pH and buffer solutions, Hydrolysis, Solubility product, Clausius-Clapeyron Equation, Phase equilibria–Phase rule and its application to one-component and two-component systems, Colligative properties.

Electrochemistry: Conductance and its applications, Transport number, Galvanic cells, EMF and Free energy, Concentration cells with and without transport. Conductometric and potentiometric titration.

Chemical Kinetics: Reactions of zero, 1st, 2nd and 3rd order, Arrhenius equation, Collision theory, Theory of absolute reaction rate, Enzyme kinetics.

Quantum Mechanics: Black-body radiation, Plank's radiation law, photoelectric effect, heat capacity of solids, Compton effect, Schrodinger Equation, wave function and its significance, postulates of quantum mechanics, quantum mechanical operators, commutation relations, Role of operators in quantum mechanics, Particle in one dimensional box.

Molecular Spectroscopy: Electromagnetic radiation, regions of spectrum, basic features of spectroscopy, statement of Born-oppenheimer approximation, Degrees of freedom. Elementary idea of Rotational (rigid rotor), Vibrational (harmonic & anharmonic oscillator) and Raman Spectra of simple diatomic molecules.

Inorganic Chemistry

Atomic Structure: Fundamental particles. Bohr's theory of hydrogen atom, Wave-particle duality, Uncertainty principles, Schrodinger's wave equation, Quantum numbers, shapes of orbitals, Hund's rule and Pauli's exclusion principle.

Periodic Properties: Periodic classification of elements and periodicity in properties, Atomic and ionic radii, ionization energy, electron affinity and electronegativity – definition, methods of determination or evaluation, trends in periodic table (in s & p block elements).

Chemical Bonding and Shapes of Compounds: Types of bonding, Valence Bond Theory and Molecular Orbital theory of diatomic molecules, VSEPR theory and shapes of molecules, hybridization, dipole moment.

Solid State: Ionic structures (NaCl, CsCl, ZnS (Zinc Blende), CaF₂, diamond, graphite etc.) radius ratio rule, lattice defects, lattice energy and Born-Haber cycle.

Hard and Soft Acids and Bases: Classification of acids and bases as hard and soft. Pearson's HSAB concept, acid-base strength and hardness and softness, Symbiosis, Liquid NH₃ as non-aqueous solvent.

Main Group Elements (s and p blocks): Chemistry with emphasis on group relationship and gradation in properties, structure of electron deficient compounds of main group elements and application of main group elements (s & p-block including noble gases).

Chemistry of d & f-block elements: Characteristics of 3d elements, oxide, hydroxide and salts of first row transition metals, General properties of lanthanides and actinides.

Coordination Chemistry: Nomenclature and stereochemistry, VB and Crystal Field theoretical approaches for structure & bonding, colour (electronic spectra) and magnetic properties of transition metal complexes. Thermodynamic and Kinetic Aspects of Metal Complexes

Organometallic Chemistry: Definition, nomenclature and classification of organometallic compounds. Preparation, properties, bonding and applications of alkyls and aryls of Li, Al, Hg, Sn and Ti, metal-ethylene complexes and homogeneous hydrogenation, mononuclear carbonyls and the nature of bonding in metal carbonyls. Organomagnesium compounds: the Grignard reagents - formation, structure and chemical reactions. Organozinc compounds: formation and chemical reactions.

Bioinorganic Chemistry: Essential and trace elements in biological processes, metallo-porphyrins with special reference to haemoglobin and myoglobin. Biological role of alkali and alkaline earth metal ions with special reference to Ca^{2+} . Nitrogen Fixation.

Qualitative and quantitative Analysis: Basic theory of volumetric titrations (acid-base, redox, complexometric, precipitation), Salt analysis (detection of acid and basic radicals)

Organic Chemistry

Basic Concepts in Organic Chemistry and Stereochemistry : Isomerism and nomenclature, electronic (resonance and inductive) effects. Optical isomerism in compounds containing one and two asymmetric centers, designation of absolute configuration, conformations of cyclohexanes.

Organic Reaction Mechanism and Synthetic Applications: Methods of preparation and reactions of alkanes, alkenes, alkynes, arenes and their simple functional derivatives, alcohols, ethers, phenols, aldehydes, ketones, carboxylic acid and carboxylic acid derivatives. Mechanism and synthetic applications of electrophilic aromatic substitution. Stereochemistry and mechanism of aliphatic nucleophilic substitution and elimination reactions. Diels – Alder reactions, Wittig Reactions, Mechanism of aldol condensation, Claisen condensation, esterification and ester hydrolysis, Cannizzaro reaction, benzoin condensation. Perkin reaction, Claisen rearrangement, Beckmann rearrangement and Wagner – Meerwein rearrangement.

