

# INFORMATION BROCHURE

## Doctoral (Ph. D.) Admission Test (DAT-2020)

Session 2020-21



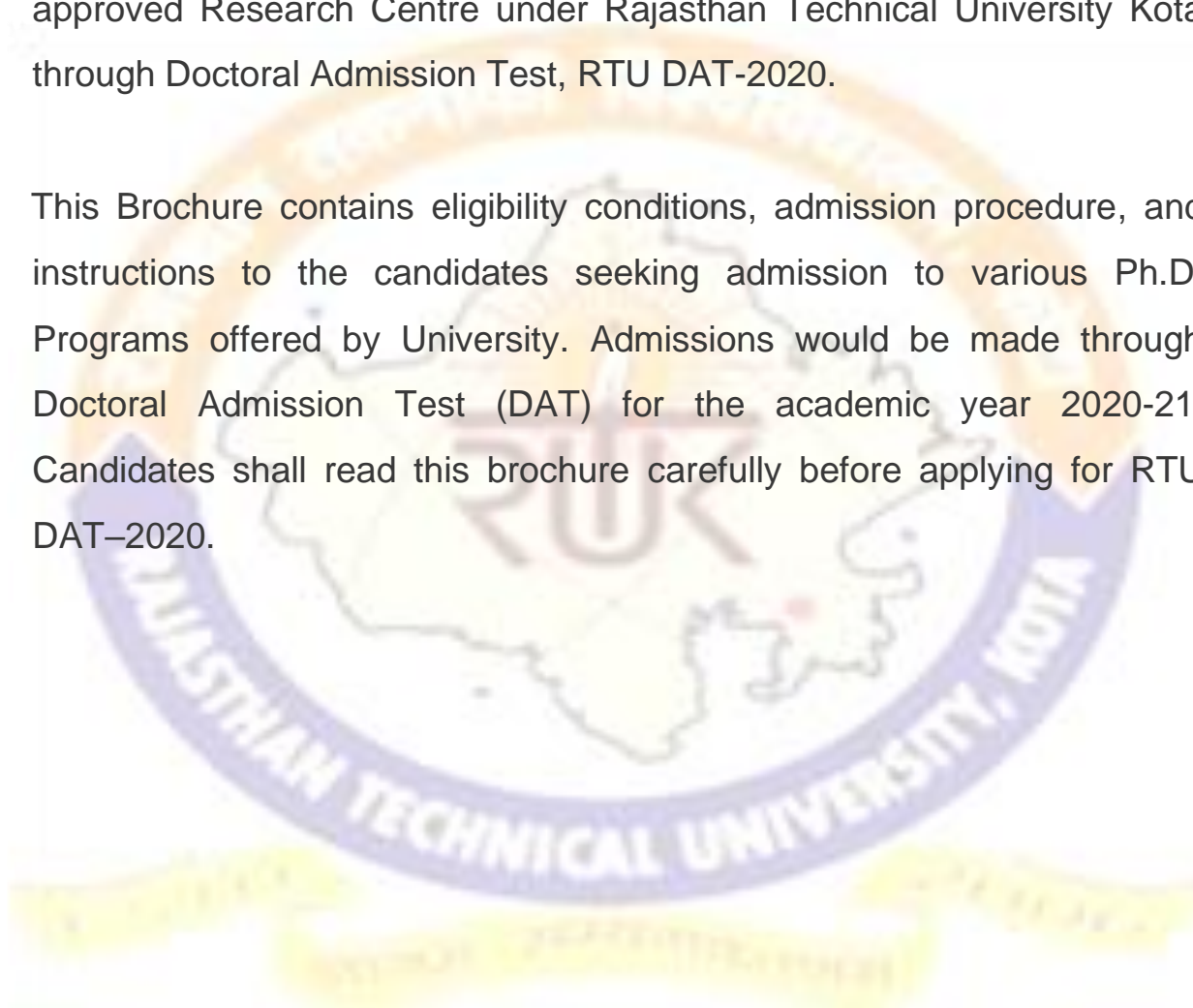
Conducted by  
**RAJASTHAN TECHNICAL UNIVERSITY KOTA**  
**KOTA-324010**

DAT 2020 Website: <https://rtu.ac.in/index/DAT-2020>

## PREFACE

This information brochure will be helpful for the candidates seeking admission in the Ph.D. Programs of University Teaching Departments and approved Research Centre under Rajasthan Technical University Kota through Doctoral Admission Test, RTU DAT-2020.

