MALAVIYA ENTRANCE TEST
(MET– 2020)

For

Admissions to B.Tech.(First Year)/ B.Tech.(Second Year) Lateral Entry/BBA /MBA / MCA / M.Tech. / M.Sc. /Ph.D.

University Admission Brochure

MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY
(Formerly Madan Mohan Malaviya Engineering College, Gorakhpur, Estd. 1962**)**
(U.P. Govt. Technical University)
(तकनीकी शिक्षा की तपस्थली)

DEORIA ROAD, GORAKHPUR-273010 (UP)
Website: www.mmmut.ac.in

Important Dates for MET-2020

Submission of On-line application form	16th January, 2020 (10:00 am) to 31st March, 2020(Till 05:00 pm)
Uploading of admit cards	30th April, 2020
Dates of Malaviya Entrance Test (MET-2020)	9th May, 2020 (for UG & PG Programs) and 1st July, 2020(for PhD only)
Declaration of Result	First week of June, 2020 (except Ph.D.)

SCHEDULE OF EXAMINATIONS
(For B.Tech./B.Tech.-II Lateral/BBA/MCA/MBA/MTech/MSc.)

Dates of Exam	Paper code	Subject	Timing	Total Period
9th May 2020 (Saturday)	Paper-1	BTech-I Admission Test (Physics, Chemistry and Mathematics)	08.00 AM to 11.00 AM	3 Hours
	Paper-2	BTech-II (Lateral Entry) Admission Test (Aptitude Test for Diploma Holders in Engg.)	12:30 PM to 02:00 PM	1.30 Hours
	Paper-3	Aptitude Test for BBA	12:30 PM to 02:00 PM	1.30 Hours
	Paper-4	Aptitude Test for MBA	12:30 PM to 02:00 PM	1.30 Hours
	Paper-5	Aptitude Test for MCA	03:00 PM to 05.00 PM	2 Hours
	Paper-6!	M.Tech. Admission Test	03:00 PM to 05.00 PM	2 Hours
	Paper-7#	M.Sc. (Maths/Physics/ Chemistry)Admission Test / B.Tech.-II Yr. (Lateral) Admission Test~	03:00 PM to 05.00 PM	2 Hours

! At Lucknow, **Prayagraj**, Ghaziabad and Gorakhpur centers only.

At Gorakhpur centre only.

~ For admission of B.Sc. Graduates to B.Tech.-II (Lateral) (subject to vacant seats after admission of Diploma holders)

SCHEDULE OF EXAMINATIONS
(For regular Ph.D.)

1st July, 2020 (Wednesday) (at Gorakhpur Center only)	Paper-8	Ph.D. Admission Test	09:00 AM to 11.00 AM	2 Hours
	Paper-8	Result Declaration	up to 8.00 pm on University website	
2nd July, 2020 (Thursday)	Interview of the selected Ph.D. candidates		9.00 am onwards at MMMUT, Gorakhpur	

WHOM TO CONTACT

Contact Address	Phones /Fax/Website/E-mail
The Coordinator **Malaviya Entrance Test (MET)** **M. M. M. University of Technology** **Deoria Road, Gorakhpur -273010 (U.P.)**	Phone No: 8765783798, 9235500507 (9:30 am to 5pm) Fax : 0551-2270011 Website :http://www.mmmut.ac.in E-mail : met@mmmut.ac.in

CHECK LIST

The candidates must check the following before submitting the application

<u>General</u>

- There is no offline application form. Every candidate is required to fill online application form only.
- The candidate is required to fill separate online application form for each course.
- Please download the admission brochure and read carefully the instructions, eligibility criteria, reservations, syllabi and other information for different courses.
- Online Application form, inconsistent in any respect, shall stand rejected without any information to the candidate.
- Fill the Online application form completely and carefully as per the instructions given in the admission brochure.
- You should keep 6 copies of the photographs similar to that uploaded in online application form with you for future use.
- No further correspondence shall be entertained without application form number or Roll number (after receipt of admit card).

IMPORTANT: The candidates must ensure that after submitting the online application form, no changes are allowed in any field at later stage. In special circumstances, if they request any modification/correction at later stage, they are required to pay a charge of **Rs. 500/- per application**. The amount of Rs. 500/- may be paid in the form of DD drawn in favor of **Madan Mohan Malaviya University of Technology, Gorakhpur payable at Gorakhpur.** The request for the modification/correction with proof shall be entertained only by **April 15, 2020**.The result will be prepared on the basis of this data and no change is allowed at later stage during the examination/counseling.

<u>Online Application</u>

- For filling On-line application, visit the website http://www.mmmut.ac.in and fill up the application as per the instruction given on the website.
- The category, subcategory, weightage, domicile status, place of examination, etc., as applicable should be claimed properly. The category, sub-category, weightage, domicile status, etc. shall not be changed at a later stage under any circumstances.
- The candidate should note down his/her admission form no. for future correspondence with the Coordinator, MET.
- Candidate should retain the photocopy of downloaded confirmation page.

CONTENTS

MALAVIYA ENTRANCE TEST (MET)

The admissions in different undergraduate and post graduate programs being offered in Madan Mohan Malaviya University of Technology, Gorakhpur shall be made through the Malaviya Entrance Test (MET) and counseling conducted under the supervision and control of the University Admission Committee (UAC). The UAC has authority for conducting the admission process, and to decide about the modalities of admissions, allotment of seats and all matters related to the admissions in the University with the approval of Vice Chancellor, MMMUT, Gorakhpur.

The admissions shall be made in the following courses offered at the University through MET for the academic year 2020-21.

- (i)   4 year B.Tech./3 year B.Tech.(Lateral Entry in B.Tech.-II)
- (ii)   3 year BBA
- (iii)   2 year MBA
- (iv)   3 year MCA
- (v)   2 year M.Tech.
- (vi)   2 year M.Sc. Physics.
- (vii)   2 year M.Sc. Maths
- (viii) 2 year M.Sc. Chemistry
- (ix)   Ph.D. (Regular)

1. **APPLICATION FORM**
   The candidate has the option to submit his/her application for Malaviya Entrance Test by "On-line application mode" only as per the details prescribed in the Admission Brochure of Malaviya Entrance Test (MET), MMMUT, Gorakhpur.

   ### 1.1 ONLINE APPLICATION FORM AND SUBMISSION

   1.2.1   The candidate should fill up the On-line application form, from anyplace through internet by login on to www.mmmut.ac.in from **16th January2020 (10.00 AM) till 31ˢᵗ March, 2020 (5.00 PM)** as per the detailed procedure given on the website.

   1.2.2   The candidates have to deposit the application fee online as per the provisions made in online form. **The application fee is non-refundable.** The candidate is required to fill separate application form for each course.

   1.2.3   The online fee payment can be made through online mode by using Debit Card/Credit Card/Net banking option. **Additional bank charges** will be applicable as per the rules of the respective bank depending upon the transaction used and are to be paid by the candidates themselves. The confirmation page will be generated only after making the online fee payment.

   1.2.4   **Online Payment Details**
   (a)   For online payment, the candidate will be redirected to the website of the bank as per the choice of fee payment exercised by the candidate. University shall not be responsible for the transactions made after redirection to the bank's website.

(b) The candidates have to login with their bank's net-banking User ID and password for net-banking. In case of payment through Debit Card/Credit Card, candidates have to enter the details of their Debit Card/Credit Card as required by the respective banks.

(c) The fee amount and bank charges will be displayed to the candidates, and candidates have to confirm the total amount before the payment.

(d) Once candidate confirms and the payment is successful, the candidate will be redirected back to the online application website.

(e) If any candidate has some difficulty (due to internet connection or power failure), and the candidate is not sure whether the payment has been processed or not, then please login back to MET On-line application website and check the status of the payment.

(f) In case the fee amount has been debited from candidate's bank account/debit card/credit card and MET On-line application website does not acknowledge any fee payment then the candidate should make the payment again till it is not reflected on the University's On-line application website. Candidate should contact the concerned bank for the difficulty faced by him/her. University will not be responsible for any inconvenience caused due to this. No extra time shall be permissible for any such failure.

(g) Candidates will be allowed to submit the final application form along with uploading of scanned signature, photograph, etc. only after successfully making the payment and its receipt in the University account following the prescribed payment process.

(h) Once the candidate confirms and the payment is successful, the candidate may proceed to complete the submission procedure of application form on MET On-line application website and the candidates are required to print the confirmation page for future reference.

1.2.5   *On completion of the online application form, a confirmation page is generated. The candidates are requested to take the print of the <u>confirmation page and preserve it for future use as they may be asked to submit the duly signed copy of this page completed in all manners at the time of seat allotment counseling</u>. Please note that you <u>**don't need**</u> to send this confirmation page to MMMUT, Gorakhpur.*

2. INSTRUCTIONS FOR FILLING ONLINE APPLICATION FORM

The following steps are required to fill up the On-line application form:

Step-1: Profile Registration

Please use this step to give general information about you to register the profile. For profile registration, you need to have a valid email-id. In case, you don't have the same, please create an email-id before proceeding for profile registration. During profile registration, you need to set a password of length of 8 to 10 characters. No two online application forms can be filled with a single email-id; therefore, if a candidate is willing to apply for two or more Papers, he/she needs two or more email-ids also so that for each course a separate online application form with a unique email-ID can be filled. The details of fields in the opened form have been illustrated

in **section 2.3**. After entering the required information in On-line form, submit the form by clicking on **SUBMIT** button. The subsequent screen displays **admission form no. and login ID**(*which is actually the email which you have entered during the profile registration*). A mail containing this information is also forwarded at your registered email-id.

Please note down the **admission form no.** carefully as you need to essentially mention it in all your future correspondence/queries related to your application form.

Step-2: Candidate Login
Use your login ID and the password to login again to proceed further for filling the application form and proceed to Step-3.

Step-3: Fill Registration Form
After entering the required information in the **registration form**, use **view/edit profile** option to edit/correct your On-line application (if needed) otherwise click on **SUBMIT** button. Make payment form shall be displayed on subsequent screen and click on Make Payment button to deposit the fee.

IMPORTANT: The candidates must ensure that after submitting on-line application form, no changes are allowed in any field at later stage. In special circumstances, if they request any modification/correction at later stage, they are required to pay a charge of **Rs. 500/- per application.** The amount of Rs. 500/- may be paid in the form of DD drawn in favour of **Madan Mohan Malaviya University of Technology, Gorakhpur payable at Gorakhpur.** The request for the modification/correction shall be entrained only by **April 15, 2020.** After this date, any request for correction/modification in the candidate's information will not be entertained. However, the candidate may submit the written request at the time of MET-2020 entrance test for any correction/modification in any field/fields of application form at the examination center by paying the correction fee of Rs. 1000/- (in the form of Demand Draft in favor of **Madan Mohan Malaviya University of Technology, Gorakhpur payable at Gorakhpur.** The result will be prepared on the basis of this data and no change is allowed at the later stage during the counseling. Before proceeding for Step-4 or online payment, please keep the following ready:
   (i).   Softcopy of your recent **photograph** (3.5cm x 4.5cm) not older than 3 months in JPG format *(less than 15 KB size)*
   (ii). **Scanned signature** (3.5cm x 1.5cm) in JPG format *(less than 15 KB size)*

Step-4: Verify Payment
Use **candidate login** tab to enter in your login account and click on **verify payment** button. If your payment is verified successfully, you will be prompted to upload softcopies of your **recent photograph** and **scanned signature**. After uploading of recent photograph and scanned signature, the candidate is advised to see the preview of uploaded signature and photograph for its correctness. Once satisfied, the candidate can press the submit button to generate the final **confirmation page of application form** and **payment receipt**. Take print out of this confirmation page for future reference. Please do keep 6 additional copies of the recent photograph (same as uploaded on On-line application form) for future use.

2.3   FIELDS OF ON-LINE APPLICATION FORM

(i). **Seeking Admission for**

Choose your course.

(ii). **Candidate Name**

Write FULL NAME (special characters/abbreviation not allowed) as recorded in your High School or equivalent examination certificate. Leave one space blank between any two parts of the name. Do not use prefix such as Sri/Mr./Km./Ms. etc. with your name.

(iii). **Father Name**

Write FULL NAME (special characters/abbreviation not allowed) as recorded in your High School or equivalent examination certificate. Leave a blank space between any two parts of the name. Do not use prefix such as Sri/Mr./Dr./ Late etc. with the father's name.

(iv). **Mother Name**

Write FULL NAME (special characters/abbreviation not allowed) as recorded in your High School or equivalent examination certificate. Leave a blank space between any two parts of the name. Do not use prefix such as Smt./Mrs/Miss/Dr./ Late etc. with the mother's name.

(v). **Date of Birth**

Write your date of birth exactly as recorded in your High School or equivalent examination certificate.

(vi). **Gender**

Select the sex as applicable

(vii). **Category**

Select the category as applicable out of UPGE/UPSC/UPST/UPBC/UPGD/ GDSC/GDST/GDBC/GDDA/UPEW/GDEW/OSGE.

(viii). **Subcategory**

Select the sub-category as applicable out of UPFF/UPAF/UPHC. All female candidates will be eligible for UPGL and may opt for one more sub-category out of UPFF/UPAF/UPHC.

(ix). **Religion**

Select as applicable form the drop-down list.

(x). **Handicapped/Type of Handicap**

The candidates opting for UPHC category will have to select as applicable out of Type-I/Type-II/Type-III

(xi). **Rural Weightage Claim**

Select as applicable out of rural/urban.

(xii). **Nationality**

Select as applicable form the drop-down list.

(xiii). **Mother tongue**

Select as applicable form the drop-down list.

(xiv). **Postal address, City, State, Pin code**

Write your correspondence address along with city, state and pin code in different lines as applicable.

(xv). **Mobile number**

Write a valid ten digits mobile number so that you may be contacted upon requirement.

(xvi). **Aadhaar Number**

Write a valid twelve digits Aadhaar number of the candidate.

(xvii). **Parent's Income**

Select the income slab (total income from all sources) as applicable.

3. **MEDIUM AND MODE OF EXAMINATION AND EVALUATION**

The question papers in the entrance test for all courses except B.Tech.-I year / B.Tech.-II year Lateral entry (diploma) / BBA will be in English only. However, for B.Tech.-I year /B.Tech.-IIyear Lateral entry (diploma) / BBA will be in Hindi and English both but the English version will be considered final in case of any ambiguity. All question papers will carry objective multiple-choice questions. Answers will be evaluated by OMR methodology. University will not be responsible for any error due to improper bubbling / stray marks by the candidate on the OMR sheet being not read by the machine.