Introduction to the following classes of compounds – Carbohydrates, Amino Acids, Peptides, Proteins and Nucleic Acids, Fats, Oils and Detergents

Heterocyclic Chemistry : Furans, thiophenes, pyrroles and pyridines.

Qualitative Organic Analysis : Functional group interconversions, structural problems using chemical reactions, identification of functional groups by chemical tests. Spectroscopy-IR, NMR, UV.

M.Sc. (Mathematics)

Algebra: Elementary operations on Matrices, Inverse of a matrix, Rank of a Matrix, Eigen values and vectors, Characteristic Equation of a matrix, Cayley Hamilton Theorem, Test for consistency of a system of linear equations. Relation between the roots and coefficients of general polynomial equation in one variable, Transformation of equations, Descartes' rule of signs. Mappings, Equivalence Relations and Partitions, Congruence modulo n. Groups, Cyclic groups, Lagrange's Theorem, Normal subgroups, Quotient groups, Fundamental Theorem of Homomorphism, Permutation groups, Even and Odd Permutations, Alternating groups, Cayley Theorem. Class Equation for a finite group, Sylow groups, Structure Theorems for finite abelian groups, Ring Homomorphism, Ideals and Quotient rings, Polynomial rings, Eisenstein Criterion of Irreducibility, Vector space, Linear Independence, Basis, Dimension, Linear Transformation, Rank and Nullity theorem, Diagonalization of Matrices, Bilinear, Quadratic and Hermitian forms, Inner Product spaces, Orthogonal basis, Gram-Schmidt Process, Inequalities.

Calculus: Successive Differentiation, Leibnitz Theorem, Taylor's theorem, Asymptotes, Curvature, Sequence and Series, Tests for Convergence of Series, Alternating Series, Absolute and conditional convergence, Continuity and differentiability, Uniform continuity, Mean value theorems, Partial differentiation, Change of variables, Euler's theorem on homogenous functions, Taylor's theorem for two variables, Jacobians, Maxima, Minima of functions of two variables, Lagrange's multiplier method, Indeterminate forms, Beta and Gamma functions, Double and Triple integrals, Dirichlet's integral, Change of order of integration in double integrals.

Analysis: Riemann integral, Mean value theorems, Improper integrals and their convergence, Series of arbitrary terms and their convergence, Abel's, Dirichlet's tests, Double series, Fourier Series, Schwarz and Young's Theorem, Analyticity and continuity of functions, C-R equations, Harmonic functions, Mobius transformation, Fixed points, Cross ratio, Inverse points, critical mappings.

Metric Space: Cauchy Sequences, Completeness, Cantor's intersection theorem, Completely ordered fields, Baire Category Theorem, Separable, second countable and first countable spaces, Compactness, Connectedness.

Differential Equations: Ordinary differential equations and their Types, Formulation and solution by various methods including series solutions, Bessel, Legendre and Hypergeometric functions, Laplace and Fourier Transforms and their properties, convolution, Solution of differential equations using transforms, Partial differential equations and their solutions, Charpit method, Classification of p.d.e.'s of second order, Homogenous and non-homogenous p.d.e.'s

Differential Geometry: General equation of second degree, Conics, Conoids, Generating lines, Reduction of second degree equations, Sphere, Cone, Cylinder, Curves with torsion, Serret-Frenet formulae.

Mechanics: Analytical conditions of equilibrium of coplanar forces, forces in three dimension, Null lines and planes, Stable and unstable equilibrium, Velocities and accelerations, S.H.M., Motion on smooth and rough plane curves, Kepler's law of motion, Motion of a particle in three dimension.

Numerical Analysis: Interpolation, Forward, Backward and Central Difference formulae, Numerical differentiation and integration, Methods of solving system of linear equations, Methods of solving algebraic and transcendental equations, Solutions of differential equations using numerical methods.

Programming in C: Programmer's model of a computer, Algorithms, Flow Charts, Data types, Arithmetic and input/output instructions, Decision control structures, Operators in C, loop, Case control structures, functions, Recursions, Preprocessors, Structures, File formatting.

Vector Analysis: Scalar and vector product of three vectors, vector differentiation, integration, Gradient, Divergence and Curl, Gauss, Green, Stokes Theorem

Trigonometry: DeMoivre's theorem and its applications, Gregory series, Summation of series, Expansion of trigonometric functions.

Dual Degree B.Sc. (Hons.) Mathematics- M.Sc. Mathematics

Syllabus offered at 10+1 and 10+2 level of CBSE New Delhi, in the subject of Mathematics.

