

**HAND BOOK OF GUIDELINES
FOR
ESTABLISHING AGRICULTURAL COLLEGE**



**TAMIL NADU AGRICULTURAL UNIVERSITY
COIMBATORE**

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**Approved by the Board of Management of TNAU
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I. INTRODUCTION

India accounts for only about 2.4 per cent of the world geographical area and 4 per cent of the water resources but has to support 17 per cent of the human population and 15 per cent of the live stock. Agriculture is always an important sector of the Indian economy accounting for the Nation's GDP and about 11 per cent of its exports. About half of the population still relies on agriculture as its principal source of income and it is the source of raw material for a large number of industries. The agriculture stands to-day as a pride of our National economy which is being confronted with phase of changing climate. Due to the diminishing of agricultural land and water resources with burgeoning population the agriculture in future stands as a threat to food security.

Therefore, there is an urgent need to review the present prospective of higher agricultural education to cater the present day local and global needs. The agricultural graduates need to be thoroughly equipped with knowledge, skills, ability to meet the challenge of the future and to emerge as an entrepreneur in agriculture and allied sector as well as to become a solution-provider in rural areas to promote the much needed transformation of Indian villages with commercial propositions from traditional agriculture. Certain aspects on which more emphasis is required in agricultural education are closely linked to curricula, skill generation, employability traits and infrastructure which are essentially required in any agricultural institution, so as to mould the graduates perform adequately to meet the needs of the nation and face global competitiveness. Improving the educational quality is the only way to achieve the targeted graduates through setting up minimum standards for proper education in agriculture in terms of infrastructure, man power and other logistics, so that the students get required knowledge and experience to face the challenges in future and enhance their capabilities to deliver as per need.

The Tamil Nadu Agricultural University (TNAU) which stands for the growth of agriculture, development of the Tamil Nadu farmers and the progress of the Nation has taken up the onerous responsibility to frame the minimum guidelines for establishing new degree programmes in agriculture and allied sciences.

II. GENERAL GUIDELINES

1. The college / institute, if not run by State / Central Government should be managed by a duly constituted and registered Society or Trust.
2. The Trust / Society desirous of starting a new agricultural college and get affiliated to TNAU shall apply in the prescribed form of the University to the Registrar, TNAU, Coimbatore.
3. The application can be downloaded from the University website www.tnau.ac.in (Annexure - I).
4. Filled in application should be sent to the Registrar, TNAU, Coimbatore only along with the registration fee (non-refundable) of Rs.50,000/- (Rupees fifty thousand only) and application fee (non-refundable) of Rs.1,00,000/- (Rupees one lakh only) for a degree programme. The fees should be paid in the form of demand draft drawn in favour of "Comptroller, Tamil Nadu Agricultural University" payable at Coimbatore.
5. After processing the application, the Standing Committee will inspect the location. Standing Committee inspection fee of Rs. 1.00 lakh only to be paid before inspection.
6. The details of fees payable to the University for affiliation are furnished in Annexure-II.
7. The minimum gap between the first and second visit of the Standing Committee is two months
8. The documents to be submitted along with the application and the schedule for processing the application are furnished in the Annexures – III (a & b).
9. To start with, affiliation will be given only for one UG degree programme for which Tamil Nadu Government has granted its approval.
10. Affiliation for the courses conducted by Private Trust / Society will be given on temporary basis at the initial stage and based on the fulfillment of all the conditions and subject to the satisfactory performance, affiliation will be renewed. Any deviation or non fulfillment of the requirements will lead to de-affiliation by TNAU.
11. The Trust / Society should furnish the following documents / certificates to Tamil Nadu Agricultural University while applying for affiliation of courses:
 - a) Legal opinion from not below the rank of the Government Pleader on the ownership of land and extent of coverage is to be enclosed. Also it is informed that the legal opinion about the title of the land in which the proposed new college is to be started has to be obtained only from the Government Pleader of the district in which the land is situated.
 - b) Resolution for starting the new Agricultural College (indicating the name of the college specifically) and Agreement signed in Rs.20/- (Rupees Twenty only) stamped paper by the all Trustees / Members.
 - c) Details of names of the Trust / Society members, their occupation, age and residential address, Phone No. Fax, e-mail, etc.
 - d) Master Time Table for all courses and all sections with classroom arrangements.
 - e) A Certificate from the competent authority authorising the indented land for the college is for EDUCATIONAL PURPOSE.
 - f) The Copies of the registered land deeds (along with Encumbrance certificate for a period of 30 years) documents in the name of the Trust should be furnished.
 - g) Building plan approved by the competent authority designated by the Government for all the buildings to be used by the