4. **CITY OF EXAMINATION**

(i). The MET for the courses except **M.Tech. /M.Sc. /Ph.D.** admissions is planned to be held at various cities given in **Appendix–B**. The candidates are required to give three choices for examination cities. The centre once allotted will not be changed. In special circumstances, the change of centre may be permitted with the approval of competent authority after paying a fee of **Rs. 500/-.** The change of request must be received one week before the date of examination by paying a DD of **Rs. 500/-** drawn in favour of **Madan Mohan Malaviya University of Technology, Gorakhpur** payable at **Gorakhpur**.

(ii). The MET for **M.Tech.** admissions will be held at Gorakhpur/Prayagraj /Lucknow /Noida or Ghaziabad only.

(iii). The MET for **M.Sc.** admissions will be held at Gorakhpur.

(iv). The MET for **Ph.D.**(Regular)admissions will be held at MMMUT, Gorakhpur only**.**

(v). University reserves the right to cancel the city of the examination as per its requirements.

5. **SCHEDULE OF EXAMINATION**

SCHEDULE OF EXAMINATIONS				
(For B.Tech./B.Tech.-II Lateral/BBA/MCA/MBA/MTech/MSc/ PhD)				
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! At Lucknow, Prayagraj, Ghaziabad and Gorakhpur centers only.

At Gorakhpur centre only.

~ For admission of B.Sc. Graduates to B.Tech.-II (Lateral) (subject to vacant seats after admission of Diploma holders)

6. EXAMINATION DETAILS

(a) Entrance test will be of objective type as per the schedule of examination given insection5. The candidates are required to select suitable paper(s) for appearing in the entrance test as mentioned below subject to their eligibility, and the course(s) in which admission is being sought.

Course	Paper	Subjects	Test Duration	Nature of Questions
B.Tech. 1st Year	Paper-1	Physics, Chemistry and Mathematics	3 Hours	Out of 150 Objective type questions, the number of questions for subjects Mathematics, Physics, Chemistry will be 60,50 & 40 respectively. All questions carry equal marks
B.Tech. 2nd year	Paper-2	Aptitude Test for Diploma Holders in Engineering	1 Hour 30 Minute	Objective type questions
BBA	Paper-3	Aptitude Test for BBA	1 Hour 30 Minutes	Objective type questions
MBA	Paper-4	Aptitude Test for MBA	1 Hour 30 Minutes	Objective type questions
MCA	Paper-5	Aptitude Test for MCA	2 Hour	Objective type questions
M.Tech.	Paper-6	M.Tech. Admission Test	2 Hours	Objective type questions
M.Sc.	Paper-7	M.Sc. (Maths/Physics/ Chemistry) Admission Test / B.Tech.-II Yr. (Lateral) Admission Test~	2 Hours	Objective type questions
Ph.D.	Paper-8	Ph.D. Admission Test	2 Hours	Objective type questions

(b) **SCORING AND NEGATIVE MARKING**

(i). Every objective type question would carry **Four marks** for correct answer.

(ii). Each objective type question will have one correct answer. The answer would be considered correct only if the appropriate choice is indicated in the answer.

(iii). There will be **minus one (-1) mark for each wrong answer**. A record of incorrect answers given by a candidate will be kept separately. Zero marks will be awarded for unanswered questions.

(iv). All objective type questions are required to be answered on specially designed OMR answer sheet against the respective question number.

(v). Answers are to be marked using ball point pen (black/blue) only. For the purpose of evaluation, the details filled in by the candidate in the OMR answer sheet will be accepted as final.

(vi). The candidates who have scored zero or less than zero total marks in any section of Paper-1in MET i.e. Section-A (Mathematics), Section-B (Physics) and Section-C (Chemistry) individually will not be included in the merit list and will be considered as NOT QUALIFIED in the Entrance test.

(vii). The candidates who have scored zero or less than zero total marks in any paper except Paper-1 in MET will not be included in the merit list and will be considered as NOT QUALIFIED in the Entrance test.

(c) **SYLLABUS**

The syllabus of each question paper for the MET is given in **Appendix–C**.

7. ADMIT CARD

7.1 Admit card can be downloaded from the University website **www.mmmut.ac.in.** However, the **original admit card** will be made available to the candidates at the time of entrance test in the examination hall.

7.2 It is the responsibility of candidates to paste his/her photograph and put signature in the space provided and get the photo verified by the invigilator before leaving the examination hall.

7.3 If any candidate is unable to download his/her admit card, he/she should contact the helpline or send an email as indicated on the web site latest by **3rdMay, 2020**.

7.4 A plea that the candidates failed to receive the information for appearing at the entrance test will not be accepted as a ground for the refund of fee or any other redressal. The University reserves the right to debar a candidate who is not eligible to appear at the MET or any other reason which may lead to vitiating the admission process.

7.5 Since successful candidates are required to produce the **original admit card** (received in the examination hall at the time of entrance test) at the time of document verification during the counseling; therefore, it should be carefully preserved until the admission process is completed.

7.6 The centre once allotted will not be changed. In special circumstances, the change of centre may be permitted with the approval of competent authority after paying a fee of **Rs. 500/-.** The change of request must be received one week before the date of examination by paying a DD of **Rs. 500/-**drawn in favour of **Madan Mohan Malaviya University of Technology, Gorakhpur payable at Gorakhpur**.

8. EVALUATION AND DECLARATION OF RESULT

8.1 The results of MET along with answer keys will be declared in the first week of **June,2020**.

Merit for admission to M.Tech. shall be prepared on the basis of marks secured by a candidate in Paper-6 of MET-2020.

8.2 In case two or more candidates secure equal marks, inter-se-merit of such candidates shall be determined as follows:

(a) Firstly, by the number of incorrect answers given. A candidate giving lesser number of incorrect answers will be placed at higher merit.

(b) Secondly,

For B.Tech First Year.: This will be based on the marks obtained in mathematics, physics, chemistry sections of Paper-1, respectively and then by age.

For lateral entry B.Tech. IInd Year/BBA/MBA/MCA/ M.Sc./ M.Tech./Ph.D.
By age only: The candidate with higher age will be placed at higher merit. If age also matches, the merit will be decided based on alphanumeric of name.

9. COUNSELING FOR OFFER OF ADMISSION

The various round(s) of counseling and spot counseling shall be conducted in order of merit of eligible candidates of MET based on their **combined rank**, even if they belong to reserved category at **MMMUT, Gorakhpur**. Advantage of their reserved category rank shall be provided at the time of allotment of seats depending upon their eligibility. Admissions to all the available seats in different programs being offered by MMMUT shall be made as per the merit rank of MET-2020 except B.Tech.-I. In case of B.Tech.-I program, 90% seats of total intake shall be filled on the basis of merit rank obtained by the candidates in MET-2020. The admission to 20% seats (10% of total intake and 10% supernumerary seats of total intake) of total intake in B.Tech.-I year course shall be made from the following JEE (Mains) -2020 qualified candidates:

(i) Admission against 10% seats of total intake in B.Tech.-I: Candidates who have appeared the qualifying examination from UP or the candidates whose parents are domicile of UP.

(ii) Admission against 10% supernumerary seats of total intake in B.Tech.-I: Candidates who have appeared in JEE (Mains) Examination from any Indian state other than Uttar Pradesh

The counseling schedule/process and counseling fee/security deposit details and fee refund policy will be notified separately on the University website. The eligible candidates are required to regularly visit the website after declaration of MET results. The allotment of seat through counseling at MMMUT Gorakhpur will be carried out strictly in accordance with the merit of candidate in MET, candidate's order of preference for the seats, and availability of vacant seat in the respective category. All the latest instructions of the University up to the date(s) of counseling shall be applicable.

10. DETAILS OF COURSES WITH INTAKE IN FIRST YEAR

S. No.	Course[#] – Branch	Intake in 1st Year*
1.	B.Tech. Civil Engineering (CE)	150
2.	B.Tech. Electrical Engineering (EE)	150
3.	B.Tech. Mechanical Engineering (ME)	150
4.	B.Tech. Electronics and Communication Engineering (EC)	150
5.	B.Tech. Computer Science and Engineering (CS)	150
6.	B.Tech. Chemical Engineering (CH)	75
7.	B.Tech. Information Technology (IT)	75
8.	Bachelor of Business Administration (BBA)	60
9.	Master of Computer Applications (MCA)	75

10.	Master of Business Administration (MBA)	75
11.	M.Tech. Hill Area Development Engineering	18*
12.	M.Tech. Environmental Engineering	18*
13.	M.Tech. Seismic Design and Earthquake Engineering	18*
14.	M.Tech. Structural Engineering	18*
15.	M.Tech. Power Electronics and Drives	18*
16.	M.Tech. Control and instrumentation	18*
17.	M.Tech. Energy Technology and Management	18*
18.	M.Tech. Computer Integrated Manufacturing	18*
19.	M.Tech. Digital System	18*
20.	M.Tech. Communication Engineering	18*
21.	M.Tech. Computer Science and Engineering	18*
22.	M.Tech. Information Technology	18*
23.	M.Sc. Physics	30
24.	M.Sc. Maths	30
25.	M.Sc. Chemistry	30
26.	Ph.D. in Civil Engineering	2**
27.	Ph.D. in Computer Science and Engineering	2**
28.	Ph.D. in Information Technology	2**
29.	Ph.D. in Electrical Engineering	3**
30.	Ph.D. in Electronics and Communication Engineering	2**
31.	Ph.D. in Mechanical Engineering	3**
32.	Ph.D. in Chemical Engineering	1**
33.	Ph.D. in Physics	2**
34.	Ph.D. in Chemistry	2**
35.	Ph.D. in Mathematics	1**
36.	Ph.D. in Economics	-
37.	Ph.D. in English	-

(Number of seats may increase/decrease at the time of admission. The intake for the B.Tech.-II (Lateral entry) will be 20% of sanctioned intake in B.Tech.-I year)

#Courses may increase/decrease till the date of commencement of counseling process.

*Two supernumerary seats in each of the above M.Tech. Specialization

University has instituted **research cum teaching fellow scheme in which the fellow will be paid a definite fellowship (at present Rs. 25000/- per month and contingency of Rs. 30,000/- per year subject to the terms and conditions prescribed by the University) and take up stipulated teaching load. Actual intake in Ph.D. will be decided at the time of counseling as per specialization of the candidate and availability of supervisor in the respective department. University reserves the right to admit or not to admit any candidate on account of suitability of candidate in respect to supervisor/department.

S.No.	Department	Broad Areas for Ph.D.
1.	Civil Engineering	Geotechnical engineering, environmental engineering, transportation engineering, hydraulics engineering and fluvial hydraulics, remote sensing
2.	Computer Sc. and Engineering	Theoretical computer science, computer networks and distributed systems, network security, database and information systems, artificial intelligence, image understanding, computer hardware and architecture, big data and machine learning, sensor networks, virtualization and cloud computing.

3.	Information Technology and Computer Application		Network security, Computer Networks, database and information systems, natural language processing, software engineering, computer vision and image understanding, big data and machine learning, sensor networks, Mobile and cloud computing
4.	Electrical Engineering		Electrical measurement & instrumentation, control systems, electrical power systems, power electronics, electrical machines and drives, renewable energy system.
5.	Electronics and Comm. Engineering		Microelectronics/VLSI/Micro-strip antenna and filter design, organic electronics, solid state devices, non-conventional material-based devices & circuits, optoelectronics & photonics, wireless communication, nanoelectronics, optical communication and beyond the CMOS devices
6.	Mechanical Engineering		Design, manufacturing, composites, computational mechanics, Production
7.	Chemical Engineering		Process intensification, advanced oxidation processes, nano-particle synthesis and applications, new and renewable energy, microbial fuel cell, cavitation engineering, energy and environment, biochemical engineering, water disinfection, fuels from sustainable feedstock
8.	Physics& Material Science		Condensed matter physics (theory and experimental), amorphous semiconductors, thin films growth and characterization, optoelectronics, nanomaterials, solar cells and sensors
	Chemistry& Environmental Science		Design and synthesis of carbon allotrope-based photocatalyst- for converting CO_2 into useful forms based on natural photosynthesis. Rational design and Synthesis of 3D and 2D photocatalyst for C-H activation and sulfoxidation in presence and absence of carbon dioxide.
	Mathematics& Scientific Computing		Operations research, inventory control, Inventory model for deteriorating/ substitutable/perishable Items; optimization.
	Humanities & Management Science	English	Literature; Literary Theories: Traditional, Modern & Post Modern; Linguistics, Translation Studies; Literary Research Methods; ELT &SLT: Bilingual Method & Second Language; ICT in ELT, World Literature & Comparative Studies, Soft Skills & Communication Studies; Kinesics; Film Studies & Text Screen Inter-phase
		Economics	Development Economics, Labour Economics, Managerial Economics, Industrial Organization.

10.1 ADMISSION TO B.Tech. SECOND YEAR – LATERAL ENTRY
(For Diploma Holders and B.Sc. Graduates)

(i) The eligible candidates (refer **section11.1**) seeking direct admission to second year of B.Tech. (for engineering diploma holders and B.Sc. graduates both), are required to submit the online application forms for appearing in the specified paper of entrance test followed by counseling.

(ii) Such seats are limited to a maximum of 20% of the sanctioned intake in different B.Tech. courses as supernumerary basis.

(iii) Provided further that, the candidates belonging to B.Sc. stream shall be considered only after filling the seats in this category with the candidates belonging to the diploma stream.

10.2 SEATS UNDER DIFFERENT QUOTA IN FIRST YEAR.

(i) All admission in various courses offered at University will be through MET and JEE (Mains)-2020after deducting the seats filled under **section 10.3**.

(ii) The admission of 90% seats of total intake in B.Tech. First Year will be done on the basis of merit list of MET and remaining 10% seats of B.Tech. First Year will be filled up on the basis of merit of candidates from JEE (Mains) Examination-2020 from the candidates passed the qualifying examination from UP or the candidates whose parents are domicile of UP.

(iii) The admission of 10% supernumerary seats of total intake in B.Tech. First Year will be done on the basis of merit of candidates from JEE (Mains) Examination-2020who have appeared in JEE (Mains) Examination-2020 from any Indian state other than Uttar Pradesh.

(iv) The seats in BBA/MBA/MCA/MSc will be filled through the MET as per the merit of candidates, who have passed the qualifying examination from any institution located in U.P. or whose parents are domicile of U.P subject to the eligibility conditions given in the admission brochure. If the candidate has passed qualifying examination from outside of U.P., he/she has to produce domicile certificate of his/her parents **(father/mother only)** at the time of document verification. The candidates having domicile status of outside U.P. will be considered only if seats are vacant.

(v) The sponsored candidates from any industry/organizations with working experience of minimum two years may also be considered for admission on limited seats in M.Tech. on supernumerary basis as per University rules.