This Brochure contains eligibility conditions, admission procedure, and instructions to the candidates seeking admission to various Ph.D. Programs offered by University. Admissions would be made through Doctoral Admission Test (DAT) for the academic year 2020-21. Candidates shall read this brochure carefully before applying for RTU DAT-2020.



## **IMPORTANT UNDERSTANDING/ UNDERTAKING BY THE CANDIDATE**

“Candidate must ensure the following important understanding/  
undertaking before applying for DAT-2020”

1. They must read all the guidelines (information brochure), eligibility conditions for respective programs of DAT-2020.
2. They are aware of and abide by all eligibility criteria as mentioned in the information brochure and ensure that they fulfill all such conditions for taking admission to the Ph.D. program.
3. They undertake that they shall provide only authentic information and the entire document uploaded/ provided are self-attested. In case any information given by them is found incorrect at any point in time, their admission/candidature will automatically stand CANCELLED without any further reference and they will be liable for all the consequences such as cancellation of registration and forfeiture of registration fee followed by suitable legal action.
4. They are aware that after submitting the application form, they would not be able to change any information at any stage.
5. They also understand that they have the credit card/debit card/ net banking/Payment gateway facility to pay the registration fees.
6. They shall provide their authentic mobile number and email id to DAT-2020. All the correspondence from DAT-2020 will be directed on this mobile number and email id.
7. They also understand that any grievance or complaint shall not be entertained after taking admission in the respective course.

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## 1. About Rajasthan Technical University

**Rajasthan Technical University (RTU)** is located in Kota in the state of Rajasthan. It was established in 2006 by the Government of Rajasthan to enhance technical education across the state. The university is located on the bank of river Chambal and adjacent to Rawatbhata Road. It is about 14 km from Kota Railway Station and 10 km from Kota Bus Stand.

The Hon'ble Governor of Rajasthan His Excellency Shri Kalraj Mishra is the Chancellor, and Prof. R. A. Gupta is the Vice-Chancellor of the Rajasthan Technical University (RTU).

Rajasthan Technical University aims to provide quality technical education to help Rajasthan in its technical development and boost the technical environment in the country. The Rajasthan Technical University offers almost all the disciplines related to technical education including Bachelor of Technology, Master of Technology, Doctor of Philosophy, Master of Business Administration, Master of Computer Applications, and Bachelor of Hotel Management and Catering Technology.

The Rajasthan Technical University currently affiliates about 68 Engineering Colleges, 03 BArch, 16 MCA Colleges, 39 MBA Colleges, 31 MTech Colleges, 01 MArch, and 01 Hotel Management and Catering Institute. More than 1.5 lakh students study in the various institutes affiliated to the University.

Thousands of students graduate from the University every year and many attain post-graduation. The University is making steady progress in developing and providing the best technical environment for education and will continue to serve the nation in the coming years.



## **2. Provisional list of Research Centers and vacant seats for the Session 2020-21:**

The provisional list of the available Research Centers and vacant seats for the session 2020-21 shall be displayed on the RTU-DAT-2020 website. However, the University reserves the right to increase or decrease the number of vacancy during the admission process at any time without prior information.