- college. This should be accompanied by a Sketch of the proposed College with details of Rooms, Laboratories, Stores, Library, etc., for all the floors (proposed College Name and Survey Number should be stated). The University's approval has to be obtained subsequently for new buildings. Rain water harvesting facilities have to be erected in the buildings.
- h) Detailed project report of the college giving background of the Trust, Development Plan for the college with the time line, architectural master plan indicating the land usage, policy with regard to Faculty recruitment, structure of academy and administrative governance, source of finance of capital and operating expenditure resource projections and their utilization schedule to satisfy adequacy and sufficiency for running the college as per the norms standardized by the University.
 - i) Background of the Trust with reference to its experience in promoting, managing and operating Educational Institutions; details of its promoters including their background; its activities in the Social, Charitable and Educational spheres since its inception and its Vision and Mission and satisfy itself of desirability.
 - j) A Topographical Sketch of the land along with surrounding area with Survey Nos. signed by the concerned Thasildar (College land should be coloured in the sketch plan).
 - k) Land Contiguity Certificate stating the College name with Survey numbers and Extent in Area from the Thasildar concerned.
 - l) A Certificate permitting Conversion of Wetland to other use and vice-versa i.e. for Educational use, etc. by competent authority.

Certificates for the following should be given after the completion of infrastructure

- i) Fire / boiler / electrical safety from competent authorities.
 - ii) No Objection Certificate from traffic/transport point of view by the concerned authority.
 - iii) College buildings being constructed in the land owned by the Trust / Society permanently.
 - iv) Building and equipment insurance.
 - v) Clearance from Health Inspector
 - vi) Structural stability of the building from Public Works Department (PWD) not below the rank of Superintending Engineer.
 - vi) No Objection Certificate from Pollution Control Board (from concerned authority) for disposal of laboratory waste.
 - viii) Photographs of the Agriculture College (especially showing the Name of the College and mobility facilities for the differently abled)
12. The lands earmarked for the college purpose should not be used for any other purpose.
 13. The College should be started with 100 per cent self-finance without expecting Government Grant / Aid to start / continue the course / any other purpose.
 14. The rules prescribed for self finance degree course by the Government will be applicable to respective degree course.
 15. The maximum student strength will be 60 for degree programme at the start of the college/institute. Applications for increase in student intake will be considered subject to the maximum of 120 for a degree programme after four years based on the good performance and fulfillment of requirements needed for the increased intake. Students admission is strictly on merit and as per existing Government Orders duly following the communal rotation.
 16. Admission of the Students will be done as per the Norms prescribed for the Professional Educational Institutions by the

Government as published in the Tamil Nadu Government Gazette Extraordinary No. 218 dated 31.08.2006 and thereafter.

