

**NARASINHA DUTT COLLEGE, HOWRAH**

**ONLINE APPLICATION INFORMATION BROCHURE FOR  
ADMISSION TO M. SC. IN MATHEMATICS, SESSION 2017 – 2018**

**A. GENERAL INFORMATION:**

1. Only online application for admission will be entertained.
  2. Online application fee **Rs 900/- (Rupees nine hundred only) [Including Bank Charges]**.
  3. Total Number of seats : **24**
  4.
    - (a) 60% (=14 seats) of total seats is reserved for C.U. and C.U. Autonomous College current year applicants only. **60% reserved category applicants merit list is called 1<sup>st</sup> Merit List.**
    - (b) 40% (=10 seats) of total seats is reserved for
      - (i) Non-C.U. candidates of current year and immediate preceding year
      - (ii) The candidates in the 1st merit list not getting scope for admission from 1st merit list.
      - (iii) C. U. candidates of immediate preceding year.
- 40% reserved category applicants merit list is called 2<sup>nd</sup> Merit List .**
5. **1<sup>st</sup> Merit List** is prepared strictly in order of merit judged on the basis of percentage of marks secured in the Honours subject and in case of a tie, the percentage of marks obtained in Mathematics subject of Higher Secondary to be taken into consideration.
  6. **2<sup>nd</sup> Merit List** is prepared based on 40% of weightage to be taken from the percentage of marks obtained in Honours subject of 3 years Bachelor's Degree course and 60% of weightage in the percentage of marks obtained in the Entrance Test.
  7. Caste reservation as per West Bengal Government Rule
  8. **All non - C.U. applicants have to appear in the Entrance Test and will be placed in the 2nd merit list only.**
  9. **For C.U. applicants of current year, Entrance Test is not mandatory but if any C.U. applicant of current year does not appear in the Entrance Test, he/she may not be placed in the 2nd merit list.**
  10. **For C. U. applicants of preceding year, Entrance Test is mandatory.**
  11. If sufficient suitable number of SC/ST/OBC applicants are not available in 1st merit list, the same may be filled up by SC/ST/OBC candidates in 2nd merit list and vice-versa. In spite of this, SC/ST/OBC seats are still vacant, the same may be filled up by general category applicants from their respective merit lists.

12. **The following applicants may appear in Entrance Test for 2nd merit list.**

- a) All valid applicants from Universities other than C.U. of current year and immediate preceding year.
- b) C.U. and C.U. autonomous college applicants of current year not getting scope for admission from the 1st merit list,
- c) C. U. applicants of immediate preceding year.

13. Question pattern of Entrance Test: 25 Short answer type each of 2 marks.

14. All the rules are subject to change by the order of the appropriate authority.

15. Error/omission/ambiguity if any are subject to change by the approval of the appropriate authority.

16. Applicants selected for admission will have to pay **Rs.19,000/-**(Rupees nineteen thousand only) at the time of admission.

17. In general, reimbursement of admission fee is not allowed. If any candidate wish to cancel his/her admission for better opportunities within a stipulated period, the tuition fees may be reimbursed but reimbursed amount will be at the discretion of college authority.

18. All merit lists & notifications will be published on the website [www.narasinhaduttcollege.edu.in](http://www.narasinhaduttcollege.edu.in)

19. **Applicants are required to upload their recent scanned coloured Passport Size Photograph and Signature.** The following are the information to upload their recent coloured passport size photograph and signature,

- a) Applicant should have a scanned copy of recent Passport Size **Photograph and Signature.**
- b) The Photograph and Signature must be in **GIF / JPEG / JPG** format only.
- c) The file size of each image (i.e. Photograph and Signature) must be **less than 50KB.**
- d) The dimension of the scanned Photograph should be **140px X 162px**(i.e. 140px in Width and 162px in Height).
- e) The dimension of the scanned Signature should be **150px X 50px** (i.e. 150px in Width and 50px in Height).

**B. IMPORTANT DATES:**

- 1. **29.06.2017** (Thursday) – Online application and bank payment of application fee open.
- 2. **08.07.2017** (Saturday) – Last date for submission of online application.
- 3. **11.07.2017** (Tuesday) – Last date for payment of application fee.
- 4. **12.07.2017**(Wednesday) – Settlement of disputes in relation to application and payment of application fee through help line (9830168755/ 033-40068162) from 11 AM to 6 PM
- 5. **13.07.2017** (Thursday) – Publication (3:00 P.M. tentative) of 1st merit list

6. **14.07.2017** (Friday) - Admission from 1st merit list
7. **15.07.2017** (Saturday) - Date of Entrance Test
8. **20.07.2017** (Thursday) – Publication(3:00 P.M. tentative) of 2nd merit list
9. Date of admission from 2<sup>nd</sup> merit list will be announced on date of publication of 2<sup>nd</sup> merit list in the website [www.narasinhaduttcollege.edu.in](http://www.narasinhaduttcollege.edu.in)

### **C. ONLINE APPLICATION ELIGIBILITY CRITERIA:**

1. All (10+2+3) pattern Mathematics Honours Graduate applicants of UGC recognized Indian University of the current year and of the immediate preceding year are eligible to apply.
2. Candidates passing Honours in Mathematics having **55% marks** in undergraduate level from Indira Gandhi National Open University, Netaji Subhas Open University and the Distance Education Programme of other Universities in West Bengal of current and immediate preceding year are also eligible to apply and they will be considered in 2nd merit list.