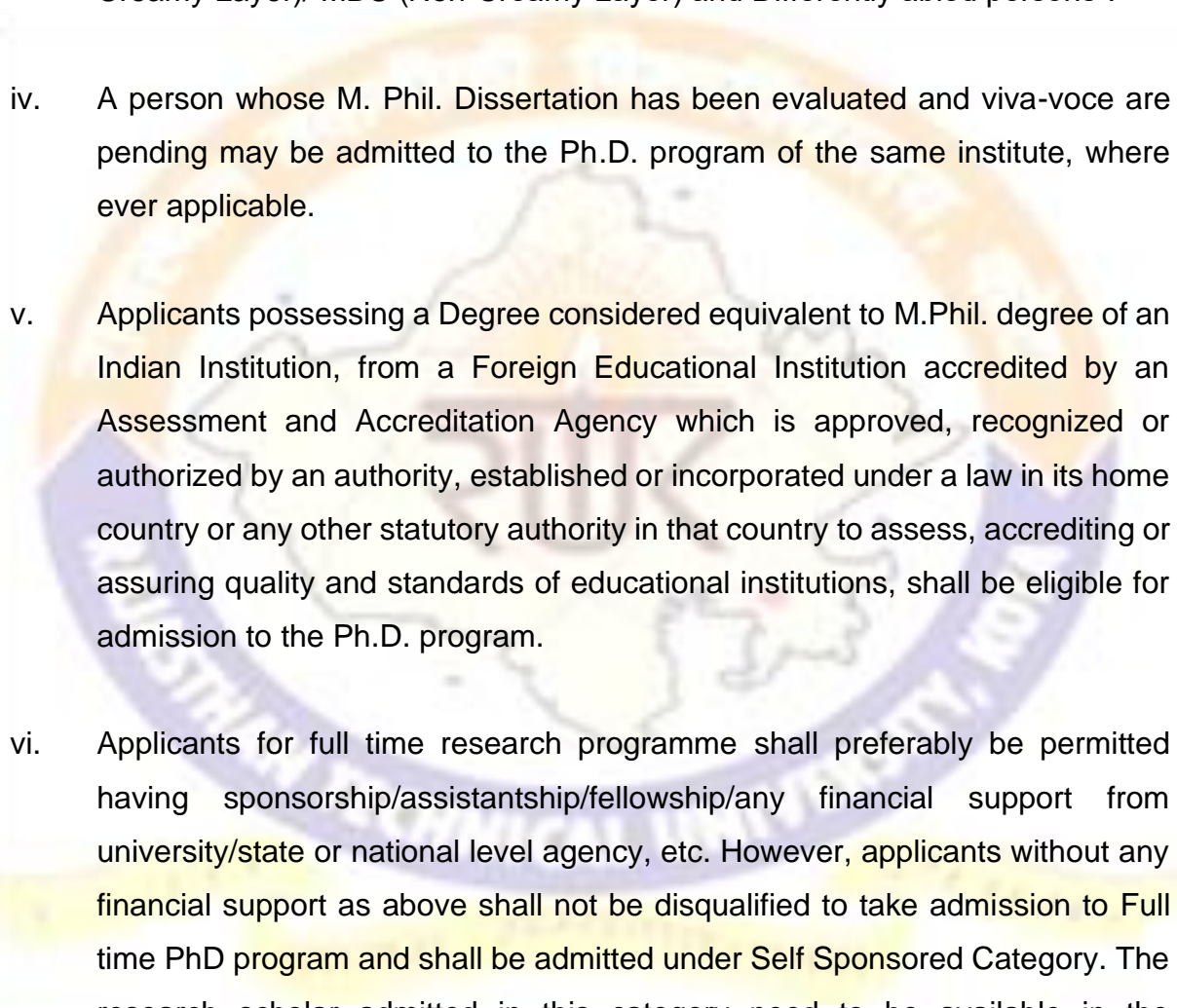
## **3. ELIGIBILITY CRITERIA:**

### **3.1 Eligibility for Full-time Research Scholar:**

An applicant possessing the following qualifications in appropriate areas and fulfilling the eligibility criteria as prescribed in Ordinance and Regulations shall be eligible to apply for admission to PhD programme of the respective disciplines of University

- i. Master's degree or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, in the appropriate discipline from any recognized University/Institute, with a minimum of 55% marks in aggregate (of all the years/semesters) where marks are awarded or minimum equivalent Cumulative Grade Point Average (CGPA) as defined by AICTE/UGC or any other competent body as the case may be.
- ii. A relaxation of 5% or equivalent grade point in the minimum eligibility shall apply to the applicant belonging to the categories of "SC/ST/OBC (Non-Creamy Layer)/MBC (Non-Creamy Layer) and Differently abled persons" or those who had obtained their Master's Degree before 19th September 1991.

The eligibility marks of 55% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualifying marks without including the grace marks procedure.

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- iii. Applicants who have cleared the M.Phil. course work with at least 55% marks in aggregate or its equivalent grade B in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) and completing M.Phil. degree shall be eligible to proceed to do research work leading to a Ph.D. Degree in the same Institution in an integrated program. A relaxation of 5% or equivalent grade point in the minimum eligibility shall be allowed to the applicant belonging to the categories of "SC/ST/OBC (Non-Creamy Layer)/ MBC (Non-Creamy Layer) and Differently abled persons".
  - iv. A person whose M. Phil. Dissertation has been evaluated and viva-voce are pending may be admitted to the Ph.D. program of the same institute, where ever applicable.
  - v. Applicants possessing a Degree considered equivalent to M.Phil. degree of an Indian Institution, from a Foreign Educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country to assess, accrediting or assuring quality and standards of educational institutions, shall be eligible for admission to the Ph.D. program.
  - vi. Applicants for full time research programme shall preferably be permitted having sponsorship/assistantship/fellowship/any financial support from university/state or national level agency, etc. However, applicants without any financial support as above shall not be disqualified to take admission to Full time PhD program and shall be admitted under Self Sponsored Category. The research scholar admitted in this category need to be available in the Institute/Department on daily basis like other Full Time research scholars and shall be eligible for leave as per the provisions contained in Regulation.
  - vii. The applicant need to fill form Form 1(a) or Form 1 (b) as per his/her applicability (Annexure -2).