17. Qualified Staff shall be recruited in advance of start of academic activity by paying salary and other emoluments as per norms fixed by the University.
18. Staff pattern should be as per the norms fixed by the Government / Tamil Nadu Agricultural University.
19. Cash endowment of Rs.20 lakhs (Rupees Twenty lakhs only) for degree programme should be deposited in Tamil Nadu Transport Development Corporation / Tamil Nadu Power Finance and Infrastructure Development Corporation Ltd., for a minimum period of five years, jointly in the name of Educational Trust / Society and Comptroller, Tamil Nadu Agricultural University. The interest accrued out of it may be utilized by the college with the prior permission of the University for strengthening its infrastructure facilities.
20. The Trust / Society should pay any service fee and other charges due to the Central and State Governments/Government agencies for the education and other activities.
21. The University Rules prescribed for self-finance Degree course should be followed as per the Government policy for similar type of courses.
22. The Fees prescribed for Self Financing Engineering Degree shall be applicable to the proposed degree in Agriculture Course for admitting the students under Management Quota.
23. Certificate to the effect that "NO CAPITATION FEE" will be collected from the students seeking admission in the above Institute.
24. An undertaking to the effect to fulfill within six months all the conditions / create the required infrastructure within the time frame specified by the TNAU/Government.
25. Failing to satisfy any of the above conditions and / or violate any Acts, Rules, prescribed in the Government Orders in force, will

lead to cancelation of the affiliation given to the Trust / Society for starting of Agricultural College.

26. The Board of Management of TNAU has got the fullest power in modifying any one part / wholesome of the guidelines without notice to the Trust / Society.
27. Once the Institution and programme affiliated with the TNAU, should not be affiliate to any other Universities in India or abroad.
28. On violation of the prescribed guidelines by the Trust / Society, TNAU is fully empowered to deaffiliate the violating Institution.

ARBITRATION :

The dispute if any arises shall be resolved by a Committee nominated by Board of Management of TNAU. The Vice Chancellor of TNAU is the final authority for arbitration purposes and the jurisdiction lies within Tamil Nadu state only.

III. MANDATORY CONDITIONS

1. College / Institute shall be managed by a duly constituted and registered Society or Trust.
2. Trust / Society shall satisfy the University that adequate financial provision is available for running the college for at least three years without any aid from any external source.
3. An undertaking to the University that it has adequate recurring income from own resources for institutes continued and efficient functioning.
4. Affiliation Approval:

The minimum facilities required to start the first year course

(a) Land availability	100 %
(b) Administrative wing	100 %
(c) Hostel facility	25 %
(d) Laboratories	25 %
(e) Library with first year books	100 %

- (f) Lab equipment and chemicals for first two semesters
- (g) Lecture Halls (2), Labs (8)
- (h) Positioning of all staff suggested for handling courses and other requisites pertaining to first year programme.

The standing committee for affiliation shall critically assess the potential and only upon satisfaction, conditional affiliation shall be given. The Committee shall visit the college after one year and upon satisfaction shall approve the continuation of the course to the subsequent year and also further admission of new batches of students. Any non compliance by the Trust / Society will lead to deaffiliation.

5. The Registered Trust / Society proposing the college shall execute a MoU with TNAU once in four years. If the Trust / Society is not prepared to execute the MoU with TNAU once in four years, it will lead to deaffiliation of the programme and the institution.
 - 5.1 To impart instruction only in the subjects and for the courses / programmes in the faculties for which affiliation has been granted by the University and shall not seek retrospective affiliation. All such courses / programmes shall follow the syllabi approved by Academic Council of the University.
 - 5.2 To comply with all the provisions of the Act, the Statutes and the Ordinances, Rules and Regulations of the University framed in this regard.
 - 5.3 To position the number of teaching posts, the qualification of teaching staff and their recruitment / promotion procedures as prescribed by the TNAU and conditions of service shall be in accordance with the Statutes / Ordinance / Regulations of the University / State Government and shall ensure imparting of adequate instruction to the students in the courses / programmes of studies to be undertaken by the college / Institute by maintaining the Student – Teacher Ratio in the College as per the TNAU norms.