(vi) Admission to the M.Tech. programme shall be first given to the GATE qualified candidates with qualifications stated in section 11.2. They don't need to appear in MET-2020. MET qualified candidates shall be admitted only against those M.Tech. seats which shall remain vacant after admitting GATE qualified candidates.

(vii) In the admission of courses, the reservation policy as prescribed by technical education department, U.P. State Govt. shall be applicable.

10.3 ADMISSION OFNON-RESIDENT INDIAN (NRI) CANDIDATES IN FIRST YEAR B.TECH.

Non-Resident Indian (NRI) candidates, who possess prescribed qualifications (refer **section 11.4**), may get direct admission in 1st year B.Tech. on 5% seats of total intake in respective B.Tech. course on merit, subject to the latest instructions of the University and UP government. The detailed information will be published in the month of **May,2020** on University website. The candidates, opting for admission under this quota, need not to appear in MET.

10.4 ADMISSION TO KASHMIRI MIGRANTS IN FIRST YEAR B.TECH.

Direct admission to Kashmiri Migrants in first year may be made as per latest instructions of AICTE/UGC/UP Govt. on the number of seats as notified, for which the notification for inviting applications for admission may be published in the month of **May,2020**onUniversitywebsite. The candidates, opting for admission under this quota, need not to appear in MET.

10.5 ADMISSION TO FEE WAIVER SEATS FOR ECONOMICALLY WEAKER MERITORIOUS STUDENTS IN B.TECH.

Asper **AICTE/UGC** notification, the maximum of 5% seats of approved intake in the respective B.Tech. courses will be available under **Fee Waiver** category for the economically weaker meritorious candidates on supernumerary basis. No tuition fee will be charged from the

candidates admitted against such seats; however, such candidates will have to pay all other fees and charges as applicable. **The economically weaker candidates** (annual income of parents/guardians being less than Rs. 6.00 lac from all sources or as prescribed by AICTE/UGC/UP Government at the time of counseling) **must submit certificate no. 12 (income certificate) at the time of document verification during the counseling.**

11. ELIGIBILITY CRITERIA

The candidates must fulfill the eligibility criteria as given in **section11.1/11.2/11.3**to appear in MET for the respective course as per the prescribed schedule. The details of the eligibility conditions are given below.

11.1 ELIGIBILITY CONDITIONS FOR ADMISSION IN B.TECH., BBA, MBA, MCA AND M.SC. COURSES

The candidates shall have to provide evidence of fulfilling the eligibility criteria as given herein at the time of document verification during the counseling.

(i) **B.Tech. First Year**: The candidate should have passed 10 + 2 examination with at least 55%marks (50%in case of candidate belonging to SC/ST category) and with at least 60% average marks (55%in case of candidate belonging to SC/ST category) in Mathematics, Physics and Chemistry.

(ii) **2nd year B.Tech.**: For admission to second year of B.Tech. under lateral entry:

(a) **Diploma holders**: Passed 3/4 year diploma examination from an institution recognized by U.P. Board of Technical Education in any branch of engineering/technology except agriculture engineering with at least 60% marks (55% in case of candidates belonging to SC/ST category).

(b) **B.Sc. graduates**: Passed 3/4 year B.Sc. degree from any recognized University of India as defined by UGC with at least 60% marks (55% in case of candidates belonging to SC/ST category) and having passed 10+2 exam with Mathematics as a subject.

The candidates belonging to B.Sc. stream shall be considered only after filling the seats with the candidates belonging to the diploma stream.

(iii) **B.B.A.**: The candidate should have passed 10 + 2 examination in any discipline, with at least 55% marks (50% in case of candidate belonging to SC/ST category) and English must be one of the subjects at 10+2 level.

(iv) **M.B.A.**: The candidate should have passed the recognized Bachelor's degree of minimum three years duration from any University of India as recognized by UGC with at least 50% marks (45% in case of candidates belonging to SC/ST category) in the qualifying examination.

(v) **M.C.A.**: The candidate should have passed the recognized Bachelor's degree of minimum three years duration from any University of India as defined by UGC with mathematics at 10+2 level and obtained minimum 50% marks (45% in case of candidates belonging to SC/ST category) in the qualifying examination.

(vi) **M.Sc. Physics:** The candidate should have passed the recognized Bachelor's degree in science stream of minimum three years duration from any University of India as recognized by UGC. The candidates must have passed qualifying examination with Physics as a subject for all the three years and with mathematics as another subject for

at least two years and obtained minimum 50% marks (45% in case of candidates belonging to SC/ST category) in the qualifying examination.

(vii) **M.Sc. Maths:** The candidate should have passed the recognized Bachelor's degree in science stream of minimum three years duration from any University of India as recognized by UGC. The candidates must have passed qualifying examination with Mathematics as a subject for all the three years and obtained minimum 50% marks (45% in case of candidates belonging to SC/ST category) in the qualifying examination.

(viii) **M.Sc. Chemistry:** The candidate should have passed the recognized Bachelor's degree in science stream of minimum three years duration from any University of India as recognized by UGC. The candidates must have passed qualifying examination with Chemistry as a subject for all the three years and obtained minimum 50% marks (45% in case of candidates belonging to SC/ST category) in the qualifying examination.

11.2 ELIGIBILITY CONDITIONS FOR ADMISSION IN M.TECH. COURSES

Admission test will be open to the Indian Nationals who have passed/appearing in the qualifying examination, fulfilling the eligibility requirements given below. GATE qualified candidates with qualifications stated below will be given first preference and MET qualified candidates shall be admitted only against those M.Tech. seats which shall remain vacant after admitting GATE qualified candidates. The candidates who are not domicile of U.P. will be eligible to take admission against general seats only. The reservation policy as prescribed by the U.P. State Government shall be applicable for admissions of UP domicile candidates only. Candidates applying under sponsored category should possess the working experience of minimum two years in any industry/organization and shall be required to provide Sponsorship Certificate from sponsoring organization/industry at the time of counseling. The admission to such candidates shall be on supernumerary basis as per University rules.

All GATE qualified candidates shall receive monthly stipend as per the norms of AICTE. The top three MET qualified candidates of each M.Tech. specializations who are not receiving any scholarship/stipend from any other source shall receive a monthly scholarship of Rs. 2000/-subject to the terms and conditions prescribed by the University.

Sl. No.	Departments	Specialization	Eligibility Qualification
1.	Civil Engineering	Environmental Engineering	B.E./B.Tech. or equivalent Engineering degree in Civil/ Environmental/ Chemical/ Structural/ Agricultural/ Construction Technology/ Construction Technology and Management with First Class or, if a class/ division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to first class/ division.

		Hill Area Development Engineering	B.E./B.Tech. or equivalent Engineering degree in Civil/Environmental/Structural/Agricultural/ Construction Technology/Construction Technology and Management with First Class or, if a class/ division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to first class/ division.
		Structural Engineering	B.E./B.Tech. or equivalent Engineering degree in Civil/ Structural/ Construction Technology/ Construction Technology and Management with First Class or, if a class/ division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to first class/ division.
		Seismic Design and Earthquake Engineering	B.E./ B.Tech. or equivalent Engineering degree in Civil/ Structural/ Construction Technology/ Construction Technology and Management with First Class or, if a class/ division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to first class/ division.
2.	Computer Science and Engineering	Computer Science and Engineering	B.E./B.Tech. or equivalent Engineering degree in Computer Science/ Computer Sc. and Engineering/ Computer Engineering/ Software Engineering with First Class or, if a class/ division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to first class/ division.
3.	Information Technology & Computer Applications	Information Technology	B.E./B.Tech. or equivalent Engineering degree in Information Technology/Computer Science/Computer Sc. and Engineering/Computer Engineering/Software Engineering/MCA with First Class or, if a class/ division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to first class/ division.
4.	Electrical Engineering	Power Electronics& Drives	B.E./B.Tech. or equivalent Engineering degree in either Electrical Engineering (EE) or Electrical and Electronics Engineering (EN) with First Class or, if a class/ division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to first class/ division.
		Control & Instrumentation	B.E./B.Tech. or equivalent Engineering degree in Engineering /Technology in Electrical Engineering, Electrical and Electronics Engineering, Instrumentation and Control Engineering, and Instrumentation Engineering with First Class or, if a class/ division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to first class/ division.
5.	Electronics and Communication Engineering	Digital Systems	B.E./B.Tech. or equivalent Engineering degree in Electronics Engineering, Electronics and Communication Engineering, Electronics and Telecommunication Engineering and Electronics and Instrumentation Engineering with First Class or, if a class/ division is not awarded, and CGPA/CPI is adopted, 6.75 will be considered equivalent to first class/ division.

		Communication Engineering	B.E./B.Tech. or equivalent Engineering degree in Electronics Engineering, Electronics and Communication Engineering, Electronics and Telecommunication Engineering or if a class/ division is not awarded and CGPA/CPI is adopted,6.75 will be considered equivalent to first class/ division.
6.	Mechanical Engineering	Computer Integrated Manufacturing	B.E./B.Tech. or equivalent. Engineering degree in Mechanical / Production / Industrial / Manufacturing / Automobile / Aerospace Engineering/Aeronautical Engineering or if a class/ division is not awarded and CGPA/CPI is adopted,6.75 will be considered equivalent to first class/ division.
		Energy Technology and Management	B.E./B.Tech. or equivalent Engineering degree in Mechanical / Production / Industrial /Energy /Chemical /Automobile/ Aerospace Engineering /Space Engineering and Rocketry or if a class/ division is not awarded and CGPA/CPI is adopted,6.75 will be considered equivalent to first class/ division.

11.3 ELIGIBILITY CONDITIONS FOR ADMISSION IN Ph.D. COURSES

(i) Entrance test will be open to the Indian Nationals who have passed/appearing in the qualifying examination fulfilling the eligibility requirement as given below.

"Candidates who possess the Bachelor and master's degree in Engineering/ Technology/Science/Management or equivalent in the relevant discipline with 1st Division in Master Degree are eligible for the admission to Ph.D. Programme".

Regular PhD seats are available with fellowship under the **Research cum Teaching Fellowship scheme** in the University which will be notified at the time of counseling for the limited period. Candidates opting for research cum teaching fellowship will have to opt this at the time of counseling and appear for the interview. Such regular PhD candidates will share limited teaching load in his/her respective department and shall receive fellowship (at present Rs. 25000/- per month and contingency of Rs. 30,000/- per year subject to the terms and conditions prescribed by the University) under this scheme. The weightage of marks in the entrance test and interview will be in the ratio of 70% and 30%, respectively, for preparing the merit in a particular specialization. The total number of candidates called for interview in each specialization will be three times of the available seats. The eligible candidates will be admitted in a particular specialization on the basis of cumulative merit (both test and interview), and as per the availability of faculty members in the particular specialization.

(ii) The University may admit candidates to Full-Time Ph.D. programme who have qualified a National Level test which entitles them for the award of Senior/Junior Research Fellowship/ any other Fellowship or the candidates working in any externally funded project in the university. The University may also admit its PG pursuing students well in advance to Ph.D. programme if they have qualified above national level test for the purpose of award of scholarship. The candidates of above such categories will be selected on the basis of personal interview without appearing in the University's Ph.D. Admission Test provided that they fulfill the eligibility norms of the University ordinance.

(iii) Part-Time PhD is also available in all departments of the university. A candidate working in a research centre recognized by the University, Regular/ contractual faculty members of this University/Employees working in Govt./ Govt. aided / Private Engineering colleges/Universities/Industries/Public sector organizations shall be considered for the

admission under part-time category subject to the terms and conditions prescribed by the University. For such candidates a separate notification and application form (not the MET-2020 online application form) for written examination/Interview shall be issued by the university separately.

11.4 ELIGIBILITY FOR ADMISSION TO NRI QUOTA IN FIRST YEAR B.TECH.

NRI candidates who possess minimum requisite qualification may get direct admission on 5%seats of respective discipline in B.Tech. 1styear only. Such candidates need not to appear in the MET. The process of admission shall be as follows:

(i) NRI quota seats shall be filled from NRI's, who

(a) have passed the qualifying examination with Physics, Chemistry and Mathematics from an Institution situated outside India, which is considered equivalent to (10+2) examination by the Association of Indian Universities.

OR

have passed High School General Certificateof Education (GCE) examination with Physics, Chemistry and Higher Mathematics (A) from London/ Cambridge/Sri Lanka.

(b) have appeared in SAT-II examination with Mathematics level II C, Physics and Chemistry. Their relative merit will be decided on their SAT-II score.

(ii) The vacant seats in NRI quota, if any, shall be filled up by such son/daughter/real brother /real sister of NRI's, who have passed 10 + 2 examination with at least 60% marks (55% for SC/ST candidates)and also with at least 50% marks in Mathematics, Physics and Chemistry each without grace marks from an institution situated in India.

(iii) The relative merit of candidates will be decided based on the total marks obtained by them in physics, chemistry and mathematics.

(iv) All such candidates must submit an NRI certificate obtained from Indian Diplomatic Mission/Chancellery/High Commission under their sealat the time of counseling**.**

(v) The candidate MUST also submit sufficient documents clarifying without ambiguity their true relationship with the sponsoring NRI for full duration till completion of the course upto the satisfaction of the University.

(vi) The candidates will be informed separately about the date of counseling, and number of seats under this quota through University website, and they are required to be present in person on the day of counseling with original documents/certificates, failing which they will lose their claim.

(vii) **The latest orders issued by the Government of U.P./University upto the date of NRI counseling shall be applicable for admission to NRI quota**.

(viii) The detailed information will be published only through website: **www.mmmut.ac.in** in the month of **May,2020**.

12. CATEGORY DEFINITIONS*

12.1 Candidates, who have passed the qualifying examination from an institution located in the State of Uttar Pradesh and who do not claim for any reserved category are eligible for admission to all the courses in the University against available General (OPEN) seats (No certificate required).