### **3.2 Eligibility for Part-time Research Scholar:**

In addition to the educational qualifications mentioned at 3.1 (i) to (v) the applicant must belong to at least one of the Part Time Research Scholar category defined in Regulations. Besides, applicant needs to prove the following to the satisfaction of the DRC (Departmental Research Committee):

- i. Permission of the employer in writing to the applicant, to pursue a Ph.D. program along with his/her regular duties in the organization he/she is employed.
- ii. Availability of all facilities for pursuing research at the applicant's parent organization/place of work, in the chosen field of research.
- iii. Certificate issued by the employer to allow him/her to fulfill the residential requirement during course work and contact days with the supervisor after completion of the course work as notified by University from time to time.
- iv. In addition to the above, the local applicant (working and residing within 50 KM radius from the university/research center where he/she is seeking admission) may be relieved from the residential requirement during course work. However, to avail of this benefit, the applicant must submit a certificate from the employer that he/she shall be allowed to attend the classes of the course work and complete other requirements of Degree while discharging the normal official duties. (Form 2 (d)).
- v. The applicant is mandatorily required to submit either Form 2(a)/Form 2(b) (only for University faculty and staff/University project staff) or Form 2(c) (all other applicants) as per his/her applicability (Annexure -2).

### **4. HOW TO APPLY:**

The applicants can apply online through the RTU DAT-2020 website by accessing link <https://rtu.ac.in/index/DAT-2020>.



- i. A candidate is required to register online on DAT-2020 website by providing the following details: -

Name of the candidate, Mother's Name, Father's Name, Date of birth, Mobile no., email id and submit to register themselves for DAT-2020.

A challan number will be generated which is used for the application form fee payment. The candidate must note down the challan number and keep it safe and confidential. The challan number of the first transaction (registration fee) will be the default login ID.

Candidates are advised not to disclose their login ID and password for the DAT-2020 web portal to anybody else. DAT-2020 will not be responsible for any loss or damage or harm caused due to the candidate disclosing his/her login ID/password to any other person/institute/ agency/society.

- ii. The next step is to pay the application form fees of DAT-2020, which is Rs. 3000/- (non-refundable, non-transferable, and non-adjustable). Fees can be submitted online through the Billdesk gateway facility, where a candidate is required to fill the online details of their credit card/debit card/net banking/other online payment gateway details. A candidate is required to pay any other admissible charges as per the requirement of the online payment gateway, as applicable. A transaction ID will be generated after the payment. The online application form will not accept entries without the transaction ID. The candidate must note down the Transaction Number and keep it safely with him/her. The transaction number is required in case of Transaction failure. Generally, it takes about 48 hours to sort out matters related to transaction failure. DAT-2020 will be able to sort out matters related to Transaction failure only if the amount is deposited /credited to the partner gateway agency.

In case there is a refund due to the candidate because of online transaction failure/ Double or multiple payments of the registration fee, the same shall be settled after the completion of the admission process in DAT-2020. **All the refunds, after verification, shall be credited/ refunded in the same account from which the payment is initially received.** In no case, the Office of DAT-

2020 shall entertain the request to transfer/ Refund/ Credit the refund amount in a bank account other than the one from which it was initially received. **Candidates are therefore advised to make payments from their own Bank account/ Debit card/ Credit card/UPI/payment Gateway.** CAM-2020 shall in no way be liable for circumstances arising out of candidate making payment from other person's Bank account/ Debit card/ Credit card/UPI/payment Gateway.