M.Sc. (Physics)

Mechanics and General Properties of Matter: Newton's Laws of Motion and applications, Velocity and acceleration in Cartesian, Polar and Cylindrical Coordinate Systems, Uniformly rotating frame, Centrifugal and Coriolis Forces, Motion under a central force, Kepler's Laws, Gravitational Law and field, Conservative and Non-conservative forces, System of particles, Centre

of Mass, Equation of motion of the CM, Conservation of linear and angular momentum, Conservation of energy, Variable Mass Systems, Elastic and inelastic collisions, Rigid Body Motion, Fixed axis rotations, Rotation and Translation, Moments of Inertia and products of Inertia, Principal moments and axes, Elasticity, Hooke's Law and elastic constants of isotropic solid, Stress

energy, Young Modules, Kinematics of Moving fluids, Equation of continuity, Euler's equation, Bernoulli's theorem, Viscous fluids, Surface Tension and surface energy, capillarity.

Oscillations, Waves and Optics: Differential equation for simple harmonic oscillator and its general solution, Superposition of two or more simple harmonic oscillators, Lissajous figures. Damped and forced oscillators, resonance. Wave equation, travelling and standing waves in one-dimension. Energy density and energy transmission in waves, Group velocity and phase velocity, Sound Waves in media, Doppler Effect, Fermat's Principle, General theory of image formation, Thick lens, thin lens and lens combinations. Interference of light, optical path retardation, Fresnel & Fraunhofer diffraction, Rayleigh criterion and resolving power, Diffraction gratings, Polarization: Linear, Circular and Elliptic polarization. Double refraction, Optical polarizer and analyzer.

Electricity and Magnetism: Coulomb's Law, Gauss's Law. Electric field and potential. Electrostatic boundary conditions, Solution of Laplace's equation for simple cases. Conductors, capacitors, dielectrics, dielectric polarization, volume and surface charges, electrostatic energy. Biot-Savart Law, Ampere's Law, Faraday's Law of electromagnetic induction, Self and mutual inductance. Alternating currents, Simple DC and AC circuits with R, L and C components. Mesh Analysis and Nodal analysis of circuit. Displacement current, Maxwell's equations and plane electromagnetic waves, Poynting's theorem, reflection and refraction at a dielectric interface, transmission and reflection coefficients (normal distance only). Lorentz Force and motion of charges particles in electric and magnetic fields.

Kinetic Theory, Thermodynamics: Elements of Kinetic theory of gases, Velocity distribution and Equipartition of energy. Specific heat of Mono-, di- and tri-atomic gases. Ideal Gas, Van-der-Waals gas and equation of state. Mean free path. Laws of thermodynamics. Zeroth Law and concept of thermal equilibrium. First Law and its consequences. Isothermal and adiabatic processes. Reversible, irreversible and quasi-static processes. Second Law and entropy. Carnot cycle. Maxwell's thermodynamic relation and simple applications. Thermodynamic potentials and their applications. Phase transitions and Clausius-Clapeyron equation.

Modern Physics: Inertial frames and Galilean invariance. Postulates of special relativity. Lorentz transformations. Length contraction, time dilation. Relativistic velocity addition theorem, mass energy equivalence. Blackbody radiation, photoelectric effect, Compton Effect, Bohr's atomic model, X-rays, Wave Particle duality, Uncertainty principle, Schrodinger equation and its solution for one, two and three dimensional boxes. Reflection and transmission at a step potential, tunneling through a barrier. Pauli exclusion principle. Distinguishable and indistinguishable particles. Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein Statistics.

Solid State Physics: Crystal structure, Bravais lattices and basis, Miller indices. X-ray diffraction and Bragg's law, Einstein and Debye theory of specific heat. Free electron theory of metal. Fermi energy and density of states. Origin of energy bands. Concept of holes and effective mass. Elementary ideas about dia-, para- and ferromagnetism, Langevin's theory of paramagnetism, Curie's Law, B-H Curve, Hysteresis and energy loss. Superconductivity, Meissner effect, Type I & II Superconductors.

Electronics: Energy band theory, Intrinsic and extrinsic semiconductors. Fermi level. P-n junctions, diode, rectifier, L & π filter, Zener diode, LED, photodiode, Solarcell, Transistors, Transistors circuits in CB, CE, CC modes, load line analysis of transistors, Amplifier circuits with transistors, Oscillators circuits with transistors, Boolean algebra, De Morgan Theorem, OR, AND, NOR AND NAND gates.

Nuclear Physics: Nuclear composition (p-e and p-n hypotheses), Nuclear properties; Nuclear size, spin, parity, statistic, magnetic dipole moment, quadrupole moment (shape concept), Rutherford Scattering, Alpha, Beta and Gamma decay and its theory, Linear accelerator, Tandem accelerator, Cyclotron and Betatron accelerators. Gas filled counters; Ionization chamber, proportional counter, G.M. Counter, Scintillation counter and semiconductor detector. Nuclear Reactors, General aspects of Reactor Design.