- 5.4 To have adequate accommodation and other amenities for the students in the hostel so that they shall not make any complaint to the University/ Government.
- 5.5 To pay the teaching and non-teaching staff regularly in line with the pay scales along with applicable allowances as per the pay scales prescribed by the UGC/ ICAR / State Govt. as the case may be from time to time.
- 5.6 To appoint teaching and the non-teaching staff only on considerations of merit based on qualifications and experience prescribed for them and not by demanding or accepting any donation or other consideration.
- 5.7 Following the UGC rule in respect of age of regular staff with cut off at 65 years, which shall only be relaxed for contractual teaching staff, within the limit of 20% in any case.
- 5.8 To the effect that the college/institute shall obtain the eligibility approval of the appointed teaching staff from the university within three months of affiliation and shall report all changes in the teaching staff and all other changes that may affect the fulfillment of the conditions for affiliation to the University within a fortnight of changes coming into effect.
- 5.9 Not to impose levies on its teaching, non-teaching staff and students for meeting recurring or non-recurring, general or special expenditure of the college or impose cuts in their salaries for any other purpose without prior sanction of the Board of Management of the University.
- 5.10 To admit students (65% of the sanctioned strength) under single window counseling system in accordance with the directions issued by the State Govt. and TNAU as to Government quota from time to time. The remaining of the sanctioned strength (35%) shall be admitted by the management from the eligible candidates already applied through ONLINE to TNAU for the management quota also.

- 5.11 To collect all fees from the students as per the fee structure based on the norms of the State Government from time to time.
- 5.12 Not to collect either directly or through any of its associated Trust, society etc., any capitation fee or donation or any form or on behalf of any of its students or their parents / guardians.
- 5.13 Not to admit students to any programme of study by the college/institute in anticipation of grant of affiliation.
- 5.14 Not to admit in excess of the sanctioned strength per programme of study by the University.
- 5.15 To the effect that the college/institute shall not, without the previous permission of the University, suspend offering an already approved course / programme of study.
- 5.16 To produce all registers and records, including audited statement of accounts, as required to be maintained under the Regulations / Orders of the University / Government as and when required for inspection.
- 5.17 To furnish all such returns and other information as the University / Government may require to enable it to monitor and judge the performance of the college with regard to maintenance of academic standards and shall take such action as the University / Government may direct to maintain the same.
- 5.18. To comply with such other conditions, as may be prescribed from time to time by the University / Government.
6. Every year a Standing Committee shall visit the self-financing agricultural college for approving continuation of affiliation up to four years. Thereafter the Committee may visit once in two years for sustainability of the programme. At the end of the fourth year if the college does not fulfill these norms, the affiliation shall be withdrawn. Subsequently, the college / institution shall become eligible for accreditation, if it fulfills the norms.
7. Only those institutions that have completed four years and successfully brought out the first batch of degree be permitted to apply for assessment and increase in seat intake of students.

8. Withdrawal of affiliation
 - 8.1 The privileges conferred on a college by affiliation may be withdrawn in part or in full, suspended or modified, if the college, on due enquiry is found to have failed to comply with any of the provisions of the Act, the Statutes, the Ordinances, the Rules and Regulations or any other direction or instruction of the TNAU or failed to observe any of the conditions of affiliation, or has conducted itself in a manner prejudicial to the academic and administrative standards and interests of the University.
 - 8.2 If an affiliated college ceases to function or is shifted to a different location or is transferred to a different Society, Trust, individual or a group of individuals without the prior approval of the University, the affiliation granted to the college shall lapse automatically. In such cases and the University / Government shall have the duty to alleviate the problems of the affected students in an appropriate manner as per its decision.
9. In addition to the above, essential requirement as guided by AICTE norms should also be fulfilled (Annexure- IV)

IV. FUNDING OF THE PROJECT

The Trust / Society should prove the soundness of the financial resources for executing the project as per the approval. The following documents should be furnished to Tamil Nadu Agricultural University as the proof of the source of funding.

1. Bank account in the name of the Trust
2. Certificate of depositing in the name of the Trust
3. Corpus fund details
4. Any other sources

V. ELIGIBILITY REQUIREMENT FOR STUDENTS TO BE ADMITTED

1. Name of the degree : B. Sc. (Agriculture)
Bachelor of Science in Agriculture

2. Minimum Educational Qualification : 10 + 2 or Intermediate

Candidates who have studied any one of the following groups are eligible to apply:

Group I:

Biology , Physics, Chemistry, Mathematics

Group II:

Biology , Physics, Chemistry with a fourth (elective) subject viz., Biotechnology, Microbiology, Biochemistry and Home Science.

