

**DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY**  
**AURANGABAD- 431 004, Maharashtra (India)**  
**DEPARTMENT OF STATISTICS**  
**NAAC Accredited 'A'**



**NOTIFICATION**

**Entrance Examination for Seeking Admission to M.A./M.Sc. Statistics  
(First Year) (Academic year 2016-2017)**

The Department of Statistics Dr. Babasaheb Ambedkar Marathwada University is going to conduct Common Entrance Test (CET) to enroll the students for M.A./M.Sc. Statistics (First Year) for Academic year 2016-2017. The deadlines and other details are given below.

**Eligibility Criteria:** Those who have completed B.A./B.Sc. with Statistics or Mathematics as one of the optional subject at graduate level. The candidate with B.A./B.Sc. ( Statistics) will be given preference.

**Fees for Entrance Examination:** Rs. 400/- (For Open Category) and Rs. 200/- (For Reserved Category) DD Drawn in favour of Registrar, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. The payment can also be paid in cash in the Office of Department of Statistics.

Sr. No.	Important Dates/ Deadlines	
1	Submission of scanned copy of duly filled in application form by email ( <a href="mailto:dr.sananse5@gmail.com">dr.sananse5@gmail.com</a> , <a href="mailto:head.statistics@bamu.ac.in">head.statistics@bamu.ac.in</a> )	16-05-2016 to 22-05-2016 (upto 5p.m)
2	Last date of submission of hard copy of application form in the Department of Statistics	22-05-2016 (upto 3p.m)
3	Display of list of eligible candidates (for CET ) on university website ( <a href="http://www.bamu.ac.in">www.bamu.ac.in</a> )	22-05-2016 (upto 5p.m)
4	<b>Common Entrance Test (CET) in the Dept. of Statistics, Dr. B.A.M.U., Aurangabad</b>	<b>28-05-2016. 3.00 P.M. to 4.00 P.M.</b>
5	Declaration of CET Result	30-05-2016
6	Registration for admission ( Selected Candidates )	02-06-2016 to 08-06-2016
7	Declaration of the First Merit list and seeking admission	11-06-2016 to 14-06-2016
8	Declaration of the Second merit list against vacancy and seeking admission	18-06-2016 to 24-06-2016
9	Spot Admission against vacancy	25-06-2016.

**Intake for M.Sc. (Statistics) First Year:** 32 Students. University admission rules will be followed

## General Instructions:

- The entrance examination will be of 100 Marks of 50 MCQs and there will not be negative marking.
- Please download **application form** from university website: [www.bamu.ac.in](http://www.bamu.ac.in) and submit scanned copy of filled in application form by email to [dr.sananse5@gmail.com](mailto:dr.sananse5@gmail.com), [head.statistics@bamu.ac.in](mailto:head.statistics@bamu.ac.in) on or before May 22, 2016. The blank application forms are also available in the department. It is compulsory to submit hard copy of the application form along with requisite cash receipt/ demand draft to the department **on or before May 22, 2016 up to 3 P.M.**
- After completion of registration procedure, final merit list will be prepared based on 50% weightage to B.A./B. Sc Subject percentage and 50% weightage to CET and final merit list will be displayed on university website : [www.bamu.ac.in](http://www.bamu.ac.in) and on the notice board of the department.
- Copy of application form and Syllabus for CET is appended herewith.

### Contact Nos.:

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Dr. C. D. Sonar: 9422275899

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**Application form for Common Entrance Test (CET)**

Paste latest

Passport size

Photograph

1. Name of the Student :

\_\_\_\_\_

2. Name and Address of the last attended College :

\_\_\_\_\_

\_\_\_\_\_

3. Name of the University : \_\_\_\_\_

4. Date of Birth : \_\_\_\_\_

4. Gender \_\_\_\_\_

5. Category: \_\_\_\_\_

6. Address for communication :

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

7. Average percentage of graduation \_\_\_\_\_

8. Average percentage of Statistics/ Mathematics Subjects for  
1<sup>st</sup> year \_\_\_\_\_ 2<sup>nd</sup> year \_\_\_\_\_ and \*3<sup>rd</sup> year \_\_\_\_\_

9. Mobile Number : \_\_\_\_\_ 10. Email ID : \_\_\_\_\_

11. Details of Fees paid : 1) Demand Draft Number \_\_\_\_\_

Amount : \_\_\_\_\_ Date: \_\_\_\_\_

Name of The Bank \_\_\_\_\_

2) Cash Receipt No. \_\_\_\_\_

Date : \_\_\_\_\_

Place: \_\_\_\_\_

Signature of the Student

Note : 1. \*Third Year appeared students and whose results is awaited can also apply for CET.

2. Submit the hard copy of the application form along with D.D/ cash receipt on or before  
May 22,2016 in the Department of Statistics.

3. ID proof is compulsory for appearing Entrance Test.

## **Syllabus of CET for Admission to M.A / M.Sc. Statistics (First Year) 2016-2017**

**Measures of central tendency** : Arithmetic Mean, Geometric Mean, Harmonic Mean, Median and Mode; **Measures of Variation** : Range, Mean Deviation, Standard Deviation, Coefficient of Variation, Quartiles, Percentiles, Measures of Skewness and Kurtosis. **Types of data**: Qualitative and Quantitative data. Scale of Measurements (Nominal, Ordinal, Interval and Ratio). Concept of Probability, Laws of Probability (Statements only); Random Variable; **Probability Distributions**: Binomial, Poisson and Normal distributions (properties and applications). **Sampling Techniques**: Concept and definitions, Types of sampling: Purposive and Random Sampling. Simple Random Sampling, Stratified Random Sampling and Systematic Random Sampling. **Test of significance**: Types of Hypothesis, Types of Error, Critical Region; Large sample tests for proportions and means; small sample tests; Application of t, chi-square, F-tests. **Correlation**: Simple Correlation, Karl Pearson's Correlation, Multiple Correlation and Partial Correlations, Properties of Correlation Coefficient Regression; **Regression**: Regression Coefficient, Properties of Regression Coefficient, Fitting of Regression Curve (Linear and Non-linear) Index numbers, probability Theory

**Real Analysis**: Introduction to  $n$  dimensional Euclidean space and metric space, system of real numbers, countable and uncountable sets, countability of rational numbers, uncountability of real numbers, supremum and infimum of set of real numbers, interior point, limit point of a set, open set, closed set, dense and compact sets, Real valued function, Continuity. **Vector Algebra**: vector space, subspace, linear dependence & independence, basis, dimension of vector space, Example of vector spaces, algebra of linear transformations. Orthonormal basis and orthogonal projection of vector. **Algebra of matrices**: row and column space of matrix, elementary matrices, determinants, rank and inverse of a matrix, null space and nullity, partitioned matrices. Real quadratic forms, reduction and classification of quadratic forms, index and signature, triangular reduction of a positive definite matrix. Characteristics roots and vectors, Caley – Hamilton theorem and applications.