M.Sc (Biotechnology)

Graduate level knowledge of the following subjects: Botany, Zoology, Chemistry, Cell Biology, Genetics, Evolutionary Biology, Biochemistry, Microbiology, Immunology, Environmental Biology, Animal & Plant Physiology, Molecular Biology, Developmental Biology, Biotechnology, Bioinformatics, Biostatistics & Biomathematics.

M.Sc. (Environmental Science)

Biological sciences: Plant and Animal kingdom-classification, characteristics of various groups, morphology, anatomy, adaptations, Ecology. Cell biology, molecular biology, structure and functions of biomolecules, genetics, microbiology and biotechnology. Physiology and biochemical processes - Photosynthesis, respiration, nitrogen metabolism, protein synthesis, growth hormones, enzymes. Structural and functional aspects of digestive, respiratory, circulatory, muscular, excretory, reproductive, endocrine and nervous system of animals. Economic botany and plant diseases.

Chemistry: Inorganic chemistry-Periodic table, s, p, d and f block elements, metallurgy, acids and bases, industrial chemistry, coordination chemistry. Organic chemistry-Isomerism, nomenclature, name reactions, mechanism of organic reactions, hybridization, chemical bonding, aromatic compounds, chemical synthesis, phytochemistry. Environmental chemistry. Recent advances in chemistry. Applications of organic compounds in daily use, fertilizers and pesticides, Physical chemistry – Chemical equilibrium, chemical thermodynamics, chemical kinetics, solutions, colligative properties, surface chemistry, catalysis, enzyme kinetics, nuclear chemistry.

Physics: Mechanics, gravitational force, heat and energy, nuclear physics, semi conductor, optics, electromagnetic waves, sound.

Mathematics and Statistics- Matrix, logarithms, differential and integral calculus, trigonometry, sequence and series, probability. Mean, mode and median, standard deviation, correlation, regression.

Environmental Studies: Natural resources- water, soil, food, energy, forests, minerals; biodiversity, pollution, global environmental problems, social issues related to environment.

CHAPTER – 6

COUNSELING AND ADMISSION

POST GRADUATE AND DUAL DEGREE PROGRAMMES

1. The admission to PG programmes/ Courses shall be open to the candidates having qualifying degree examination in any relevant discipline from any Indian University included in the approved list of Association of Indian Universities (AIU) or any foreign university recognized by AIU or any other central Govt. institution. Equivalent degree must be recognized from Govt. of India.

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).

The admissions to dual degree programmes / Courses shall be open to the candidates having qualifying examination in any relevant discipline from any Indian school/college recognized by centre or Haryana State Education Board (or equivalent).

2. The admission to PG and Dual Degree Courses shall be done by the concerned department of the university in respect of the courses run by it. However in case of all dual degree programmes (physics, chemistry, Bio-Technology) the admissions shall be done in *Bio-Technology Deptt.* by Dual Degree Admission Committee constituted by Dean (FSTI).
3. The admission to M.Tech. Programme shall be done first on the basis of GATE Score and thereafter on the remaining vacant seats if any, on the merit of entrance examination conducted by University. Further, seats lying vacant will be filled on the basis of Academic Merit of qualifying examinations.

The admission to other PG and Dual Degree Courses, in which there is no GATE score available, shall be done on the merit of entrance examination conducted by University. Further, seats lying vacant will be filled on the basis of Academic Merit of qualifying examinations.

Admission in MHA (Masters in Hospital Administration) shall be made on the basis of Academic Merit of qualifying examinations.

If two or more candidates secure identical marks (score) in the entrance test/ GATE, their relative merit will be determined by the percentage of marks obtained by them in the qualifying examination. In case of percentage of marks secured in qualifying examination is also identical, the candidate older in age will be preferred.

4. GATE qualified Candidates seeking admission in a particular course is required to have a valid GATE score in the eligible course. In case of admission in M. Tech. in ECE, M. Tech. in ECE (VLSI Design), candidates have to have valid GATE score in ECE only. Other eligible candidates may seek admissions in these courses through University Entrance Test.

5. Counseling and admission schedule shall be notified on or before the last date of submission of application forms.
6. Only those candidates who present themselves personally on the specified date and time along with the originals of all the documents will be considered for admission.
7. Preference of the Course shall be got filled up by candidates at the time of Counseling and admission.