- iii. To activate the online application form for entering the required details, the candidate must enter his/her transaction ID in the appropriate field of the application form. Then the candidate will be allowed to fill the application form with their personal and academic details as per the requirements. In this section of the application form, a candidate is required to fill their: -  
Personal details, Address for correspondence, Educational qualifications details, etc.
- iv. The entries of the online application form must be filled as required. The changes (if required) will be allowed in the online application form before final submission i.e. before pressing the "Submit" button on the web portal. The web page will not accept any changes after the final submission of the online application form i.e. after pressing the "Submit" button on the web portal. Therefore, the candidates are advised to click the "Submit" button only, and only if he/she is sure that the data entered in the online application form is correct and no further editing is required.
- v. If the information submitted by any candidate is found to be fraudulent, incorrect or untrue, the seat allotted (if any), shall stand canceled and his/ her fees deposited shall be forfeited and he/she will also be liable for legal action. DAT-2020 will not be responsible for any consequence arising out of non-acceptance of any correction/ addition/ deletion of Data of the application form after clicking the "Submit" button.
- vi. Candidates are required to take the printout of the application form after final submission (which will be generated by the web portal) and attach the self-

attested photocopies of all the relevant documents to submit to DRC at the time of interview. The application form with relevant documents will also be required for verification at the time of reporting at Institute/ Research Center. A reporting institute is where the admission is given to the candidate.

***The candidates are mandatorily required to bring their original documents at the time of the interview to DRC and at the time of reporting. The candidates are also required to produce form 1(a) /form 1(b)/ form 2(a) to 2(d) (whichever is applicable) at the time of interview to DRC. Failure to produce the relevant and applicable form/certificate may lead to refusal/denial/rejection by the concerned DRC to interview the candidate.***

**The hardcopy of the application form is not required to be submitted to the DAT-2020 office or RTU Kota.**

vii. The eligibility of the applicant for the entrance test shall be decided provisionally based on the information provided in the online application form. In the event of any information being found incorrect or misleading, the candidature shall be liable to cancellation by the University at any time.

viii. **If an applicant wishes to apply for more than one specialization/ department, he/she shall have to submit the separate application form along with the application form/ registration fee.**

Such applicants are required to appear in individual specialization papers of RTU-DAT and shall also be required to give separate presentations of research interest/area/plan relevant to each of the specialization applied for during the interview. The applicants who do not appear in interview of a particular specialization shall be declared absent and shall not be considered for admission in that specialization.

ix. An applicant who has applied for more than one specialization under the same department shall be asked to give his/her preference of specialization and

supervisor at the time of interview by concerned DRC, and after interview if he/she is appearing in the merit list of more than one specialization shall be allotted seat/supervisor only in one specialization depending upon the applicant's preference and availability of consenting supervisor. The decision of the DRC in this regard shall be final and binding.

## 5. ADMISSION PROCEDURE

- i. In all Ph.D. programs, the admission shall be granted as per Rajasthan Technical University, Kota/ Bikaner Technical University, Bikaner ordinance and regulations for the degree of Doctor of Philosophy and the subsequent modifications thereof. **The RTU-DAT-2020 entrance examination shall be conducted at the premises of RTU, Kota only.**
- ii. List of the applicants, eligible for entrance examination will be displayed only on the RTU DAT-2020 website and no individual communication will be made. The applicants are advised to visit regularly on the RTU website for the schedule of RTU-DAT examination and other updated information.
- iii. The entrance examination for RTU-DAT shall consist of 100 objective type multiple choice questions of two-and-a-half-hour duration in which a set of 50 questions will be based on for Research Methodology (60 Minutes duration) and another set of 50 questions for Specialization paper (90 Minutes duration). The syllabus for Research Methodology and Specialization papers are available on the CAM/DAT-2020 website.
- iv. The result of the entrance examination of the qualified candidates will be displayed on the RTU-DAT-2020 website. The candidates who obtain at least 50% marks in the entrance examination (i.e. 50 marks out of the maximum total marks 100 in both the components of the entrance exam taken together) will be declared as qualified for the interview. Provided that a relaxation of 5 % of marks (from 50% to 45%) shall be allowed for the candidates belonging to "SC/ST/OBC (Non-Creamy layers)/MBC (Non-Creamy layers)/Differently-abled



category” in the RTU-DAT examination to qualify for the interview (i.e. 45 marks out of the Maximum total marks 100 in both the components of the entrance exam taken together).

All the qualified candidates of the RTU-DAT-2020 examination shall be invited for an interview before the DRC on the notified date. No separate communication in this regard shall be sent to the individual candidate.

