

# COMMON ENTRANCE TEST (CET) FOR ADMISSION INTO VARIOUS DEGREE PROGRAMMES OF THE ASSAM AGRICULTURAL UNIVERSITY

## A) CETUG-AAU21 for undergraduate degree programmes

- The CETUG is a common entrance test for admission into the undergraduate degree programmes of the disciplines of Agriculture, Horticulture, Sericulture, Veterinary Science, Fishery Science, Community Science and Food Nutrition & Dietetics which will held on a date(s) to be notified later on.
- The test will be held in centres located in Dhubri, Kokrajhar, Bongaigaon, Goalpara, Udalguri, Nalbari, Barpeta, Guwahati, Nagaon, Diphu, Silchar, Jorhat, Sivasagar, Dibrugarh, Lakhimpur and Tezpur. *However, in absence of sufficient number of candidates in a place, candidates may be shifted to the nearby place of test centres.*
- The Test will be of 2 (Two) hours (Effective) duration for 200 (Two hundred) marks with 200 multiple choice questions (MCQ) in both English and Assamese languages carrying 1 mark each. The distribution of questions shall be as per the following structure:

Subject	No. of MCQs	Marks
Physics	50	50
Chemistry	50	50
Botany	50	50
Zoology	50	50

- For every wrong answer, there will be a negative marking of 0.25 mark.
- The standard 10+2 syllabus of the Assam Higher Secondary Educational Council prescribed for Physics, Chemistry, Botany and Zoology subject will be followed for the entrance test.
- The test will be conducted in sessions across all the test centres in Assam
- The common merit list of the candidates will be prepared based on percentile ranking in each session of the test covering all the test centres.
- In case of a tie in a group of candidates in percentile ranking, candidates' ranks will be decided based on their test scores secured in Botany, followed by Zoology and then Chemistry and Physics respectively. If the tie still exists, their percentage in 10+2 followed by HSLC percentage will be considered.
- Cut-offs under various quotas & categories will be declared for attending the online counselling subsequently.
- Who are **REQUIRED** to appear in the test?

#	Categories of candidates
1	All candidates from unreserved and EWS categories
2	All candidates from reserved categories (OBC, SC, STP, STH)
3	Games & Sports category
4	Differently Abled candidates
5	Descendants of Freedom Fighter
6	Children of AAU Employee
7	Children of Defence Personnel
8	Victim or children, brother, sister of martyrs of Assam Agitation
9	Higher Fee candidates from NE states
10	Rest of India candidates for Horticulture/Sericulture
11	Son/daughter of Small Tea Growers
12	Agricultural Extension Assistant with sponsorship from state of Assam

- Who are **NOT REQUIRED** to appear in the test?

#	Categories of candidates
1	ICAR sponsored candidates
2	VCI sponsored candidates
3	NEC sponsored candidates
4	Tea Growing States sponsored by respective states
5	NRI/NRI Sponsored candidates (A candidate from Assam wishing to offer candidature for other seats available under various quotas and categories shall have to appear in the test)
6	Kashmiri Migrants
7	Kashmiri Non-Migrants (Hindu Pundit)

## B) CETPG-AAU21 for post-graduate degree programmes

- Questions will be of multiple choice (MCQ) type with four options and answers to be given on OMR sheet.
- Each question will carry one (1) mark only.
- The test would be of total 200 marks (50 for Aptitude + 150 for the profession faculty wise)
- Marks for each subject will be distributed according to the proportion of credit hours of that subject during the U G Programme.
  - For College of Agriculture/Horticulture/Sericulture: 50 marks for Aptitude + 75 marks from respective subject (common to all three faculties) + 75 marks from Agri./ Hort./ Seri. Syllabi (as per UG syllabus of AAU)
  - For College of Community Science: 50 marks for Aptitude + 120 marks from respective subject + 30 marks from elective (as per UG syllabus of AAU)
  - For College of Veterinary Science.: 50 marks for Aptitude + 150 marks from respective subjects (as per UG syllabus of AAU)
  - For College of Fisheries Science.: 50 marks for Aptitude + 150 marks from respective subject
- The questions for Aptitude part will be common to all the faculties.
- The test will be conducted in a single session across three centres, viz., a) **AAU, Jorhat** for Agriculture and Community Science streams, b) **College of Fisheries Science, Raha** for Fisheries stream, and c) **College of Veterinary Science, Khanapara** for Veterinary stream.
- The common merit list of the candidates for each faculty will be prepared based on percentile ranking after combining scores obtained in the test (from 200 marks) and CGPA obtained during undergraduate degree programme (in percentage from 100).
- In case of a tie in a group of candidates in percentile ranking, candidates' ranks will be decided based on their scores secured in the test, followed by their CGPA. If the tie still exists, their percentage in 10+2 followed by HSLC percentage will be considered.
- Cut-offs under various quotas & categories will be declared for attending the online counselling subsequently.