Fee will be paid online through candidate login Portal created at the time of registration. (Refer University brochure for Fee structure for all the programmes)

Note: Candidates shall bring the following documents (as applicable) while reporting to counseling:

- Print out of online filled application form.
- Passport size three photographs.
- Certificates showing the detailed marks in all subjects in the qualifying examination and One set of attested/self attested documents.
(Up to pre final semester for candidates appeared in qualifying examination).
- Matriculation/Hr. Secondary Examination Certificate as proof of age and One copy of attested/self attested document.
- Conversion Table/Formula showing equivalence between percentage and CGPA of the qualifying degree.
- Valid GATE score card (wherever applicable) with one attested copy.
- 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 conducts.
- Haryana Resident Certificate (Annexure II) with one attested/self attested copy.
- Certificate from the Employer (Annexure-III) with one attested copy.
- SC/BC/ Affidavit by parents of BC/PH/FF/DFE/ESM (Annexure -IV, V, VI, VII, VIII, IX, X) with one attested /self attested copy.
- Declaration by parents (Annexure XI).
- Sponsorship and Relieving Certificate (Annexure XII, XIII).
- Resident of Murthal certificate with one attested copy (Annexure XIV).
- Single girl child affidavit(Annexure XV)
- Income Certificate (Annexure XVI)
- Economically Weaker Section : Income and Assets Certificates (Annexure-XVII)

Note: There shall be sole responsibility of the candidate in case fee deposition is failed by this method because of internet failure or otherwise.

8. If a candidate is eligible for admission to more than one M. Tech. Course, his/her valid GATE score shall be considered for the admission to such courses provided he/she has valid GATE score in one of the relevant disciplines of such courses.
9. The merit list will be prepared on the basis of results of Entrance Test provided by the Controller of Examination to the chairpersons. COE will also provide the details of all the registered candidates.
10. Chairperson of the Department will constitute an admission committee that will prepare the merit list (rank wise) of all the applicants. The merit list will be displayed well in advance on the university website before first counseling (AIC: All applicants, HOGC: All Applicants excluding ROH Category & ineligible applicants, Categorywise list: SC Candidates, BC Candidates etc.)

Reserve category candidate(s) are also eligible in General Category (AIC / HOGC) provided that they scored marks in qualifying examination \geq the marks required for General Category i.e. 50% marks in qualifying examination (Refer Chapter 1 of Prospectus). Similarly valid GATE score should be \geq for General Category.

11. The counseling and admission in a programme will be held in the respective department as per the schedule mentioned in the prospectus. All the eligible candidates shall mark their attendance up to 10:00 A.M. on the scheduled date. Counseling will begin from 10:00 A. M. If any candidate reports after 10:00 A.M., he/she will mark his/her attendance mentioning time also and he/she will be offered available seat only at that time.
12. All original certificates will be verified at the time of counseling by the concerned committee of the department. For any reason, if a candidate is unable to produce original certificates at the time of admission, he/she will be allowed provisional admission on his/her application subject to verification of original certificates before next counseling time failing which his/her admission shall stand cancelled and fee forfeited. Such relaxation shall not be given in respect of category certificate (EWS, SC, BC-A, BC-B, ESM, FF, PWD etc).
13. The candidates who are unable to attend the first or second counseling, he/she will be allowed to attend the subsequent counseling according to his/her merit and eligibility subject to availability of seat.
14. If a candidate admitted during any Counseling, applies for cancellation of his/her admission, his/her admission will be cancelled by chairperson of the department on recommendation of the departmental admission committee.
15. Candidates claiming reservation under SC and Backward Categories or any other reservation shall have to submit a certificate issued by the competent authority in the prescribed format.
16. The BC Candidates (Block 'A' & 'B') for benefit of reservation shall submit Backward Class Certificate Block A or B as given in Annexure –V (University Brochure). OBC certificate shall not be considered.

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 and shall not be eligible for admission under Backward Class Category.

17. Only candidates having the permanent disability of not less than 40% (being otherwise fit for admission to the course) will be considered for admission as physically handicapped. Disability certificate must be issued from Chief Medical Officer of the concerned District. However, the admission shall be provisional subject to verification by a Medical Board constituted by the University for the purpose. The decision of the Board shall be final.
18. The seats(s) reserved for Resident of Murthal (ROM), is/are considered as part of Haryana open General Category (HOGC) i.e. such no. of seats are considered reserved out of HOGC category for Resident of Murthal.

The filling up of ROM seat(s) in PG programmes will be made on rotation basis among male & female candidates. If an eligible male candidate is not available then the seat will be filled up with female candidates & vice-versa.

Eligibility criteria for Resident of Murthal (ROM), mentioned in prospectus, shall be strictly followed.

19. If, the reserved seat(s) of backward class 'A' remains vacant, these shall be filled up from backward class 'B' such inter conversion between BCA and BCB shall be made in the second half of the 2nd counseling i. e. at 3.00 P.M.