- v. On a notified date, the DRC shall interview the invited applicants in the order of merit of RTU-DAT entrance examination. **The candidates are required to discuss their research interest/area/plan through a presentation (approx. 15 minutes duration) before DRC.** The DRC will judge the suitability of the applicant for admission on the basis of following
- the candidate possesses the competence for the proposed research;
  - the research work can be suitably undertaken at the Institution/College/Research Centre;
  - the proposed area of research can contribute to new/additional knowledge.

**The candidate shall be asked questions after completion of presentation** and shall be evaluated based on

- candidate's competence in the proposed research area viz. familiarity with necessary software/lab equipments/analytical/numerical methods etc. and research aptitude
  - contribution of the proposed research work to new/additional knowledge
  - candidate's technical/scientific knowledge in the proposed research area and clear understanding of the proposed research area
- vi. The final merit list of the candidates in individual specialization shall be prepared by the concerned DRC on the basis of aggregate marks obtained in entrance examination and interview as prescribed in Regulations. The candidate shall be allotted supervisor by DRC in the order of merit. Preference of the candidate for supervisor shall be considered as far as possible. However, recommendations of the DRC regarding allotment of supervisor and research

centre shall be final and binding. DRC will allot the supervisor on the basis of specialization of supervisor, interest area of the applicant and mutual consent of supervisor and applicant. The final list of selected candidates for admission shall be displayed on the web-portal after due approval of the competent authority. The respective university reserves the right to modify/ amend/ alter the procedure/ process mentioned above at any stage and without any further notice.

- vii. University reserves the right not to fill all the vacant seats in the absence of suitable applicants and/or non-availability of supervisor in the chosen area of research as decided by DRC. Merely qualifying RTU-DAT examination and/or appearing in the interview do not entitle the applicant for admission to the PhD program.
- viii. Please note that **“The DRC interviews for research centers belonging to/ affiliated to Rajasthan Technical University, Kota shall be conducted at the premises of RTU, Kota while the DRC interviews for research centers belonging to/ affiliated to Bikaner Technical University, Bikaner shall be conducted at the premises of BTU, Bikaner.”**
- ix. The reservation in the Ph.D. program shall be as per the **Rajasthan State Government Reservation Policy**. Applicants desirous of taking admission in the OBC/MBC category should have a valid certificate of the non-creamy layer as per the norms of the Government of Rajasthan.
- x. If any Scholarship/ Assistantship/ Fellowship is available, it will be provided to full-time (FT.1) Ph.D. applicants as per the prevailing RTU norms at the time of admission. Details of the University/Institute fellowship are given in Annexure-1. Applicants of the FT.1 category are advised to refer to the Annexure-1 before exercising his/her choice.
- xi. The applicants shall not be paid any TA/DA for appearing in the written test/ interview. No stay arrangements shall be made by the University for appearing in the examination/ interview.

- xii. The applicant having any grievance against the question(s) asked in entrance examination for RTU-DAT-2020 may submit the same in writing to the convener, RTU-DAT-2020, within one day of the conduct of that examination.
- xiii. In case there is a difference in the interpretation of rules and procedure mentioned in this brochure and the Ph.D Ordinance/Regulations declared by the respective university (RTU/BTU), then the Ph.D Ordinance/Regulations shall supersede and overtake.

## **6. Contact and Helpline Number for DAT-2020**

Candidates are advised to go through the information brochure, all online links, and other related guidelines before applying to the DAT-2020. The candidate may contact for any clarification/ query regarding DAT-2020 at the following address:

Admission Office DAT-2020,  
Near Central Library,  
Rajasthan Technical University,  
Rawatbhata Road, Akelgarh,  
KOTA (Rajasthan) – 324010  
Phone No: 0744-2473090  
email: [rtudat2020@rtu.ac.in](mailto:rtudat2020@rtu.ac.in)

### Annexure-1

List of the University Fellowship/ Institute Fellowship available to Full Time Ph.D. Scholars.