### **D. FEE STRUCTURE:**

<b>1<sup>st</sup> and 2<sup>nd</sup> Semester Fee Structure (For Session 2017- 2018)</b>			
<b>1st Semester</b>		<b>2nd Semester</b>	
Tuition Fee:	9,000/-	Tuition Fee:	9,000/-
Session Charge:	1,000/-	Exam. Fee :	2,000/-
Library Fee:	800/-		
Admission Fee:	5,000/-		
Exam. Fee :	2,000/-		
Maintenance & Development fee:	1,200/-		
<b>Total:</b>	<b>19,000/-</b>	<b>Total:</b>	<b>11,000/-</b>
<b>3rd and 4<sup>th</sup> Semester Fee Structure( For Session 2018- 2019)</b>			
<b>3rd Semester</b>		<b>4th Semester</b>	
Tuition Fee:	9,000/-	Tuition Fee:	9,000/-
Session Charge:	1,000/-	Exam. Fee :	2,000/-
Library Fee:	800/-		
Admission Fee:	5,000/-		
Exam. Fee :	2,000/-		
Maintenance & Development fee:	1,200/-		
<b>Total:</b>	<b>19,000/-</b>	<b>Total:</b>	<b>11,000/-</b>

### **E. SYLLABUS OF ENTRANCE TEST:**

**(Syllabus of the following topics is as per Under Graduate Honours level)**

1. **Real Analysis** –Sets in R, Continuity, Differentiability, Power series, Enumerable sets, Fourier series, Compact sets, Metric spaces, Sequence, Infinite series of real constants and their convergence.
2. **Dynamics** –Particle Dynamics.

3. **Algebra** –Set, Relation, Mapping, Group, Ring, Field, Vector Space; Vector Algebra, Theory of equation, Complex number.
4. **Calculus** – Functions of several variable, Indeterminate forms, Maxima & Minima, Definite integration, Ordinary Differential equation of first order, Vector Calculus, Concavity & Convexity, Laplace Transformation.
5. **Numerical Analysis** – Errors in numerical computation, Numerical integration, Solution of linear and non-linear equations.
6. **LPP-** Mathematical Preliminaries, Characteristics of an optimal solution, Assignment & Transportation Problem.
7. **Mathematical Theory of Probability** -- Random experiments, events, Axioms of probability, Independent events, Multiplication rule, Conditional Probabilities, Bayes' theorem, Bernoulli & Poisson trials, Binomial law, Probability distributions: Binomial, Poisson, Gamma, Normal, Uniform distributions, Transformations of random variables, Mathematical Expectations, Mean, Variance, Moments, Central moments, Tchebycheff's inequality, convergence in probability, Law of Large numbers, Bernoulli's limit theorem, Asymptotically normal distribution, Limit theorem for equal components.
8. **Tensor Calculus**-- Summation convention, Contravariant, Covariant, Invariant and Mixed tensors, Kronecker Delta, Symmetric & Skew-symmetric tensors, Outer & Inner products, Quotient laws, Reciprocal Tensor, Riemannian Space, Line element & Metric tensor, Reciprocal Metric tensor, Associated tensor, Magnitude of a vector, Orthogonal vectors.

#### **F. ONLINE APPLICATION SUBMISSION INSTRUCTIONS AND GUIDELINES:**

1. First read carefully the Information Brochure.
2. Enter into the college webpage [www.narasinhaduttcollege.edu.in](http://www.narasinhaduttcollege.edu.in). Follow the steps for online application to fill up the form as per the information required and then submit it. After submission of the online application, the system will generate a printable version of the filled out **Application Form** (2 pages), a printable **Bank Challan** (1 page having three parts called 'Bank copy', 'College copy' and 'Applicant copy') and **Admit Card** (1 page having two parts called „College copy" and 'Applicant copy'). Although you can retrieve these files later online. We recommend that you take print out of these files. It will complete online submission process. Print out of application form of two pages may be in **one page of both sides**.
3. **Only offline payment of application fee is allowed.** For this, take a print out of the bank challan and carry it to „ **Narasinha Dutt College" branch of "CENTRAL BANK OF INDIA "** and pay the application fee of Rs. 900/- (Rupees nine hundred only). **The bank will return Applicant copy to you as a receipt against your payment.** Make sure that it is stamped and signed by the bank. You retain the receipt of Applicant's copy until the end of the admission process.
4. Before submission of application form, it is always editable all fields but after submission, only few selected fields are editable until last date of submission of

application form. If you have submitted an application with erroneous data you can fill up a fresh application and submit it again. Pay your application fee against the challan generated for the error free fresh application. Your application will be validated only after you have paid the processing fee. No requests for manual correction will be entertained at any stage.