If the candidates under reserved categories (Including ROM) are not available upto 2nd Counseling and the seats remain vacant, these shall be automatically considered converted. These seats along with other net resultant vacancies after the 2nd counseling shall be offered to General category candidates in the next subsequent counseling on all India Basis.

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%) after second counseling by 10.30 AM on the day of 3rd Counseling. Thereafter, all the reserved seats, except Supernumerary seats (EWS Quota, SQ, UEQ, SGCQ and KM) will be converted into General Category (All India Basis).

Supernumerary seats are over and above sanctioned intake and cannot be converted into any other category.

20. Vacancy status, after each counseling shall be uploaded on the university website/portal for the information of the candidates and public in general. (Chairperson's responsibility)
21. A candidate, who furnishes particulars which are found to be false, or suppresses material information, will not be considered for admission and if he/she is admitted on such information, notwithstanding the legal action under the law of the land, his/her admission shall be cancelled and all fees deposited by him/her shall be forfeited.
22. Before accepting the admission, the candidate must also ensure that he/she fulfils the minimum eligibility conditions for admission to the respective Programme.
23. All the admitted candidates will be governed by the Rules and Regulations and/ or relevant Ordinance (s) as laid down by the University.
24. In the event of any inconsistency in the rules or any clarification thereof, the matter shall be referred to Dean (Academic Affairs). Dean (academic Affairs)/ the Hon'ble Vice Chancellor of the University shall be competent for interpretation of the written rule (s) whose decision shall be final and binding.
25. Candidates appeared in final year / semester of qualifying examination in academic year 2019-20 can also apply. These candidates must have cleared all the examinations of pre final year / semester examination. Proof of qualifying final exam should be submitted by 15th October, 2020, otherwise admission shall stand cancelled automatically and all the dues/ fees paid by them shall be forfeited. (For all PG Programmes)

A candidate appearing for XII/ Higher Secondary or Equivalent qualifying examination in academic year 2019-20 can also apply. However, such candidate will have to submit the proof of clearing the respective qualifying examinations with at least minimum percentage required for eligibility at the time of counselling. (For all Dual degree programmes)
26. Nothing contained in this Admission Prospectus should be construed to convey sanction or cited as an authority for which University regulations alone are applicable.
27. Any candidate who has been disqualified or debarred by the University or Board or any other Statutory Board shall not be eligible for admission.
28. Canvassing in any form is strictly prohibited. Further, if any candidate, person or official engages him self / her self in any unlawful act or indulges in any kind of unfair means in the Test/Admission, he/she shall be liable to prosecution under relevant laws as per Indian Penal Code.

29. Those applicants who do not furnish complete particulars in the application form will not be considered.
30. If the University/authorities are not satisfied with the character, past behaviour and antecedents of a candidate, they may refuse to admit him/her in the University/ Institute in order to ensure academic standards, discipline and peaceful atmosphere in the University/Institute.
31. All disputes pertaining to admissions in the session 2020-21 are subject to the jurisdiction of Sonapat Court only.
32. All rules and regulations for submission of migration certificate by the candidates who have passed the qualifying examinations from other Universities / Boards will be applicable as per the rules of the concerned university.
33. Reservation shall be applicable as per Haryana Govt. rules.
34. Any increase / decrease in intake and addition of new courses in the University reported after the publication of the Prospectus shall be included in the list at the time of counseling after approval of the Competent Authority.
35. Refund of fee/ dues in the event of cancellation of admission shall be governed as per Govt.of Haryana guidelines. In the event of a candidate with drawing upto 2:00 pm on the last day of admission or vacated seat filled, the entire fee collected from the student, after deducting of the processing fee (Rs. 1000/-) shall be refunded to the candidate.
36. Change in the Schedule/any relevant information shall be displayed on the university website www.dcrustm.org , www.dcrustm.ac.in and no separate letter shall be sent.
37. Procedure for 4th/5th Counseling shall be as under: **(If required)**

If the list of candidates appeared in the Entrance Test conducted by University is exhausted then following procedure will be followed otherwise candidate from the merit list of Entrance Examination will only be considered.

- i. Already registered candidates can also participate in these counseling and need not to apply again.
- ii. Unregistered candidates need to fill an application form which is available at page no. 37 – 38 of prospectus.
- iii. Time for marking of attendance and submission of applications form is 9:30 a.m. to 11:30 a.m. in the respective departments.
- iv. For these counseling, no applications shall be accepted after 11: 30 a. m.
- v. All admitted candidates shall be charged University Fee as given in prospectus on the day of counseling. Unregistered candidates shall have to pay an additional charge of Rs. 1000/- as Registration Fee in addition to fee mentioned in prospectus.