Group II (A):

Botany and Zoology, Physics, Chemistry

3. Duration of the course : Four years

4. Minimum admission strength : Sixty (60) per academic year

VI. DEPARTMENTS

i. Department of Crop Management

Agronomy

Soil Science and Agricultural Chemistry

Crop Physiology

Environmental Sciences

Agricultural Microbiology

Forestry

ii. Department of Crop Improvement

Plant Breeding and Genetics

Seed Science and Technology

Agricultural Biotechnology

iii. Department of Crop Protection

Agricultural Entomology

Plant Pathology

Plant Nematology

iv. Department of Social Sciences

Agricultural Economics

Agricultural Extension

Agricultural and Rural Management

Humanities, Physical Science and Computer Sciences

Physical Education

v. Department of Horticulture

vi. Department of Agricultural Engineering

VII. REQUIREMENT OF TEACHING STAFF

Degree Programme: B.Sc.(Agriculture)

S. No.	Department / Name of the Post	Total
I.	DEPARTMENT OF CROP MANAGEMENT	
Agronomy		
	Professor	1
	Associate Professor	1
	Assistant Professor	2
Soil Science and Agricultural Chemistry		
	Associate Professor	1
	Assistant Professor	2
Crop Physiology		
	Assistant Professor	1
Environmental Sciences		
	Assistant Professor	1
Agricultural Microbiology		
	Assistant Professor	1
Agricultural Meteorology		
	Assistant Professor	1
Forestry		
	Assistant Professor	1
	Total	12
II.	DEPARTMENT OF CROP IMPROVEMENT	
Plant Breeding and Genetics		
	Professor	1
	Assistant Professor	2
Seed Science and Technology		
	Associate Professor	1

Agricultural Bio-Technology		
	Assistant Professor	1
	Total	5
III.	DEPARTMENT OF CROP PROTECTION	
Agricultural Entomology		
	Professor	1
	Assistant Professor	2
Plant Pathology		
	Associate Professor	1
	Assistant Professor	2
Plant Nematology		
	Assistant Professor	1
	Total	7
IV.	DEPARTMENT OF SOCIAL SCIENCES	
Agricultural Extension		
	Associate Professor	1
	Assistant Professor	1
Agricultural Economics		
	Professor	1
	Assistant Professor	1
Agricultural and Rural Management		
	Assistant Professor	1
Humanities, Physical Sciences and Computer Science		
	Assistant Professor	1
Physical Education		
	Assistant Director of Physical Education	1
	Total	7
V.	DEPARTMENT OF HORTICULTURE	
	Professor	1
	Associate Professor	1
	Assistant Professor (Floriculture, Vegetable, Fruits, Medicinal Plants and Spices)	2
	Assistant Professor (Food Science and Nutrition)	1
	Total	5

VI.	DEPARTMENT OF AGRICULTURAL ENGINEERING	
	Associate Professor (Farm Machinery)	1
	Associate Professor (Soil & Water Conservation, Bio-energy, Food Process Engineering)	3
	Total	4

- At least 50 percent of staff indicated in each department should be appointed at the start of the degree programme required to offer I year courses.
- The staff strength should comply the requirements prescribed at the end of the III year
- Faculty wise staff should be available to handle all the courses year wise.