[Code: **UPGE**]

12.2 Candidates, who have passed the qualifying examination from an institution located in U.P. and are domicile of U.P.; and belong to Schedule Caste (SC) of U.P./Schedule Tribe

(ST) of U.P./Other Backward Classes of U.P./Economically Weaker Section (EWS) of U.P. are eligible for admission against available reserved seats of their respective category. Certificate 1 or 2 or 13A and 13B as applicable is required. List of SC, ST and OBC castes as per SC/ST Act 1976 and Government Order 4/1/2001-TC/Ka-2/2002 dt. 19/09/2002 and as provided by concerned U.P. Govt. department is detailed in **Appendix E.**

[Respective Codes: **UPSC/UPST/UPBC/UPEW**]

12.3   Candidates, who have passed the qualifying examination from an institution located outside U.P. and whose parents are domicile of U.P.; and who have not claimed for any reserved category, are also eligible for admission to courses offered in the University under General (OPEN) category. Such candidate has to produce the domicile certificate of his/her parents (**father/mother only**) at the time of counseling (Certificate 3 in **Appendix D**)

[Code: **UPGD**]

12.4   Candidates, who have passed the qualifying examination from an institution located outside U.P.; and whose parents are domicile of U.P.; and who belong to Schedule Caste of U.P./Schedule Tribe of U.P./Other Backward classes of U.P. /Economically Weaker Section (EWS) of U.P. are also eligible for admission against reserved seats of their category. Such candidate has to produce the domicile certificate of his/her parents (**Father/Mother only)** (Certificate 3) and category certificate (Certificate 1 or 2 or 13A and 13B as applicable) at the time of counseling. List of SC, ST and OBC castes as per SC/ST Act 1976 and Government Order 4/1/2001-TC/Ka-2/2002 dt. 19/09/2002 and as provided by concerned U.P. Govt. department is detailed in **Appendix E.**

[Respective Codes:
GDSC/GDST/GDBC/GDEW]

12.5   The domicile requirement to son/daughter of following is **relaxed** and admission is permitted to such:

(i). Defence personnel settled in U.P. on the date of Admission Test after retirement/being disabled in action or defence personnel killed in action and the dependents settled in U.P. on the date of entrance test. Certificate 5 **Appendix-D** is required.

(ii). Defence personnel who are not domicile of U.P. but are posted in U.P. on the date of entrance test. Certificate 5 in **Appendix-D** is required.

(iii). Employee of **All India services** belonging to U.P. cadre. Certificate 11 in **Appendix-D** is required.

GDDA candidates will be considered as UPGD category for all other benefits.

[Code: **GDDA**]

12.6   For Admission to M.Tech/Ph.D. program, the candidates, who have passed the qualifying examination from an institution located outside U.P. and whose parents are NOT domicile of U.P. are also eligible for admission to M.Tech./Ph.D. courses offered in the University under General (OPEN) category. (no certificate required)

[Code: **OSGE**]

* Proforma of various certificates is available in **Appendix–D**. In case of the online category/reservation certificates, the advantage of the reserved category shall be provided subject to their online validation through respective statutory website, failing which such candidate will not be entitled for the advantage of reserve category and they will be treated in general category. In case of the candidates who do not submit the proper category/reservation certificate in the

prescribed proforma at the time of document verification, the advantage of reserved category shall not be provided to them and they will be treated in General Category.

13. RESERVATIONS*

13.1   Vertical Reservation (Category):

S.N.	Category	Percentage of Reservation
(a)	Scheduled Caste of U.P.	21%
(b)	Scheduled Tribe of U.P.	2%
(c)	Other Backward Classes of U.P.	27%
(d)	Economically Weaker Section of U.P.	10%

13.2   Horizontal Reservation (Sub-category in each vertical reservation category): **Not Applicable for M.Tech./Ph.D.**

S.N.	Sub-Category	Code	Maximum Percentage of Total Seats
(a)	Dependents of Freedom Fighters from U.P.	UPFF	2%
(b)	Sons/Daughters of 'defence personnel of U.P. either retired (superannuated) or killed/disabled in action' or 'defence personnel posted in U.P.'	UPAF	5%
(c)	Handicapped/Disabled of U.P.	UPHC	5%
(d)	Girls of U.P.	UPGL	20%

* Subject to change as per latest instructions of Govt. of U.P. till the date of counseling.

13.3   The candidates can claim only one type of horizontal reservation out of UPFF/UPAF/UPHC. However, the girl candidates can also claim for any one of UPFF/UPAF/UPHC along with UPGL.

13.4   Subsequent request for the change of category/sub-category filled in On-line submission shall not be entertained under any circumstances.

13.5   Category/sub-category must be supported by the relevant certificates as per proforma given in the **Appendix-D** to be produced at the time of document verification in counseling, failing which the candidates shall be treated under General Category.

13.6   The advantage of horizontal reservation in Armed force sub-category is available to sons/daughters of 'defence personnel of U.P. either retired (superannuated) or killed/disabled in action and the dependents settled in U.P.' or 'the defence personnel posted in U.P.' on the date of entrance test.

13.7   Certificate 4, 5 and 6 in **Appendix-D**are required at the time of document verification, for claiming reservations in subcategories mentioned at **section13.2** (a), (b) and (c) respectively.

13.8   Please note that benefit of UPGL subcategory will automatically be given to all the female candidates.

14. WEIGHTAGE TO CANDIDATES FROM RURAL AREAS OF UTTAR PRADESH

14.1 A weightage of 3% of the total marks obtained at MET will be given to such UPGE candidates for 1ˢᵗ year of B.Tech./BBA course, who have passed the qualifying examination from an institution situated in rural area of Uttar Pradesh.

14.2 For this purpose, the institutions should be situated in the jurisdiction of Gram Panchayat but the area should not be industrially developed area. Such candidates must produce the Certificate -7 at the time of document verification during counseling.

14.3 Rural weightage is not applicable to a candidate opting for any other reservation (OBC/SC/ST) including UPGL and to a candidate opting direct admission to second year B.Tech. and MBA/ MCA/ M.Tech./ M.Sc./ Ph.D.

14.4 Rural weightage is not applicable for candidates under UPGD category defined in section12.3.

15. MEDICAL STANDARDS

15.1 Candidates will have to submit a certificate of medical fitness/handicap on Certificate 9 in **Appendix D** at the time of document verification.

15.2 The medical standards prescribed are as given below:

Medical Standards Applicable:

Height	Candidate should be Physically fit to pursue his/her studies in the opted course.
Weight	
Chest measurement	
Heart and lungs	No abnormality
Hernia, hydrocele, piles etc.	Presence of any of these is to be essentially corrected before joining.
Vision	Normal. If defective, it must be got corrected to 6/9 in the better eye and 6/12 in the worse one. Eyes should be free from congenital or any other disease.
Hearing	Normal. If defective, it must be got corrected before joining.
Physically handicapped/ disabled	The candidate having any one type of physical handicap/ disability given below.

Physically Handicapped/Disabled:

Type – I	Minimum 40% Permanent Visual Impairment
Type – II	Minimum 40% Permanent Locomotors Disability
Type – III	Minimum 40% Permanent Speech and Hearing Impairment

16. UNIVERSITY FEE DETAILS

The University fee structure for various courses

S No	Course	Year	For Hostlers #	For Non Hostlers *
1.	B.Tech.	Iˢᵗ Year	Rs 1,10,000/-	Rs 90,000/-
2.	B.Tech.- (Lateral)	IIⁿᵈ Year	Rs 1,10,000/-(for girls only)	Rs 90,000/-

3.	BBA	Iˢᵗ Year	Rs 95,000/-	Rs. 75,000/-
4.	MCA	Iˢᵗ Year	Rs 85,000/-	Rs 65,000/-
5.	MBA	Iˢᵗ Year	Rs 1,15,000/- (for girls only)	Rs 95,000/-
6.	M.Tech.	Iˢᵗ Year	Rs.95,000/-	Rs 75,000/-
7.	M.Sc.	Iˢᵗ Year	Rs.71,000/- (for girls only)	Rs. 51000/-
8.	Ph.D.	Iˢᵗ Year	Rs 80,000/-	Rs 60,000/-

Inclusive of refundable Rs. 10,000/- against "University and Hostel Caution Money"

*Inclusive of refundable Rs. 5,000/- against "University Caution Money"

> **Note:** In case of non-availability of hostel, the hostel fee component as applicable shall be refunded to the candidate. The above structure may be revised by the University/UP Government directives from time to time.

17. IMPORTANT INSTRUCTIONS

17.1   The candidate must himself/herself ensure about his/her eligibility to appear in the Malaviya Entrance Test (MET). If a candidate, who is not eligible to appear in the examination, does so; he/she will not have any claim whatsoever, for admission to any course through MET.

17.2   Candidates, who are yet to appear in the qualifying examination or have appeared, but results are awaited, are also eligible to appear in the MET. However, the candidates in respect of whom, the result of the qualifying examination has not been declared by the date of document verification due to any reason whatsoever, shall not be eligible for admission under any circumstances.

17.3   Entrance Test for B.Tech./BBA/MBA/MCA/M.Sc./Ph.D.is open to the candidates who have passed the qualifying examination from any institution located in U.P. or whose parents are domicile of U.P subject to the eligibility conditions given in this Admission Brochure. However, for admission to M.Tech /Ph.D. program, the candidates, who have passed the qualifying examination from an institution located outside U.P. and whose parents are NOT domicile of U.P. are also eligible to appear in the entrance test for admission to M.Tech./Ph.D. courses offered in the University only under General (OPEN) category. For B.Tech./BBA/MBA/MCA/M.Sc., if the candidate has passed qualifying examination from outside of U.P., he/she has to produce domicile certificate of his/her parents (**father/mother only)** at the time of verification of documents, failing which the candidature shall stand cancelled. In MCA/MBA/M.Sc. courses the preference shall be given to the candidates having domicile status of Uttar Pradesh (U.P.) and subsequently the candidate having domicile outside U.P. will be considered only, if seats are vacant.

17.4   Accepting admission in the University implies acceptance by the candidate and his/her parents or guardians, of all the provisions given in this admission brochure and the University rules as applicable. Any change in the rules, regulations, fees and special conditions, etc. of the University shall mutatis mutandis apply to the admitted candidate.

17.5   Candidates seeking advantage of reserved categories, weightage, etc. are required to indicate the same but **not to enclose any supporting certificates with the application form. The advantage of horizontal reservation is not admissible to the candidates seeking admission to M.Tech./Ph.D.** These certificates will have to be produced in original at the time of document verification along with one attested copy of each one of them. The proforma of certificates are given at the end of this admission brochure at **Appendix-D**, these are subject to change even up to the starting date of counseling as per orders of Govt. of Uttar Pradesh/University. Candidates are essentially required to produce the respective certificates

in support of their claim for reservation on prescribed format only. Any deviation unless approved by the University in the proforma will deprive the candidate from the benefit being claimed. Note that the Certificate 2 for OBC candidates will be valid only when it is issued on or after **01.04.2020(mandatory due to conditions of creamy layer for OBC).**

17.6 The result of MET for respective courses as declared by the University shall be final. However, the candidate can get his/ her answer sheets scrutinized on payment of **Rs. 10,000/-** per paper within 7 days of declaration of result. The fee may be paid in the form of DD drawn in favour of **Madan Mohan Malaviya University of Technology, Gorakhpur payable** at **Gorakhpur.** The application for scrutiny may be submitted to **The Coordinator, Malaviya Entrance Test (MET), Madan Mohan Malaviya University of Technology, Deoria Road, Gorakhpur–273010**, in writing. This fee shall be refunded in case of genuinity of the claim.

17.7 If any document/declaration submitted by the candidate is found to be false at any stage, his/her candidature for admission shall be cancelled and he/she will be liable for prosecution under the law. **In case of any legal dispute regarding admission, the jurisdiction will be limited to Gorakhpur courts only.**

17.8 If any Board awards only letter grades without providing an equivalent percentage of marks on the grade sheet, the candidate should obtain a certificate from the Board specifying equivalent marks and submit it at the time of document verification. In case, such a certificate is not provided by the candidate, the decision of the University Admission Committee (UAC) regarding his/her eligibility shall be final.

17.9 The admit card, result, counseling schedule and all notifications in connection with MET shall be made available on the University's official website **www.mmmut.ac.in**. It is the responsibility of the candidate to visit the website and be informed about all information relevant to him/her. Therefore, the candidates are advised to refer to this website regularly failing which University will not be responsible for any loss due to lack of communication.

17.10 For any queries regarding MET, the contact numbers 8765783798, 9235500507 may be used from 10.00am to 5.00pm only on all days except gazetted holidays, and from 10.00 am to 1.00 pm on Sundays. For the queries through e-mail, the reply will be made after 24 hours.

17.11 The tentative dates of reporting for the newly admitted students are last week of **July 2020**. The exact date of reporting shall be notified on University website and shall also be informed to the candidate in the admission offer letter during the counseling.

Abbreviations used:

AICTE	–	All India Council for Technical Education, New Delhi
UGC	–	University Grants Commission, New Delhi
MMMUT	–	Madan Mohan Malaviya University of Technology, Gorakhpur
MBA	–	Master of Business Administration
B.Tech.	–	Bachelor of Technology
BBA	–	Bachelor of Business Administration
MCA	–	Master of Computer Applications
M.Tech.	–	Master of Technology
M.Sc.	-	Master of Science
Ph.D.	–	Doctor of Philosophy

CODES FOR ELIGIBILITY QUALIFICATIONS FOR M.TECH. COURSES

Discipline of BE / B.Tech.	Code	Discipline of BE / B.Tech.	Code
Automobile Engineering	01	Electronics and Telecom. Engineering	16
Agricultural Engineering	02	Energy Engineering	17
Aerospace/Aeronautical Engineering	03	Environmental Engineering	18
Chemical Engineering	04	Industrial Engineering	19
Civil Engineering	05	Information Technology	20
Computer Engineering	06	Instrumentation and Control Engineering	21
Computer Science	07	Instrumentation Engineering	22
Computer Science and Engineering	08	Manufacturing Technology /Engineering	23
Construction Technology	09	Production Engineering	24
Construction Technology and Management	10	Structural Engineering	25
Electrical and Electronics Engineering	11	Master of Computer Applications (MCA)	26
Electrical Engineering	12	Mechanical Engineering	27
Electronics and Instrumentation Engineering,	13	Space Engineering & Rocketry	28
Electronics Engineering,	14	Software Engineering	29
Electronics and Communication Engineering,	15		

LIST OF EXAMINATION CITIES

List of cities where MET-2020 is likely to be conducted:

City	City Code
AGRA	01
AYODHYA	02
BAREILY	03
DEHRADUN	04
GORAKHPUR	05
JHANSI	06
KANPUR	07
LUCKNOW	08
MEERUT	09
NOIDA/Gr. NOIDA/GHAZIABAD	10
PRAYAGRAJ	11
VARANASI	12

SYLLABI FOR MALVIYA ENTRANCE TEST (MET)

PAPER – 1 (PHYSICS, CHEMISTRYAND MATHEMATICS)

Section –A: Physics

Measurement: Dimensional analysis and error estimation, dimensional compatibility and significant figures.

Motion in one dimension: Average velocity, instantaneous velocity, one-dimensional motion with constant accelerations, freely falling bodies.

Laws of Motion: Force and inertia, Newton's laws of motion, and their significance.

Motion in two dimensions: Projectile motion, uniform circular motion, tangential and radial acceleration in curve-linear motion, relative motion and relative acceleration.

Work, Power and Energy: Work done by a constant and variable forces, kinetic and potential energy, power, Conservative and non conservative forces, conservation of energy, gravitational energy, work energy theorem, potential energy stored in a spring.