Seats shall be filled through following sequence (order of preference) for all counselling:-

- a. Firstly, the eligible candidates will be considered on merit of valid GATE score (Wherever applicable) for admission. (Clause 25 applicable).
- b. After exhausting (criteria a), eligible candidates will be considered for admission based on merit list of result of entrance test conducted by the university. (Clause 25 applicable).
- c. After exhausting (criteria b), eligible candidates will be considered for admission on the basis of merit list of qualifying examination. (Clause 25 is not applicable).

- d. Thereafter, if the seats still remain vacant, chance will be given to those who have cleared their all examinations upto pre final year/semester and appeared in final exam. Their relative merit shall be formed on the basis of their average % of marks up to pre final year/semester (%marks should be equal or more than given in Chapter-1 under eligibility conditions). Proof of qualifying final exam should be submitted as mentioned in clause 25 (should fulfil the eligibility conditions as given in Chapter-1), otherwise admission shall stand cancelled automatically and all the dues/fees paid by them shall be forfeited.
38. As per office order no. DCRUST/Acad./AA-1/2016/3688 to 3703 dated 14.07.2016 SC, Students will have not to be charged admission fee (except refundable security/ caution money). Such exemption will be given to those whose family income is upto Rs. 2.5 lacs per annum from all sources and who produces, at the time of admission, the caste and income certificate from competent Authority. The original certificates will be kept by admission committee and will return only after completion of admissions. The eligible SC students will submit the Post Matric Scholarship forms every year on prescribed format. The fee will be compensated from his/her scholarship amount. In case the student does not apply for scholarship in the prescribed time or is found ineligible or he/she does not submit complete documents for award of scholarship, he/she will be liable to pay part/full fee along with late fee as per rules. Further, it is also intimated that if the scholarship amount received from the SC category student is less than any semester fee, if in any case, the remaining fee will be deposited by the student(s).
- All other SC students are liable to pay full fee including those SC students who are admitted to M. Tech. / M. Arch. on the basis of valid GATE SCORE.
38. After completing the work of the admission, the admission committee will submit all the details of admitted students to Chairpersons of Respective Department. Chairpersons are required to arrange to make entries of all admitted students on the University Registration Portal.
40. The gross annual income of parents shown in the certificate should be of financial year 2019- 20 and certificate should be issued on or after 01.04.2020.
41. **GENERAL INSTRUCTIONS, CODE OF CONDUCT AND ANTI-RAGGING GUIDELINES AND MEASURES, ABOUT THE UNIVERSITY, DEPARTMENTAL INFORMATION, ACADEMIC CALENDAR, FEE STRUCTURE AND GUIDELINES FOR FEE CONCESSION, ALL ANNEXURES, ETC. : (REFER UNIVERSITY BROCHURE AVAILABLE ON THE UNIVERSITY WEBSITE).**



Application Form for Dual Degree & P.G. admission 2020-21
(Applicable to vacant seats after 3rd counselling, if any)

Application No.:

Programme Name				
Personal Details				
Name of Applicant		Photo		
Aadhar Card No.				
Mother's Name				
Father's Name				
Gender				
Date of Birth				
Category				
Whether Physically Handicapped				
Whether Ex-Servicemen/Ward of Ex-Servicemen/Dependent of Freedom Fighter				
Supernumerary Seats (EWS/SQ/UEQ/SGCQ/KM)				
Mailing & Contact Details				
Mailing Address				
District/City				
State/UT				
Pin Code				
Mobile No.				
E-mail ID				
Educational Details				
Examination	Board/University	Subjects/Specialization	Percentage of marks	Year of Passing
10 th				
12 th				
U.G. degree				
P.G. degree				
Any other				

GATE Detail

Subject:

Year of passing

Valid Score:

Marks:

Declaration

(To be signed by the Candidate)

I hereby declare that all the entries made in this form are correct. I further declare that I fulfil the minimum eligibility conditions laid down for admission and I have read all conditions and guidelines given in the prospectus for admission in P G programme for the academic session 2020-21. In case of detection of any false entry, especially in respect of qualifying examination/ experience/ caste/ sponsoring certificate, my admission may be treated cancelled at any time during the course of my study and I will have no claim what so ever except security charges. I am fully aware of the upreme Court directives in regard to ragging and I shall not indulge in any act of ragging and will strictly adhere to the code of conduct prescribed by University.