## C) CETGEN-AAU21 for Master's degree programmes in Agricultural Biotechnology, Food Technology and Agricultural Biochemistry

- Questions will be of multiple choice (MCQ) type with four options and answers to be given on OMR sheet.
- Each question will carry one (1) mark only.
- The test will be of total 200 marks (50 for Aptitude + 150 from the syllabus provided in **Annexure-I**)
- The test will be conducted in a single session at **AAU, Jorhat**.

- The common merit list of the candidates will be prepared based on percentile ranking in after combining scores obtained in the test (from 200 marks) and CGPA from undergraduate degree programme (in percentage from 100).
- In case of a tie in a group of candidates in percentile ranking, candidates' ranks will be decided based on their scores secured in the test, followed by their Bachelor's CGPA. If the tie still exists, their percentage in 10+2 followed by HSLC percentage will be considered.
- Cut-offs under various quotas & categories will be declared for attending the online counselling subsequently.

## D) CETDOC-AAU21 for PhD degree programmes

- The entrance test for doctoral candidates will be conducted by the concerned Department.
- The test will be of total 200 marks consisting subjective type questions as per the Master's syllabus of the concerned discipline.
- The common merit list of the candidates for each Discipline will be prepared based on percentile ranking after combining scores obtained in the test (from 200 marks) and CGPA obtained during Master's degree programme (in percentage from 100).
- In case of a tie in a group of candidates in percentile ranking, candidates' ranks will be decided based on their scores secured in the test, followed by their Bachelor's CGPA. If the tie still exists, their percentage/CGPA during Bachelor's degree programme will be considered.

### Annexure-I

## SYLLABUS FOR CETGEN-AAU21

**UNIT 1:** Physical units of measurement, various systems of units, SI System, Dimensions of physical quantities, thermodynamic variables, laws of thermodynamics, mode of heat transfer, electromagnetic waves, radioactive radiations and their classifications, applications of radioactivity, use of radioisotopes as a tracer in agriculture, industry and medicine

**UNIT 2:** Morphology of cell – prokaryotic and eukaryotic cells, plant and animal cells, structure, composition and function of cell organelles, cell cycle, cell death and cell renewal, tools of cell biology, membrane structures, membrane transport, Mendelian genetics, chromosomal and molecular basis of inheritance, gene interactions, spontaneous and induced mutations, economic botany, organization of animal tissues, respiration, digestion, absorption, general physiology of animals

**UNIT 3:** General characteristics of viruses, bacteria, fungi, algae, yeasts, molds and their economic importance, control and food safety, microbial growth and nutrition, microbiological standards, general principles of food preservation.

**UNIT 4:** The gas laws, concept of acid-base, pH and buffer, types of solutions, solubility & factors affecting solubility, chemical bonds and the forces involved, electrophilic and nucleophilic reactions, aliphatic and aromatic hydrocarbons, chemical equilibrium, redox reactions, classification, structure and metabolic functions of carbohydrates, lipids and proteins, enzymes: structure, nomenclature, mechanism of action; vitamins and minerals as coenzymes and cofactors, photosynthesis, secondary plant metabolites, analytical techniques like spectroscopy, electrophoresis, separation techniques - filtration, centrifugation, chromatography.

**UNIT 5:** Structure and function of nucleic acids, genes and genomic organization, DNA replication, transcription and translation, recombinant DNA technology, recent developments in genetic engineering, gene therapy, ELISA, plant/animal cell and tissue culture, DNA fingerprinting, molecular biology techniques – PCR, southern, northern and western blotting.

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