Linear Momentum and collisions: Linear momentum and impulse, conservation of linear momentum for two particle system, collisions, collision in one dimension, collision in two dimension, rocket propulsion.

Rotation of a rigid body about a fixed axis: Angular velocity and angular acceleration, rotational kinematics, rotational motion with constant angular acceleration relationship between angular and linear quantities, rotational energy, moment of inertia for a ring, rod, spherical shell, sphere and plane lamina, torque and angular acceleration, work and energy in rotational motion, rolling motion ofasolidsphere and cylinder.

Gravitation: Gravitational field, Kepler's laws and motion of planets, planetary and satellite motion, geostationary satellite.

Oscillatory motion: Harmonic motion, oscillatory motion of mass attached to a spring, kinetic & potential energy, Time Period of a simple pendulum, comparing simple and harmonic motion with uniform circular motion, forced oscillations, damped oscillations and resonance.

Mechanics of solids and fluids: States of matter young's modulus, bulk modulus, shear modulus of rigidity, variations of pressure with depth, Buoyant forces and Archimedes principle, Pascal's law, Bernoulli's theorem and its application, surface energy, surface tension, angle of contact, capillary rise, coefficient of viscosity, viscous force, terminal velocity, Stoke's law, stream line motion, Reynold's numbers.

Heat and thermodynamics: First law of thermodynamics, specific heat of an ideal gas at constant volume and constant pressure, relation between them, thermodynamics process (reversible, irreversible, isothermal, adiabatic), second law of thermodynamics, concept of entropy and concept of absolute scale, efficiency of a Carnot engine, thermal conductivity, Newton's law of cooling, blackbody radiation, Wien's displacement law, Stefan's law.

Wave: Wave motion, phase, amplitude and velocity of wave, newton's formula for longitudinal waves, propagation of sound waves in air, effect of temperature and pressure on velocity of sound, Laplace's correction, Principle of superposition, formation of standing waves, standing waves in strings and pipes, beats, Doppler's effect.

Electrostatics: Coulomb's law, electric field and potential due to point charge, dipole and its field along the axis and perpendicular to axis, electric flux, Gauss's theorem and its applications to find the field due to infinite sheet of charge, and inside the hallow conducting sphere, capacitance, parallel plate capacitor with air and dielectric medium between the Plates, series and parallel combination of capacitors, energy of a capacitor, displacement currents.

Current Electricity: Concept of free and bound electrons, drift velocity and mobility, electric current, Ohm's law, resistivity, conductivity, temperature dependency of resistance, resistance in series and parallel combination, Kirchhoff's law and their application to network of resistances, principle of potentiometer, effect of temperature on resistance and its application.

Magnetic Effect of Current: Magnetic field due to current, Biot-Savart's law, magnetic field due to solenoid, motion of charge in a magnetic field, force on a current carrying conductors and torque on current loop in a magnetic

field, magnetic flux, forces between two parallel current carrying conductors, moving coil galvanometer and its conversion into ammeter and voltmeter.

Magnetism in Matter: The magnetization of substance due to orbital and spin motions of electrons, magnetic moment of atoms, diamagnetism, paramagnetism, ferromagnetism, earth's magnetic field and its components and their measurement.

Electromagnetic induction: Induced e.m.f., Faraday's laws, Lenz's law, electromagnetic induction, self and mutual induction, B-H curve, hysteresis loss and its importance, eddy currents.

Ray Optics and optical instruments: Sources of light, luminous intensity, luminous flux, illuminance, photometry, wave nature of light, Huygens's theory for propagation of light and rectilinear propagation of light, reflection of light, total internal reflection, reflection and refraction at spherical surfaces, focal length of a combination of lenses, spherical and chromatic aberration and their removal, refraction and dispersion of light due to a prism, simple and compound microscope, reflecting and refracting telescope, magnifying power and resolving power.

Wave Optics: Coherent and incoherent sources of light, interference, young's double slit experiment diffraction due to a single slit, linearly polarized light, Polaroid.

Modern Physics: Photo-electric equation, matter waves, quantization, Planck's hypothesis, Bohr's model of hydrogen atom and its spectra, neutralization potential, Rydberg constant, solar spectrum and Fraunhofer lines, fluorescence and phosphorescence, X-Rays and their productions, characteristic and continuous spectra.

Nuclear Instability, radioactive decay laws, Emission of α, β, γ rays, Mass – defect, Mass Energy equivalence, Nuclear Fission Nuclear Reactors, Nuclear Fusion.

Classification of conductors, Insulators and semiconductors on the basis of energy bands in solids, PN junction, PN Diode, junction Transistors, Transistor as an amplifier and Oscillator.

Principles of Logic Gates (AND, OR and NOT) Analog Vs Digital communication, Difference between Radio and television, Signal propagation, Principle of LASER and MASER, Population Inversion, Spontaneous and stimulated Emission.

Section – B:Chemistry

Atomic Structure: Bohr's concept. Quantum numbers, Electronic configuration, molecular orbital theory for homonuclear molecules, Pauli's exclusion principle.

Chemical Bonding: Electrovalence, co-valency, hybridization involving s,p and d orbital's hydrogen bonding.

Redox Reactions: Oxidation number, neutralizing and reducing agents, balancing of equations.

Chemical Equilibrium and Kinetics: Equilibrium constant (for gaseous system only) Le Chatterley's principle, ionic equilibrium, Ostwald's dilution law, hydrolysis, pH and buffer solution, solubility product, common-ion effect, rate constant and first order reaction.

Acid – Base Concepts: Bronsted Lowry& Lewis.

Electrochemistry: Electrode potential and electro-chemical series.

Catalysis: Types and applications.

Colloids: Types and preparation, Brownian movement, Tyndall effect, coagulation and peptization.

Colligative Properties of Solution: Lowering of vapour pressure, Osmotic pressure, depression of freezing point, elevation of boiling point, determination of molecular weight.

Periodic Table: Classification of elements on the basis of electronic configuration, properties of s,p and d block elements, ionization potential, electro negativity& electron affinity.

Preparation and Properties of the following: Hydrogen peroxide. Copper sulphate, silver nitrate, plaster of paris, borax, Mohr's salt, alums, white and red lead, microcosmic salt and bleaching powder, sodium thiosulphate.

Thermo chemistry: Exothermic & endothermic reactions Heat of reaction, Heat of combustion & formation, neutralization, Hess's law.

General Organic Chemistry: Shape of organic compounds, Inductive effect, mesomeric effect, electrophiles and nucleophiles, Reaction intermediates: carboniumion, carbanions & free radical, Types of organic reactions, Cannizzaro Friedel Craft, Perkin, Aldol condensation.

Isomerism: Structural, Geometrical & Optical

IUPAC: Nomenclature of simple organic compounds.

Polymers: Addition and condensation polymers

Carbohydrates: Monosaccharide's.

Preparation and Properties of the Followings: Hydrocarbons, monohydric alcohols, aldehydes, ketones, monocarboxylic acids, primary amines, benzene, nitrobenzene, aniline, phenol, benzaldehyde, benzoic acid, Grignard Reagent.

SolidState: Structure of simple ionic compounds, Crystal imperfections (point defects only), Born-Haber cycle

Petroleum: Important industrial fractions, cracking, octane number, anti-knocking compounds.

Section – C: Mathematics

Algebra: Sets relations & functions, De-Morgan's Law, Mapping Inverse relations, Equivalence relations, Peano's axioms, Definition of rationales and integers through equivalence relation, Indices and surds, Solutions of simultaneous and quadratic equations, A.P., G.P. and H.P., Special sums i.e. $\sum n^2$ and $\sum n^3$ ($n\sum N$), Partial fraction, Binomial theorem for any index, exponential series, Logarithm and Logarithmic series. Determinants and their use in solving simultaneous linear equations, Matrices, Algebra of matrices, Inverse of a matrix, Use of matrix for solving equations.

Probability: Definition, Dependent and independent events, Numerical problem on addition and multiplication, theorem of probability**.**

Trigonometry: Identities, Trigonometric equations, properties of triangles, solution of triangles, heights and distances, Inverse function, Complex numbers and their properties, Cube roots of unity, De-Moivre's theorem.

Co-ordinate Geometry: Pair of straight lines, Circles, General equation of second degree, parabola, ellipse and hyperbola, tracing of conics.

Calculus: Limits & continuity of functions, Differentiation of function of function, tangents & normal, Simple examples of Maxima & Minima, Indeterminate forms, Integration of function by parts, by substitution and by partial fraction, definite integral, application to volumes and surfaces of frustums of sphere, cone and cylinder. Differential equations of first order and first degree

Vectors: Algebra of vectors, scalar and vector products of two and three vectors and their applications.

Dynamics: Velocity, composition of velocity, relative velocity, acceleration, composition of accelerations, Motion under gravity, Projectiles, Laws of motion, Principles of conservation of momentum and energy, direct impact of smooth bodies.

Statics: Composition of coplanar, concurrent and parallel forces moments and couples resultant of set of coplanar forces and condition of equilibrium, determination of centroid in simple cases, Problems involving friction.

PAPER – 2 (APTITUDE TEST FOR DIPLOMA HOLDERS IN ENGINEERING)

Engineering Mechanics, Engineering Graphics, Basic Electrical Engg., Basic Electronics Engg., Elements of computer science, Basic Workshop Practice and Physics/Chemistry/Maths of Diploma standard.

PAPER-3 (APTITUDE TEST FOR BBA)

Qualitative and Quantitative Aptitude**:** Number System, Profit & Loss, Percentage & Average, Work & Time, HCF & LCM, Ratio & Proportion, Time-Speed-Distance, Algebra & Geometry, Coding & Decoding, Multidimensional Arrangements, Visual Reasoning, Course of Action, Critical Reasoning, Statement Conclusions, Pie Chart, Syllogisms, Puzzles

English**:** Verbal Reasoning, Syllogisms, Jumbled Paragraphs, Sentence Completion, Sentence Correction, Same Word & different usage, Idioms & Analogies, Synonyms & Antonyms, One-word Substitution.

PAPER – 4 (APTITUDE TEST FOR MBA)

The test is aimed at evaluating the verbal ability, quantitative aptitude, logical and abstract reasoning and knowledge of current affairs. The following is a brief description of contents of the test paper.

Section-A(English Language): Grammar, vocabulary, uncommon words, sentence completion, synonyms, antonyms, relationship between words and phrases and comprehension of passages.

Section-B(Numerical Aptitude): Numerical calculation, arithmetic, simple algebra, geometry and trigonometry, Interpretation of graphs, charts and tables.

Section-C (Thinking and Decision Making): Creative thinking, unfamiliar relationships, verbal reasoning, finding patterns trends and Assessment of figures and diagrams.

Section-D (General Awareness): Knowledge of current affairs and other issues related to trade, industry, economy, sports, culture and science.

PAPER – 5 (APTITUDE TEST FOR MCA)
(i)   MATHEMATICS
Modern Algebra: Idempotent law, identities, complementary laws, Demorgan's theorem, mapping, inverse relation, equivalence relation, Piano's Axiom, definition of rational numbers and integers through equivalence relation.

Algebra: Surds, solution of simultaneous and quadratic equations, arithmetic, geometric and harmonic progression, Binomial theorem for any index, logarithms, exponential and logarithmic series, determinants.

Probability: Definition, dependent and independent events, numerical problems on addition and multiplication of probability, theorems of probability.

Trigonometry: Simple identities, trigonometric equations, properties of triangles, use of mathematical tables, solution of triangles, height and distance, inverse functions, DeMoiver's theorem.

Co-Ordinate Geometry: Co-ordinate geometry of the straight lines, pair of straight lines, circle, parabola, ellipse and hyperbola and their properties.

Calculus: Differentiation of function of functions, tangents and normal, simple examples of maxima of minima, limits of function, integration of function (by parts, by substitution and by partial fraction), definite integral (application to volumes and surfaces of frustums of sphere, cone and cylinder).

Vectors: Position vector, addition and subtraction of vectors, scalar and vector products and their applications.

Dynamics: Velocity, composition of velocity, relative velocity, acceleration, composition of acceleration, motion under gravity, projectiles, laws of motions, principles of conservation of momentum and energy, direct impact of smooth bodies, pulleys.

Statics: Composition of co-planar, concurrent and parallel forces, moments and couples, resultant of set of coplanar forces and conditions of equilibrium, determination of Centroids in simple case, problems involving friction.

Statistics: Theory of probability, Mean, Median, Mode, Dispersion and Standard Deviation.

(ii)   COMPUTER AWARENESS
Organization of a computer, Central Processing Unit (CPU), Structure of instructions in CPU, input / output devices, computer memory, memory organization, back-up devices, Representation of characters, integers, and fractions, binary and hexadecimal representations, Binary Arithmetic: Addition, subtraction, division, multiplication, Logical Gates: AND, OR, NOT, XOR, NAND, Block structure of computers, peripheral devices, devices, Computer languages: Machine, Assembly and high-level language, Flow chart and Algorithms

(iii)   ANALYTICAL ABILITY
Questions shall be set to test analytical and reasoning capability of candidates.

PAPER-6 (M.Tech. Admission Test)
For admission to M.Tech. programme, the admission test shall include objective type questions from the core subjects of the respective disciplines.

PAPER-7 (M.Sc. Physics Admission Test)

Mathematical Methods: Calculus of single and multiple variables, partial derivatives, Jacobian, imperfect and perfect differentials, Taylor expansion, Fourier series. Vector algebra, Vector Calculus, Multiple integrals, Divergence theorem, Green's theorem, Stokes' theorem. First order equations and linear second order differential equations with constant coefficients. Matrices and determinants, Algebra of complex numbers.

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, Center 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, parallel and perpendicular axes theorem. Principal moments and axes. Kinematics of moving fluids, equation of continuity, Euler's equation, Bernoulli's theorem.

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, traveling 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. Fraunhofer diffraction. Rayleigh criterion and resolving power. Diffraction gratings. Polarization: linear, circular and elliptic polarization. Double refraction and optical rotation.

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. Displacement current, Maxwell's equations and plane electromagnetic waves, Poynting's theorem, reflection and refraction at a dielectric interface, transmission and reflection coefficients (normal incidence only). Lorentz Force and motion of charged 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 relations and simple applications. Thermodynamic potentials and their applications. Phase transitions and Clausius-Clapeyron equation. Ideas of ensembles, Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein distributions.

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, the superposition principle, calculation of expectation values, Schrodinger equation and its solution for one, two and three dimensional boxes. Solution of Schrodinger equation for the one-dimensional harmonic oscillator. Reflection and transmission at a step potential, Pauli exclusion principle. Structure of atomic nucleus, mass and binding energy. Radioactivity and its applications. Laws of radioactive decay.