Candidate's Signature**Place:*****Date:***

DEENABNDHU CHHOTU RAM UNIVERSITY OF SCIENCE & TECHNOLOGY, MURTHAL (SONEPAT)

Seat Matrix for the Academic Session 2020-21 for PG and Dual Degree Courses

Sr. No	Prog. Code	Name of the Course	Sanctioned Intake								Supernumerary Seats				
			AIC	State Quota	HOGC	SC	BCA	BCB	PWD	Total	EW S	S Q	U E Q	S G C Q	K M
			(15% of total seat)	(85% of total seat)	(50% of SQ)	(20% of SQ)	(16% of SQ)	(11% of SQ)	(3% of SQ)		(10% of SI)				
1	432	Dual Degree B.B.A-M.B.A	9	51	24+1**	10	8	6	2	60	6	0	0	0	3
2	532	Master in Business Administration (2 Years)	9	51	24+1a+1b	10	8	5	2	60	6	0	0	0	3
3	533	Masters in Hospital Administration	4	20+6*	10	4	3	2	1	24+6*	2	0	0	0	1
4	501	M.Tech - Computer Science and Engineering	5	25	12	5	4	3	1	30	3	0	0	0	2
5	502	M.Tech - Electrical Engineering (Instrumentation & Control)	3	15	8	3	2	2	0	18	2	0	0	0	1
6	503	M.Tech - Electronics and Comm. Engg.	3	15	7+1b	3	3	1	0	18	2	0	0	0	1
7	504	M.Tech - Mechanical Engineering	2	16	7+1a	3	2	2	1	18	2	0	0	0	1
8	505	M.Tech - Chemical Engineering	3	15	8	3	2	2	0	18	2	0	0	0	1
9	506	Master of Architecture (Sustainable Arch.)	3	17	8	4	3	2	0	20	2	0	0	0	1
10	507	M.Tech - Electric Power System	3	15	7	3	3	2	0	18	2	0	0	0	1
11	508	M.Tech - Energy Studies and Environment Management	3	15	7	3	3	1	1	18	1	0	0	0	1
12	509	M.Tech – BioTechnology	2	16	8	3	3	1	1	18	1	0	0	0	1
13	511	M.Tech - Bio-Medical	3	15	8	3	3	1	0	18	2	0	0	0	1
14	512	M. Plan - Urban and Regional Planning	3	17	8	4	3	2	0	20	2	0	0	0	1
15	513	M.Tech - Highway Engineering	3	15	8	3	2	2	0	18	2	0	0	0	1
16	515	M.Tech- Construction & Real Estate Mgt.	3	15	7	3	3	2	0	18	2	0	0	0	1
17	516	M.Tech - Electronics & Communication Engineering (VLSI)	2	16	8	4	2	2	0	18	2	0	0	0	1
18	551	M.Sc. Physics	9	51	25	9+1**	8	6	2	60	6	2	1	1	3
19	552	M.Sc. Chemistry	9	51	25	9+1**	8	6	2	60	6	2	1	1	3
20	553	M.Sc. Mathematics	9	51	25+1**	10	8	5	2	60	6	2	1	1	3
21	554	M.Sc. BioTechnology	4	26	13	5	4	3	1	30	3	1	1	1	3
22	556	M.Sc. Environmental Science	3	15	8	3	3	1	0	18	2	1	1	1	1
23	572	MA English	4	26	13	5	4	3	1	30	3	1	1	1	2
24		Dual Degree B.A. Hons. (English) - M.A. English	9	51	26	10	7+1* *	6	1	60	6	2	1	1	3

25	435	Dual Degree B.Sc. Hons. (Biotechnology) - M.Sc. Biotechnology	9	51	25	10	8	5+1* *	2	60	6	2	1	1	3
26	436	Dual Degree B.Sc. Hons. (Physics) - M.Sc. Physics	9	51	25+1**	10	8	5	2	60	6	2	1	1	3
27	453	Dual Degree B.Sc. Hons. (Mathematics) - M.Sc. Mathematics	9	51	25	11	8	5	2	60	6	2	1	1	3
28	434	Dual Degree B.Sc. Hons. (Chemistry) - M.Sc. Chemistry	9	51	25+1**	10	8	6	1	60	6	2	1	1	3
Total			146	824+6*	412	165	132	90	25	970+6*	97	19	11	1 1	52

CHAPTER – 7

SCHEDULE OF EVENTS

Sr. No.	Event	Date and Time
1.	Online filling of application form	27.05.2020 to 09.07.2020
2.	Download of admit cards from University website	
3.	Entrance test	
The exact date, time and venue of tests shall be printed on the admit card.		
4.	Result of Entrance Test displayed on University website	

Note:

Counseling and Admission Schedule

Sr. No.	Event	Date and Time	Fee to be deposited by
1.	1 st Physical Counseling		
2.	2 nd Physical Counseling		
3.	3 rd Physical Counseling		
4.	4 th Physical Counseling		
5.	5 th Physical Counseling		
<i>Last date of admissions</i>			

CLASSES WILL START FROM 01.09.2020.

Note: Refer university website regularly for any update due to COVID-19. The detailed schedule of entrance test and counselling will be notified on or before the last date of submission of online application forms.