<b>Rajasthan Technical University University Teaching Department (University Fellowship)</b>			
<b>S. No.</b>	<b>Departments</b>	<b>Specialization</b>	<b>No. of Scholarship</b>
01	Mechanical Engg.	Industrial Engineering	01
02	Mechanical Engg.	Machine Design	01
03	Electrical Engg.	Power System	01
04	Electrical Engg.	Power Electronics & Electrical Drives	01
05	Electronics Engg.	Digital Communication	01
06	Electronics Engg.	Control and Instrumentation.	01
07	Civil Engg.	Environmental Engineering	01
08	Civil Engg.	Geotechnical Engineering	01
09	Civil Engg.	Structural Engineering.	01
10	Computer Engg.	High Performance Computing	01
11	Centre for Nano Technology	Nano Materials in Electromechanical /Structural Engineering	01
12	Renewable Energy	Renewable Energy Technology	01

**Note:** Few fellowships for the eligible candidates are also available under the AICTE Doctoral Fellowship Scheme which is subject to fulfillment of eligibility and other conditions laid out for the scheme. Applicants are advised to visit the AICTE ADF web portal for more details and eligibility conditions. However, applicants cannot claim the award of fellowship under ADF scheme or any other scheme as a matter of right.



## Annexure-2

Category	Form to be attached
Full Time Sponsored	<u>Form 1 (a)</u>
Full Time Self-financed	<u>Form 1 (b)</u>
Part Time Self-financed	<u>Form 2 (c), Form 2 (d)</u>
Part Time RTU Staff	<u>Form 2(a)</u>
Part Time RTU Project	<u>Form 2(b)</u>



**Format for Form 1 (a)**  
**(Mandatory for category FT.3 Sponsored)**

**Declaration by Employer of the applicant**

Application of Mr/Ms./Mrs -----who is working as -----  
------(designation) in ----- department of our institution/organization  
for admission as Full Time research scholar at Rajasthan Technical University Kota is hereby  
forwarded. He is working in our institute/organization since ----- (minimum  
two years working experience is required.)

In case, he/she is selected for admission by the university in the Ph.D. program; he/she shall  
be relieved in time to join the Ph.D. program. He /she will also be treated on duty and will be  
provided his/her normal salary during the period of Ph.D.

Date:

Head of institution  
Signature with seal



**Format for Form 1 (b)**  
**(Mandatory for category FT.4 Self-financed)**

Application of Mr./Ms. -----who is working as-----  
(designation) in ----- department of our institution for admission  
as Full-Time research scholar at Rajasthan Technical University Kota is forwarded. In case  
he/she is selected for admission, he/she shall be granted study leave of -----  
-----years (minimum two years) to pursue the Ph.D. He/ She will be relived in time by our  
institution to join the Ph.D.  
program.

Date:

Head of institution  
Signature with seal



**Format for Form 2(a)**  
**(Mandatory for category PT.1 and PT.2 of Rajasthan Technical University  
Faculty/Staff)**

Application of Mr./Ms.-----who is working as -----  
(designation) in----- department of our institution for admission as  
Part Time research scholar at Rajasthan Technical University Kota, is hereby forwarded. He/She  
has more than three years of working experience.

Date:

Head of institution  
Signature with seal





**Format for Form 2(b)**  
**(Mandatory for category PT.3 Project Staff of Rajasthan Technical University)**

Application of Mr./Ms/Mrs.----- who is working as -----  
-----(designation) in -----department is hereby forwarded for  
admission as Part Time research scholar of Rajasthan Technical University Kota.

Date:

Principle Investigator/  
Coordinator of project



**Format for Form 2(c)**  
**(Mandatory for category PT.4 Self finance)**

**Declaration by Employer of the applicant**

Application of Mr./Ms./Mrs.----- who is working as -----  
----- (designation) in----- institution/organization is  
hereby forwarded for admission as Part Time research scholar at RTU Kota. He is working in  
our institute/organization since ----- (minimum three years working  
experience is required\*). In case he/she is selected for admission, he/she shall be allowed to  
complete all the mandatory residential and other requirements of the Program/ Course as per  
the rules of the university.

This is also certified that the sufficient research facility pertaining to his/her research work is  
available at our institute/organization and will be made available for his/her utilization.

Date:

Head of institution  
Signature with seal

\* Applicant having less than three years' experience under current employer needs to submit the  
past experience certificate(s) totaling at-least three years duration in addition to the above  
mandatory certificate from the current employer.

**Format for Optional Form 2(d)**  
**(Applicable only for the Part Time applicant of PT.4 category who needs exemption from residential requirement during course work)**

**Declaration by Employer of the applicant**

It is certified that our institution/organization is within 50 Km radius from the ..... (Name of the Institute/Research center where admission is being sought). In case Mr./Ms./Mrs. -----is selected for admission, he/she shall be allowed to attend the classes of the course work and complete other requirements of Degree while discharging the normal official duties.

Date:

Head of institution  
Signature with seal