Solid State Physics, Devices and Electronics: Crystal structure, Bravais lattices and basis. Miller indices. X-ray diffraction and Bragg's law; Intrinsic and extrinsic semiconductors, variation of resistivity with temperature. Fermi

level. p-n junction diode, I-V characteristics, Zener diode and its applications, BJT: characteristics in CB, CE, CC modes. Single stage amplifier, two stage R-C coupled amplifiers. Simple Oscillators: Barkhausen condition, sinusoidal oscillators. OPAMP and applications: Inverting and non-inverting amplifier. Boolean algebra: Binary number systems; conversion from one system to another system; binary addition and subtraction. Logic Gates AND, OR, NOT, NAND, NOR exclusive OR; Truth tables; combination of gates; de Morgan's theorem.

Atomic Physics and Laser: Bohr and Sommerfeld model of atom. Idea of discrete energy levels and electron spin: Fanck – Hertz and Stern – Gerlach experiments. Significance of four quantum numbers and concept of atomic orbitals. Orbital magnetic dipole moment, Orbital, spin and total angular momenta, Larmor precession, Vector model of atom, Electronic configuration and atomic states, Spin-orbit interaction and fine structure, Intensity of spectral lines, General selection rules. Normal Zeeman Effect. Two valence electron atoms: LS and JJ coupling schemes and resulting spectra. Idea of normal and inverted doublet. Basics of stark effect. Einstein coefficients, Threshold condition for LASER action, Rate equation for three level laser system, Characteristics of laser radiation. He-Ne and Nd-YAG Laser. Significance of non-linear polarization of lasers and some applications: Second harmonic generation using non-linear optical methods.

PAPER-7 (M.Sc. Maths Admission Test)

Sequences and Series of Real Numbers: Sequence of real numbers, convergence of sequences, bounded and monotone sequences, convergence criteria for sequences of real numbers, Cauchy sequences, subsequences, Bolzano-Weierstrass theorem. Series of real numbers, absolute convergence, tests of convergence for series of positive terms- comparison test, ratio test, root test; Leibniz test for convergence of alternating series.

Mathematical Programming: Simplex method, Dual Simplex method, Transportation Problem, Assignment Problem, Game Theory.

Numerical Analysis: Finite differences, Numerical solutions of algebraic equation, Method of iteration and Newton-Raphson method, Rate of convergence, Solution of systems of linear algebraic equations using Gauss elimination and Gauss-Seidel method.

Integral Calculus: Integration as the inverse process of differentiation, definite integrals and their properties, fundamental theorem of calculus. Double and triple integrals, change of order of integration, calculating surface areas and volumes using double integrals, calculating volumes using triple integrals.

Differential Equations: Ordinary differential equations of the first order of the form $y'=f(x,y)$, Bernoulli's equation, exact differential equations, integrating factor, orthogonal trajectories, homogeneous differential equations, variable separable equations, linear differential equations of second order with constant coefficients, method of variation of parameters, Cauchy-Euler equation.

Vector Calculus: Scalar and vector fields, gradient, divergence, curl, line integrals, surface integrals, Green, Stokes and Gauss theorems.

Group Theory: Groups, subgroups, Abelian groups, non-Abelian groups, cyclic groups, permutation groups, normal subgroups, Lagrange's Theorem for finite groups, group homomorphisms and basic concepts of quotient groups.

Linear Algebra: Finite dimensional vector spaces, linear independence of vectors, basis, dimension, linear transformations, matrix representation, range space, null space, rank-nullity theorem. Rank and inverse of a matrix, determinant, solutions of systems of linear equations, consistency conditions, eigen values and eigenvectors for matrices, Cayley-Hamilton theorem.

Real Analysis: Interior points, limit points, open sets, closed sets, bounded sets, connected sets, compact sets, completeness of R. Power series (of real variable), Taylor's series, radius and interval of convergence, term-wise differentiation and integration of power series. Functions of One Real Variable: Limit, continuity, partial derivatives, differentiability, maxima and minima. Functions of Two or Three Real Variables: Limit, continuity, partial derivatives, differentiability, maxima and minima.

PAPER-7 (M.Sc. Chemistry Admission Test)

Reactions and reagents: Organometallic compounds - Grignard reagent - synthesis of different types of compounds like alcohol, aldehyde, acid, amine and organometallic. Acetoacetic ester - tautomerism - base hydrolysis - acid hydrolysis - malonic ester - cyano acetic ester - synthesis of dicarboylic acids and unsaturatedacids.

Carbohydrates:Occurrence, classification and their biological importance. Monosaccharides: Constitution and absolute configuration of glucose and fructose, epimers and anomers, mutarotation, determination of ring size of glucose and fructose, Haworth projections and conformational structures.

Alicyclic compounds, aromatic compounds, fats and oils: Alicyclic compounds - nomenclature - synthesis of alicyclic compounds using carbon - acroyloin condensation - Diels Alder reaction, Freunds's synthesis - bayer's strain theory postulates, drawbacks - theory of strainless rings - conformations of cyclohexane.

Amino Acids, Peptides and Proteins: Amino acids, Peptides and their classification. α-Amino Acids - Synthesis, ionic properties and reactions. Zwitterions, pKa values, isoelectric point and electrophoresis; Study of peptides: determination of their primary structures-end group analysis, methods of peptide synthesis. Synthesis of peptides using N-protecting,

Nucleic acids: Structure of components of nucleic acids: Bases, Sugars, Nucleosides and Nucleotides. Nomenclature of nucleosides and nucleotides, structure of polynucleotides (DNA and RNA), Biological roles of DNA and RNA.

Heterocyclic compounds and natural products: Heterocyclic compounds-synthesis and reaction of pyrrole ,furan ,thiophene, pyridine, quinine, isoquinoline. Alkaloids-Isolation from natural products-colour reaction-structural elucidation of nicotine. Terpenoids- Isolation - Isoprene rule-structural elucidation of citral.

Polymer: Nomenclature, functionality, classification, methods of polymerization, mechanism of polymerization, molecular weight determination-Viscometry, light scattering methods. Plastics-Moulding constituents of a plastics and moulding of plastics into articles. Important thermoplastics and thermosetting resins- synthesis & applications. Conductivepolymers.

Nucleophilic substitution: Reactivity, structural and solvent effects, substitution in SN^1, SN^2, SN^i. Neighbouring group participation -Norbornyl and bridgehead systems, substitution at allylic and vinylic carbons, substitution by ambient nucleophiles, aromatic nucleophilic substitution, SN Ar, benzyne, SN^1. Aromatic nucleophilic substitution of activatedhalides

Elimination reactions: E1, E2, E1CB- mechanism, stereochemistry, orientation of double bonds - Hoffmann, Zaitsev, Bredts rule - pyrolytic elimination, Chugaev reaction. Oxidation and reduction: Reduction using hydride reagents, $LiAlH_4$, $NABH_4$ and other organoboranes.

Theories of aromaticity: Aromaticity, antiaromaticity, Huckel's rule, annulenes and heteroannulenes, fullerenes (C60). Other conjugated systems, Chichibabin reaction. Aromatic electrophilic substitution: Orientation, reactivity, and mechanisms.

Addition to carbon-carbon multiple bonds: Electrophilic, nucleophilic and free radical addition. Stereochemistry and orientation of the addition. Hydrogenation, halogenation, hydroxylation, hydroboration. Addition to carbonyl compounds - 1,2 and 1,4-addition, benzoin, Knoevenegal, Stobbe and Darzen glycidic ester reactions.

Photochemistry: Characteristics of electromagnetic radiation, Lambert-Beer's law and its limitations, physical significance of absorption coefficients. Laws of photochemistry, quantum yield, actinometry, examples of low and high quantum yields, photochemical equilibrium and the differential rate of photochemical reactions, photosensitised reactions, quenching.

Gaseous state: Kinetic theory of gases, Vander waal's equation. Law of equipartition principle, Translational, Rotational and vibrational energies of molecules, Joule-Thomson effect, liquefaction of gases. Criticalconstants.

Atomic structure: Photoelectric effect, dual nature of electrons, Heisenberg's uncertainty principle, quantum numbers, electronic configuration, wavemechanics.

Reaction kinetics: Rate order and molecularity of chemical reactions. Methods of their evaluation. Calculation of rate constants. Consecutive - Parallel and opposing reactions. Chain reactions. Energy of activation - Theories on reaction rates. Heterogeneous reactions - zero orderreactions.

Phase equilibria: Phase rule: Application - to one components system (water, sulphur and carbon dioxide), Two component systems (Eutetic, Intermediate compound formation and solid solutions) and simple three componentsystems.

Solutions and Colligative Properties: Dilute solutions; lowering of vapour pressure, Raoult's law. Thermodynamic basis of the colligative properties - lowering of vapour pressure, elevation of Boiling Point, Depression of Freezing point and Osmotic pressure and derivation of expressions for these using chemical potential. Application of colligative properties in calculating molar masses of normal, dissociated and associated solutes in solutions.

Electrochemistry: Conductivity of electrolytes- Specific, molar and equivalent conductivity, Nernst equation for electrode potential, EMF series, hydrogen electrode, calomel electrode, glass electrode, Electrolytic and galvanic cells, cell EMF, its measurement and applications.

Ionic equilibrium: Acids, bases - definitions a) based on proton transference, dissociation constant, amphoteric electrolyte - pH -Buffer solutions. Salts - water of crystallization, double salts, complex ions and salts, hydrolysis. Decomposition potential, over voltage, e.m.f. and energy relations. Conductometry, Potentiometry, their applications, Fuelcells.

Surface chemistry: Derivation of Langmuir adsorption isotherm, B.E.T adsorption isotherm, Determination of surface area of solids by B.E.T. method. Catalysis- Homogeneous catalysis, heterogeneous catalysis, Enzyme catalysis, adsorptionchromatography.

Thermodynamics: Entropy as a thermodynamic quantity, entropy changes in isothermal expansion of an ideal gas, reversible and irreversible processes, physical transformations, work & free energy functions, Helmholtz and Gibbs free energy functions, Gibbs-Helmholtz equation, Gibbs-Duhem equation, Clapeyron-Clausius equation & its applications, Van't Hoff isotherm andapplications.

Chemical Bonding: Basic concepts, bonding in metals, electron gas theory, physical properties of metals. Alloy- substitutional alloys, interstitial alloys. Coordinate bond, EAN rule, 16 & 18 electronrule.

Shape& Intermolecular Interactions: Shape-Lewis dot structures, formal charge, VSEPR method, consequences of shape, dipole moment, valence bond theory; Intermolecular interactions-ion ion interactions, ion-dipole interactions, hydrogen bonding, dipole-dipole interactions, London / dispersion forces, relative strength of intermolecular forces; Consequences-surface tension.

Solid State: Types of solids - close packing of atoms and ions - bcc , fcc structures of rock salt - cesium chloride- spinel - normal and inverse spinels, Stoichiometric Defect, controlled valency&Chalcogen semiconductors.

Theories of coordination compounds - VB theory - CFT - splitting of d orbitals in ligand fields and different symmetries - CFSE - factors affecting the magnitude of 10 Dq - evidence for crystal field stabilization - spectrochemical series - site selection in spinels - tetragonal distortion from octahedral symmetry - Jahn-Teller distortion.

Nuclear Chemistry: Mass defect and binding energy, nuclear reactions, fission and fusion, nuclear reactor and breeder reactors,radio dating.

Electronic spectra and magnetism: Microstates, terms and energy levels for d1–d9 ions in cubic and square fields - selection rules - band intensities and band widths - evaluation of 10 Dq and β for octahedral complexes of cobalt and nickel - charge transfer spectra - magnetic properties of coordination compounds - change in magnetic properties of complexes.

Rotational spectra: Diatomic and polyatomic molecules - selection rules, rotational Raman spectra - vibrational spectra of diatomic molecules - rotational character of vibration spectra - morse potential of real molecules - selection rules - overtones and combination - Fermiresonance.

Vibrational spectra: Polyatomic molecules - harmonic and anharmonic oscillators - Morse potential - selection rules - normal modes of vibrations of polyatomic molecules - selection rules - Fourier transformation in IR spectroscopy - Raman spectroscopy – fundamentals - rotational Raman - vibrational Raman spectra - IR/ Ramaninstrumentation.

Periodic table of elements: s-block, p-block, d-block and f-block elements, their periodicity and general properties.

Separation techniques: Solvent extraction, chromatography - thin layer chromatography, ion exchange chromatography and size exclusion chromatography, HPLC, Gaschromatography.

PAPER-8 (Ph.D. Admission Test)
For admission to Ph.D. programme, the admission test shall include objective type questions from the core subject of the respective disciplines.

CERTIFICATE – 1 (प्रमाण पत्र–1)

अनुसूचित जाति ⁄ जनजाति(UPSC/UPST/GDSC/GDST)
(अभ्यर्थी के जन्म जिले के जिला मजिस्ट्रेट ⁄ प्रथम श्रेणी मजिस्ट्रेट द्वारा प्रमाणित)

यह प्रमाणित किया जाता है कि श्री ⁄ कु0 .... पुत्र ⁄ पुत्री श्री .... निवासी गॉव ⁄ शहर .... तहसील .... जिला .... प्रदेश .... का जन्म .... जाति में हुआ था और यह जाति अनुसूचित जाति ⁄ जनजाति आदेश (संशोधन) एक्ट 1956 के अन्तर्गत भारत सरकार ⁄ उत्तर प्रदेश शासन .... सरकार द्वारा मान्य अनुसूचित जाति ⁄ जनजाति है।

अभ्यर्थी के हस्ताक्षर   हस्ताक्षर
दिनांक   नाम
स्थान   मुहर
                                      जिला अधिकारी ⁄ अतिरिक्त जिला अधिकारी ⁄
                                      सिटी मजिस्ट्रेट ⁄ परगना मजिस्ट्रेट ⁄ तहसीलदार

Note: Proforma of certificate may be changed according to latest Govt. order.

CERTIFICATE – 2 (प्रमाण पत्र–2)
उत्तर प्रदेश के अन्य पिछड़े वर्ग के लिए जाति प्रमाण पत्र का प्रपत्र(UPBC/GDBC)

यह प्रमाणित किया जाता है कि श्री ⁄ श्रीमती ⁄ कुमारी .... सुपुत्र ⁄ सुपुत्री श्री ....निवासी ग्राम .... तहसील .... नगर .... जिला .... उत्तर प्रदेश राज्य की .... पिछडी जाति के व्यक्ति हैं। यह जाति उत्तर प्रदेश लोक सेवा अनुसूचित जातियों । अनुसूचित जनजातियों तथा पिछडे वर्गों के लिए आरक्षण अधिनियम, 1994 की अनुसूची – 1 के अन्तर्गत मान्यता प्राप्त है।

यह भी प्रमाणित किया जाता है कि श्री ⁄ श्रीमती ⁄ कुमारी .... उक्त अधिनियम 1994 की अनुसूची –2 (अधिसूचना संख्या –22 ⁄ 16 ⁄ 92–का 02 ⁄ 1995 टी0 सी0 दिनांक 8 दिसम्बर, 1995 द्वारा यथा संशोधित) से आच्छादित नहीं है।
श्री ⁄ श्रीमती ⁄ कुमारी .... तथा अथवा उनका परिवार उत्तर प्रदेश के ग्राम .... श्री ⁄ श्रीमती ⁄ कुमारी .... नगर .... जिला .... में सामान्यतया रहता है।

अभ्यर्थी के हस्ताक्षर   हस्ताक्षर
दिनांक   नाम
स्थान   मुहर
                                      जिला अधिकारी ⁄ अतिरिक्त जिला अधिकारी ⁄
                                      सिटी मजिस्ट्रेट ⁄ परगना मजिस्ट्रेट ⁄ तहसीलदार

नोट–अभ्यर्थी ध्यान दें कि उ0प्र0 के अन्य पिछड़े वर्ग के लिए जाति प्रमाण **मार्च 31, 2020** के पश्चात का बना हुआ होना आवश्यक है क्योंकि क्रीमीलेयर के अन्तर्गत आने वाले अभ्यर्थियों को आरक्षण का लाभ अनुमन्य नहीं है।

CERTIFICATE – 3(प्रमाण पत्र–3)
उत्तर प्रदेश सामान्य निवासी के पुत्र/पुत्री (UPGD/GDSC/GDST/GDBC)
(उस जिले के अधिकारी द्वारा प्रमाणित जिस जिले के माता/पिता निवासी है)

यह प्रमाणित किया जाता है कि श्री/श्रीमती (अभ्यर्थी के पिता/माता का नाम) ....पिता/माता श्री/कु0(अभ्यर्थी का नाम)................................... उत्तर प्रदेश के   गाँव/शहर .... तहसील ....जिला .... के सामान्य निवासी हैं तथा श्री/कु0 (अभ्यर्थी का नाम) ....अपने पिता/माता पर पूर्णतया आश्रित हैं। उक्त पते पर श्री/कु0 (अभ्यर्थी का नाम) ....के माता/पिता सामान्यतः निवास करते हैं।

दिनांक   हस्ताक्षर जिला मजिस्ट्रेट
स्थान   पूरा नाम
                                                            पदनाम
                                                            मुहर
                                                            (जिला मजिस्ट्रेट की सील)

'जिला मजिस्ट्रेट अथवा जिला मजिस्ट्रेट द्वारा अधिकृत अपर जिला मजिस्ट्रेट/सब डिवीजन मजिस्ट्रेट द्वाराप्रमाण पत्र ही मान्य होंगे जो शा0आ0 सं0–157/तीन –2003–77(II)/83 दिनांक 18 फरवरी, 2003 के अधीन जारी किया जायेगा।

नोट–प्रमाण पत्र–3 अभ्यर्थी के माता/पिता का बना होना चाहिए क्योंकि अभ्यर्थी जिन्होंने अर्हकारी परीक्षा उत्तर प्रदेश के बाहर स्थित किसी विद्यालय से उत्तीर्ण की है परन्तु उनके माता/पिता उत्तर प्रदेश के सामान्यनिवास हैं परीक्षा में बैठने के पात्र हैं।

CERTIFICATE – 4(प्रमाण पत्र—4) (Sub-Category UPFF)

उत्तर प्रदेश लोक सेवा (शारीरिक रूप से विकलांग, स्वतंत्रता संग्राम सेनानी के आश्रितों और भूतपूर्व सैनिकों के लिए आरक्षण) अधिनियम, 1993 के अनुसार स्वतन्त्रता संग्राम सेनानी के आश्रित के प्रमाण पत्र का प्रपत्र

प्रमाणित किया जाता है कि श्री/श्रीमती (स्वतंत्रता संग्राम सेनानी का नाम) .... निवासी ग्राम ....तहसील .... नगर .... जिला .... उत्तर प्रदेश लोक सेवा (शारीरिक रूप से विकलांग, स्वतंत्रता संग्राम सेनानी के आश्रितों और भूतपूर्व सैनिकों के लिए आरक्षण) अधिनियम 1993 के अनुसार स्वतन्त्रता संग्राम सेनानी हैं और श्री/श्रीमती/कु0(आश्रित अभ्यर्थी का नाम) .... पुत्र/पुत्री/पौत्र/अविवाहित पौत्री उपरांकित अधिनियम, 1993 के ही प्रावधानों के अनुसार उक्त श्री/श्रीमती (स्वतन्त्रता संग्राम सेनानी) .... के आश्रित हैं।

दिनांक   हस्ताक्षर
स्थान   पूरा नाम एवं पदनाम
                                                            मुहर (जिला मजिस्ट्रेट की सील)

Note: Proforma of certificate may be changed according to latest Govt. order.

CERTIFICATE – 5(प्रमाण पत्र–5)
उत्तर प्रदेश/सेना दल(Sub-Category UPAF)
(अंतिम यूनिट के आफिसर कमान्डिंग/जिला सैनिक कल्याण बोर्ड द्वारा प्रमाणित)

यह प्रमाणित किया जाता है कि श्री/श्रीमती **(अभ्यर्थी के पिता अथवा माता का नाम)** ....निवासी गॉव/शहर
.... तहसील .... जिला ....उत्तर प्रदेश, के दिनांक ....
को सेवा निवृत्त (Superannuated) युद्ध में मारे गये/अपंग हो गये/उत्तर प्रदेश में वर्तमान में तैनात है। वे भारतीय
थलसेना/जलसेना/वायुसेना के स्थान .... दिनांक........................ से दिनांक .... तक
कार्यरत थे/हैं।अभ्यर्थी Department of Ex-Servicemen Welfare, Ministryof Defence, Government of Indiaद्वारा
अधिसूचित (Refer Appendix-F of University Admission Brochure) प्राथमिकताओं में से प्राथमिकता नंबर(Please writea
valid priority number applicable to this candidate) ....(केवल शब्दों में/only in
words)के अंतर्गत अर्ह है ।

दिनांक   यूनिट कमान्डिंग आफिसर के हस्ताक्षर
स्थान   नाम
                                                            मोहर

(जिला मजिस्ट्रेट द्वारा प्रमाणित)

यह प्रमाणित किया जाता है कि श्री/कु0(अभ्यर्थी) .... निवासी .... उत्तर प्रदेश
गॉव/शहर .... तहसील .... जिला .... उपरोक्त सेना दल के सेवा निवृत्त
(Superannuated) युद्ध में मारे गये या अपंग हो गये कर्मचारी जो उत्तर प्रदेश के स्थायी निवासी हैं/थे, के पुत्र/पुत्री हैं
अथवा प्रवेश परीक्षा की तिथि (8 अगस्त 2020) को उत्तर प्रदेश भारतीय थलसेना/जल सेना/वायुसेना में कार्यरत थे/हैं।
दिनांक   हस्ताक्षर
स्थान   नाम
                                                मोहर

CERTIFICATE – 6(प्रमाण पत्र—6)
(Sub-Category UPHC) (काउन्सिलिंग में जमा करने हेतु)

शारीरिक विकलांग के अधिमान के लिए प्रमाण पत्र (मुख्य चिकित्सा अधिकारी द्वारा प्रमाणित)

1. यह प्रमाणित किया जाता है कि श्री / कु0(अभ्यर्थी) ....पुत्र / पुत्री श्री (पिता का नाम) ....नीचे लिखे कारणों से शारीरिक रूप से विकलांग हैं।
   (केवल मुख्य चिकित्सा अधिकारी ही कारण लिखें)...

2. अभ्यर्थी की उपरोक्त विकलांगता को निम्न प्रकार की विकलांगता की श्रेणी में रखा जा सकता है।
   (कृपया✓ का निशान लगायें)

Type - I: Minimum 40% permanent Visual impairment	
Type-II: Minimum 40% permanent Locomotors disability	
Type-III: Minimum 40% permanent Speech Hearing impairment	

3. यह भी प्रमाणित किया जाता है कि उपरोक्त विकलांग स्थिति अभ्यर्थी के इन्जीनियरिंग शिक्षा प्राप्त करने में बाधक नहीं होगी।

   अभ्यर्थी के हस्ताक्षर   चिकित्साधिकारी के हस्ताक्षर
   नाम   नाम
   दिनांक   मुहर

CERTIFICATE – 7 (प्रमाणपत्र–7)
उत्तर प्रदेश ग्रामीण क्षेत्र के लिये अधिमान (UPGE)
(कालेज के प्रधानाचार्य द्वारा प्रमाणित)

यह प्रमाणित किया जाता है कि श्री ⁄ कु0(अभ्यर्थी) .... ने ....

कालेज गाॅव .... से इण्टरमीडिएट की शिक्षा प्राप्त की। यह कालेज तहसील ....

.. जिला .... उत्तर प्रदेश के ग्रामीण क्षेत्र में स्थित हैं तथा ग्राम पंचायत के कार्य क्षेत्र के सीमा के अन्दर

है और यह क्षेत्र औद्योगिक विकसित क्षेत्र नहीं है।

दिनांक   हस्ताक्षर
स्थान   नाम
                                      मुहर

(जिला विद्यालय निरीक्षक एवं जिला मजिस्ट्रेट द्वारा प्रमाणित)
प्रधानाचार्य द्वारा दिया गया कालेज की स्थिति से संबंध उपरोक्त वक्तव्य प्रमाणित किया जाता है।

दिनांक   हस्ताक्षर जिला विद्यालय निरीक्षक
स्थान   नाम
                                      मुहर
दिनांक   प्रति हस्ताक्षरित जिला मजिस्ट्रेट
स्थान   नाम
                                      मुहर

CERTIFICATE – 8(प्रमाण पत्र–8)

CHARACTER CERTIFICATE FROM THE HEAD OF
THE INSTITUTION LAST ATTENDED

This is to certify that Sri/Km. _____
has been a bonafide student of _____
from _____ to _____and
has passed/appeared at the _____
examination in the year _____

Proctorial reports:
1. Has he/she involved himself/herself if any act of indiscipline?   Yes/No
2. Has he/she been warned, Fined or punished for any act of indiscipline?   Yes/No
3. Has he/she been restricted or expelled from Hostel of College for any reason?   Yes/ No
4. Has he/she been involved in any act of indiscipline outside the College campus like
    group clashes or fraction fights etc.   Yes/ No
5. Has he/she been addicted to drugs or intoxicants?   Yes/ No
General remarks (Please state your assessment of the student)

Date: **Signature**_____
                                               Name_____
                                               Designation _____

CERTIFICATE – 9 (प्रमाण पत्र–9)
FORMAT FOR MEDICAL CERTIFICATE
(To be obtained from a Chief Medical Officer or Medical Officer of MMMUT, Gorakhpur)

This certificate has to be submitted at the time of admission in the University

Name of Candidate:			Age:	Sex:
MET-2020 Roll No.:		Category:	Subcategory and Weighatge:	
Rank Position:		Father's Name:		
(**To be filled in by the Candidate**)				

L.T. M.I. Height Weight Chest Abdomen	VISION	Colour Vision: Without glass: With glass:

History	Operation	Koch'sColic's	B.P.	
	Seizures	Asthma	Piles	Diabetes

E X A M I N A T I O N	Pulse	Tonsil	DNS	Hernia
	Pallor	L.Nodes	CSOM	Hydrocele
	Cardiovascular		CNS	
	Respiratory		GIT	
	Genitourinary		Others	

Is the candidate physically handicapped/Disabled: If yes, type of handicap/disability: (Please trick ✓ the type of handicap/disability)		(Please tick) Yes/No
	☐	Type - I: Minimum 40% permanent Visual impairment
	☐	Type-II: Minimum 40% permanent Locomoter disability
	☐	Type-III: Minimum 40% permanent speech and Hearing impairment

Any other finding:
Certified that the candidate is physically fit/unfit/temporally disqualified to pursue engineering studies

Signature of Candidate   Signature of the issuing Medical Officer (with Official stamp)

CERTIFICATE – 10 (प्रमाण पत्र–10)
UNDERTAKING BY CANDIDATE FOR MEDICAL FITNESS

I certify that I have no such physical handicap/disability which would hinder the pursuit of studies in the courses in which I am seeking admission. If at any stage it is found that I have a physical handicap/ disability which would hinder the pursuit of studies in the courses in which I am seeking admission then my admission will be liable to be cancelled. I will produce medical fitness certificate from a C.M.O./C.M.S. at the time of my joining the University.

Dated: Counter Signed by Father/Guardian   Signature of the Candidate

CERTIFICATE – 11 (प्रमाण पत्र–11)

अखिल भारतीय सेवा के उ0प्र0 कैडर के अधिकारियों ⁄ कर्मचारियों हेतु

प्रमाणित किया जाता है कि श्री ⁄ श्रीमती (अभ्यर्थी के माता ⁄ पिता का नाम) ....पदनाम ....

..............विभाग का नाम .... कैडर संख्या ....अखिल भारतीय सेवा के उ0प्र0

कैडर के अधिकारी ⁄ कर्मचारी है तथा वर्तमान में इस कार्यालय में कार्यरत हैं। यह प्रमाण पत्र इनके पुत्र ⁄ पुत्री (अभ्यर्थी का

नाम) ....को मदन मोहन मालवीयप्रौद्यौगिकी विश्वविद्यालय में प्रवेश हेतु प्रदान किया जाता

है।

दिनांकः ....

<div align="right">
विभागाध्यक्ष ⁄ कार्यालयाध्यक्ष का हस्ताक्षर
नाम एवं पदनाम
मुहर
</div>

CERTIFICATE-12 (प्रमाण पत्र–12)
(Income Certificate) (काउन्सिलिंग में जमा करने हेतु)

क्षेत्रीय भूलेख निरीक्षक तथा लेखपाल की जांच रिपोर्ट के आधार पर प्रमाणित किया जाता है कि ....

....(आवेदक के अभिभावक ⁄ माता ⁄ पिताका नाम) सुपुत्र ....

....निवासी ⁄ ग्राम..परगना

....तहसील........................नगर ....

जिला........................राज्य..के स्वयं की मासिक आय

रूपया........................तथा वार्षिक आय रूपया ....है।

लेखपाल की रिपोर्ट के अनुसार आय का स्रोत..है।

स्थानः
दिनाॅकः
तहसीलदार

<div align="right">मुहर</div>

नोट–अभ्यर्थी ध्यान दे कि उ0प्र0 के आर्थिक रूप से कमजोर अभ्यर्थियों के लिए प्रमाण पत्र मार्च 31, 2020 के पश्चात का बना हुआ होना आवश्यक है।

CERTIFICATE – 13A
उत्तर प्रदेश सरकार

कार्यालय का नाम..

आर्थिक रूप से कमजोर वर्ग के सदस्य द्वारा प्रस्तुत किया जाने वाला आय एवं परिसम्पति प्रमाण-पत्र

प्रमाण-पत्र संख्या-........................   दिनांक-...............................

वित्तीय वर्ष .... के लिए मान्य

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी ....

पुत्र/पति/पुत्री .... ग्राम/कस्बा..

पोस्ट ऑफिस .... थाना ....

तहसील .... जिला .... राज्य ....

पिन कोड........................... के स्थायी निवासी है, जिनका फोटोग्राफ नीचे अभिप्रमाणित है, आर्थिक रूप से

कमजोर वर्ग के सदस्य हैं, क्योंकि वित्तीय वर्ष .... में इनके परिवार की कुल वार्षिक आय 8

लाख (आठ लाख रूपये मात्र) से कम है। इनके परिवार के स्वामित्व में निम्नलिखित में से कोई भी परिसम्पति

नहीं हैः-

    I.   5 (पाँच) एकड़ कृषि योग्य भूमि अथवा इससे ऊपर ।

    II.   एक हजार वर्ग फीट अथवा इससे अधिक क्षेत्रफल का फ्लैट।

    III.   अधिसूचित नगरपालिका के अंतर्गत 100 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।

    IV.   अधिसूचित नगरपालिका से इतर 200 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।

    2.   श्री/श्रीमती/कुमारी .... जाति .... के

सदस्य हैं, जो अनुसूचित जाति, अनुसूचित जनजाति तथा अन्य पिछड़े वर्गों के रूप में अधिसूचित नहीं है।

आवेदक का पासपोर्ट साईज का
अभिप्रमाणित फोटोग्राफ
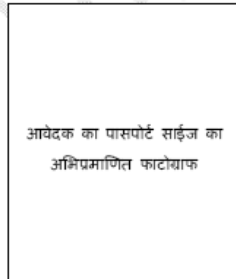
हस्ताक्षर .... (कार्यालय का मुहर सहित)

पूरा नाम ....

पदनाम ....

जिलाधिकारी/अतिरिक्त जिलाधिकारी/सिटी
मजिस्ट्रेट/परगना मजिस्ट्रेट/तहसीलदार।

CERTIFICATE-13B
आर्थिक रूप से कमजोर वर्ग के लाभार्थ स्वंय घोषणा पत्र

स्वंय घोषणा पत्र

मैं .... पुत्र/पुत्री/पत्नी ....

ग्राम/कस्बा .... पोस्ट ऑफिस ....

थाना .... ब्लाक .... तहसील ....

जिला .... राज्य .... ने आर्थिक रूप से कमजोर वर्ग के

प्रमाण पत्र हेतु आवेदन दिया है, एतद् द्वारा घोषणा करता/करती हूँ :-

1. मैं .... जाति से सम्बन्ध रखता/रखती हूँ, जो उत्तर प्रदेश हेतु अधिसूचित अनुसूचित जाति, अनुसूचित जनजाति एवं अन्य पिछड़ा वर्ग की सूची में सूचीबद्ध नहीं है।

2. मेरे परिवार की कुल श्रोतों (वेतन, कृषि, व्यवसाय, पेशा इत्यादि) से कुल वार्षिक आय रू .... (शब्दों में) है।

3. मेरे परिवार के पास उल्लिखित आय के सिवाय अथवा इसके अतिरिक्त अन्यत्र कोई परिसम्पत्ति नहीं है।

अथवा

कई स्थानों पर स्थित परिसम्पतियों को जोड़ने के पश्चात भी मैं (नाम) .... आर्थिक रूप से कमजोर वर्ग के दायरे में आता/आती हूँ।

4. मैं घोषणा करता/करती हूँ कि मेरे परिवार की सभी परिसम्पतियों को जोड़ने के पश्चात् निम्नलिखित में से किसी भी सीमा से अधिक नहीं है-

I.   5 (पाँच) एकड़ कृषि योग्य भूमि अथवा इससे ऊपर ।

II. एक हजार वर्ग फीट अथवा इससे अधिक क्षेत्रफल का फ्लैट।

III. अधिसूचित नगरपालिका के अंतर्गत 100 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।

IV. अधिसूचित नगरपालिका से इतर 200 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।

मैं प्रमाणित करता/करती हूँ कि मेरे द्वारा उपरोक्त जानकारी मेरे ज्ञान और विश्वास के अनुसार सत्य है और मैं आर्थिक रूप से कमजोर वर्ग के लिए आरक्षण सुविधा प्राप्त करने हेतु पात्रता धारण करता/करती हूँ। यदि मेरे द्वारा दी गई जानकारी असत्य/गलत पायी जाती है तो मैं पूर्ण रूप में जानता हूँ/ जानती हूँ कि इस आवेदन पत्र के आधार पर दिये गये प्रमाण पत्र के द्वारा शैक्षणिक संस्थान में लिया गया प्रवेश/लोक सेवाओं एवं पदों में प्राप्त की गई नियुक्ति निरस्त कर दी जायेगी/कर दिया जायेगा अथवा इस प्रमाण पत्र के आधार पर कोई अन्य सुविधा/लाभ प्राप्त किया गया है उससे भी वंचित किया जा सकेगा और इस सम्बन्ध में विधि एवं नियमों के अधीन मेरे विरूद्ध की जाने वाली कार्यवाही के लिए मैं उत्तरदायी रहूँगा/रहूँगी।

नोट:- जो लागू नहीं हो उसे काट दें।

आवेदक/आवेदिका का हस्ताक्षर तथा पूरा नाम।

स्थान :-

दिनांक :-

अनुसूचितजाति, अनुसूचितजनजाति एवं ओ0बी0सी0 जातियों के नाम

अनुसूचितजातियों की सूची

1. अगरिया 2.बादी 3 .बधिक 4. बहेलिया 5. बैगा 6. बैसवार 7. बजनिया 8. बाजगी 9. बलहार 10. बलाई 11. बाल्मीकि 12. बंगाली 13. बनमानुष 14. बांसफोर 15. बरवार 16. बसोर 17. बावरिया 18. बेलदार 19. बेरिया 20. भुईया 21. भंतू 22. भुईयार 23. बोरिया 24. चमार, धुसिया, जाटव 25. चेरो 26. दबगर 27. धांगर 28. धानुक 29. धरकार 30. धोबी 31. डोम 32. डोमर 33. दुसाध 34. घरामी 35. घसिया 36. ग्वाल 37. हबुरा 38. हरी 39. हेला 40. कलाबाज 41. कंजड 42. कापरिया 43. करवल 44. खैरहा 45. खोरोट 46. खरवार (बेनबांसी को छोड़कर) 47. खटीक 48. कोल 49. कोरबा 50. लालबेगी 51. मजहबी 52. मुसहर 53. नट 54 पंखा 55. परहिया 56. पासी, तरमाली 57. पटारी 58. रावत 59. सहरिया 60. सनौरिहया 61. सांसिय 62. शिल्पकार 63. तुरैहा 64. मझवार 65. कोरी 66. गोंड

अनुसूचितजनजातियों की सूची

1. भोटिया 2. बुक्सा 3. जौनसारी 4. राजी 5. थारु 6. गोंड, धुरिया, नायक, ओझा, पठारी, राजगोंड, (महराजगंज, सिद्धार्थनगर, बस्ती, गोरखपुर, देवरिया, मऊ, आजमगढ़, जौनपुर, बलिया, गाजीपुर, वाराणसी, मिर्जापुर एवंसोनभद्रजनपदों में), 7. खरवार, खैरवार,(देवरिया, बलिया, गाजीपुर, वाराणसी, एवंसोनभद्रजनपदों में), 8. सहरिया (ललितपुर जिले में), 9. परहिया (सोनभद्र जिले में), 10. वैगा (सोनभद्र जिले में), 11. पंखा, पनिका (सोनभद्र एवंमिर्जापुरजिले में), 12. अगरिया (सोनभद्र जिले में), 13. पटारी (सोनभद्र जिले में), 14. चेरो (सोनभद्र एवंवाराणसीजिले में), 15. भुइया, भुनिया (सोनभद्र जिले में),

ओ0बी0सी0 (अन्य पिछड़ा वर्ग) जातियों की सूची

1. अहीर, यादव, ग्वाला, यदुवंशीय 2. अरख, अर्कवंशीय 3. काछी, काछी–कुशवाहा, शाक्य 4. कहार, कश्यप 5. केवट, मल्लाह, निषाद 6. किसान 7. कोइरी 8. कुम्हार, प्रजापति 9. कुर्मी, चनऊ, पटेल, पटनवार, कुर्मी–मल्ल, कुर्मी–सैंथवार 10. कम्बोज 11. कसगर 12. कुजड़ा या राईन 13. गोसाई 14. गूजर 15. गड़ेरिया, पाल, बघेल 16. गद्दी, घोसी 17. गिरि 18. चिकवा, कस्साब, कुरैशी, चक 19. छीपी, छीपा 20. जोगी 21. झोजा 22. डफाली 23. तमोली, बरई, चौरसिया 24. तेली, तमोली, रोगनगर, साहू, रौनियार, गन्धी, अर्राक 25. दर्जी, इदरीसी, काकुत्स्थ 26.धीवर 27. नक्काल 28. नट 29. नायक 30. .फकीर 31. बंजारा, रंकी, मुकेरी, मुकेरानी 32. बढ़ई, सैफी, विश्वकर्मा, पांचाल, रमगढ़िया, जागिड़, धीमान 33. बारी 34. बैरागी 35. बिन्द 36. बियार 37. भर, राजभर 38. भुर्जी, भड़भुजा, भूंज, कांदू, कशोधन 39. भठियारा 40. माली, सैनी 41. मनिहार, कचेर, लखेरा 42. मुराव, मुराई, मौर्य 43. मोमिन (अंसार) 44. .मिरासी 45. मुस्लिमकायस्थ 46. नद्दाफ (धुनिया), मन्सूरी, कन्डेरे, कड़ेरे, करण (कर्ण) 47. मारछा 48. रंगजेज, रंगवा 49. लोध, लोधा, लोधी, लोट, लोधीराजपूत 50. लोहार, लोहार–सैफी 51. लोनिया, नोनिया, गोले–ठाकुर, लोनिया–चौहान 52. सोनार, सुनार, स्वर्णकार 53. स्वीपर , हलालखोर 54. हलवाई, मोदनवाल 55. हज्जाम, नाई, सलमानी, सविता, श्रीवास 56. राय सिक्ख 57. सक्का–भिश्ती, भिश्ती–अब्बासी 58. धोबी 59. कसेरा, ठठेरा, ताम्रकार 60. नानबाई 61. मीरशिकार 62. शेख सरवारी (पिराई), पीराही 63. मेव, मेवाती 64. कोष्टा / कोष्टी 65. रोड 66. खुमरा, संगतराश, हंसीरी 67. मोची 68.खागी 69. तंवरसिंघाड़िया 70. कतुआ 71. माहीगीर 72. दांगी 73. धाकड़ 74. गाडा 75. तंतवा 76. जोरिया 77. पटवा, पटहारा, पटेहरा, देववंशी 78. जाट 79. कलाल, कलवार, कलार

विमुक्तजातियों की सूची

1. पढ़क 2. खुरपलटा 3. मोंगिया (मोंग) 4. कजड़ या कुजबंधिया 5. सिंगीवाला 6. औघड़ 7. बैरिया 8. बैद 9. भाट 10. चमरमगता 11. जोगी 12. कपड़िया 13.महावत (लुंगी पठान) 14. कुलन्दरफकीर 15. नटअथवाकरनाटक 16. करबल 17. बावरिया 18. बासी 19. हबूडा 20. डोम 21. खटिक 22. बंजारा 23. बहेलिया 24. गोदाहार 25. बरवार 26. बुर्जी 27. सपेरा (सपेरिया) सिंगजीगार 29. बेलदार 30. मदारी 31. कंकाली 32. बृजबासी 33. जोगा 34. किंगिरिया 35. भतरी 36. कुरमंगिया (हिन्दु महावत) 37. कनमैलिया 38. गोसाई 39. लोनाचमार 40. पोशियान 41.अहेरिया (बहेलिया) 42. बदक 43. बंजारा 44. परवार 45. बेड़िया 46. बावरिया 47. भर 48. बोरिगा 49. चमार 50. दकेरे, कहार 51. डोम 52. गंडीला 53. धोसीहिन्दू 54. गजर 55. हबूडा 56. कंजर 57. केतट 58. खटिक 59. लोध 60. मल्लाह 61. मेवाली 62. मुसहर (बनमानुष) 63. नट 64. पलवरदुषाध 65. पासी 66. सांसिया 67. लगाभाट 68. औधिया 69. भॉतू 70. पीधिया 71. परवल

F.No.6(1)/2017/D(Res.II)

(194)

Government of India
Ministry of Defence
Department of Ex-Servicemen Welfare
D (Res-II)

Room No.237 'B' Wing
Sena Bhawan, New Delhi
November 30, 2017

To
The Chief Secretaries/Administrators
All States/UTs.

Subject: **Inter-se priority for reservation/preference to the wards of Armed Forces personnel by States /UTs for admission to Medical/Professional / Non-Professional Courses.**

In continuation of this Department's letter of even number 19.05.2017, the Competent Authority has approved the following revised order of priorities for reservations or preferences to the wards of Armed Forces personnel by States/UTs/Central/State Universities/ Autonomous Institutions for admission in medical/professional/non-professional courses:-

Priority I : Widows/Wards of Defence personnel killed in action.

Priority II : Wards of disabled in action and boarded out from service.

Priority III : Widows/Wards of Defence personnel who died while in service with death attributable to military service.

Priority IV : Wards of disabled in service and boarded out with disability attributable to military service.

Priority V : Wards of Ex-Servicemen and serving personnel who are in receipt of Gallantry Awards:

    i) Param Vir Chakra
    ii) Ashok Chakra
    iii) Sarvottam Yudh Seva Medal
    iv) Maha Vir Chakra
    v) Kirti Chakra
    vi) Uttam Yudh Seva Medal
    vii) Vir Chakra
    viii) Shaurya Chakra
    ix) Yudh Seva Medal
    x) Sena, Nau Sena, Vayu Sena Medal
    xi) Mention-in-Despatches.

Priority VI: Wards of Ex-Servicemen.

Priority VII: Wives of :

    i) defence personnel disabled in action and boarded out from service.
    ii) defence personnel disabled in service and boarded out with disability attributable to military service
    iii) ex-Servicemen and serving personnel who are in receipt of Gallantry Awards.

Priority VIII: Wards of Serving Personnel.

Priority IX : Wives of Serving Personnel.

(Santosh)
Joint Secretary (Res.II)
Tel. 23015772