VIII. REQUIREMENT OF NON-TEACHING STAFF

S. No	Divisions/ Departments/ Sections	Assis- tant *	Lab Asst.	Field Asst.	Total
1.	Agronomy + (Agro-forestry)	1	1	2	4
2.	Agricultural Economics + (Basic Economics, Maths & Computer Science and Statistics)	1	-	-	1
3.	Agriculture Extension & Communication + (Sociology and Psychology, English)	1	-	-	1
4.	Entomology	1	1	1	3
5.	Genetics & Plant Breeding + (Seed Science & Technology)	1	2	1	4
6.	Horticulture + (Food Science & Technology)	1	1	1	3
7.	Soil Science and Agricultural Chemistry + (Microbiology, Agro- meteorology, Environmental Sciences)	1	2	1	4
8.	Plant Pathology including Virology and Nematology	1	1	1	3
9.	Animal Sciences including Fisheries, Dairy Fisheries & Poultry units)	1	-	1	2

10.	Agriculture Engineering + (Farm Management)	1	1	1	3
11.	Biochemistry and Crop Physiology	1	1	1	3
	Total	11	10	10	31

* Assistant should have competence to handle accounts and stores by utilizing computer.

Additional Manpower

S. No.	Name of the Post	No. of Posts
A. Establishment		
1.	P.A./P.S. to Dean	01
2.	Assistant Administrative Officer	01
3.	Assistant Accounts Officer	01
4.	Assistant	01
5.	Driver	01
B. Central Instrumentation Laboratory		
1.	Instrumentation Technician/Lab Asst.	01
C. Library Staff		
1.	Assistant Librarian	01
2.	Library Assistant/Clerk	02
D. Hostel Staff		
1.	Warden (to be nominated from amongst faculty)	02+02
2.	Care taker/ Assistant	02+02
E. Students Health Centre		
1.	Doctor	01
2.	Nurse	01
F. Estate Branch		
1.	Junior Engineers(Civil and Electrical)	02
2.	Security Officer	01

IX. LAND

- Undisputed ownership and possession of land by the Trust / Society as specified below is essential

S. No.	Type of land	For Degree programmes (in acres)
i) Cultivable land		
1.	Wet land	10
2.	Dry land	20
3.	Garden land	15
4.	Orchard	25
5.	Botanical Garden	20
6.	Herbal garden	5
7.	Woodland* (Agro-forestry)	5
	Total Cultivable Land	100
ii) Building: College building, play ground and farm office		10
	Grand Total	110

* Woodland means woodlot which refers to forest (including Agro-forest) / tree plantation

- The land should be a cultivable and CONTIGUOUS.
- The land should be registered in the name of the Society or Trust for starting the college / institute. Copy of the document along with latest EC for thirty years should be enclosed in the application form. Private leased lands will not be considered.
- The land use certificate, if it is a cultivable land, permission to use the land for running a college and construction of building from the competent revenue authorities should be produced. Permission under Section 37-B of the Tamil Nadu Land Reforms (Fixation of Ceiling on Land) must be applied to the Government Revenue Department within six months from the date of issue of Government order.
- Cultivable Land should have representation of Wet Land, Dry Land, Garden Land, Orchard comprising poly house / net house / mist chambers / high-tech nurseries etc., mini botanical garden encompassing Floriculture, Herbal Garden for Medicinal plants, Vegetable and Spices & condiments and model Instructional Farm.

X. INFRASTRUCTURE

1. Buildings

Civic / Transport Facilities

Building should have adequate facilities of light, ventilation and toilets by keeping in view of the norms laid down by the Indian Standards Institution or the local authority.

S.No.	Details	No. of Rooms	Dimensions (in ft)
1.	Dean's Room	1	20 x 24
2.	P.A. Room	1	10 x 12
3.	Visitors Room	1	10 x 12
3.	Committee Room with video conferencing facility	1	20 x 30
4.	Assistant Administrative Officer including staff	1	20 x 12
5.	Assistant Accounts Officer including staff	1	20 x 12
6.	Assistant Academic Officer including staff	1	20 x 12
7.	Exam Hall (300 capacity)	1	100 x 50
8.	Evaluation Room	1	20 x 36
9.	Faculty Room (Ladies)	1	10 x 12
10.	Faculty Room (Gents)	1	20 x 12
11.	Placement Cell	1	20 x 12
12.	Smart Lecture Halls (60 capacity)	6	40 x 30
13.	Auditorium	1	100 x 60
14.	Library	1	30 x 72
15.	Common Utility Room	1	20 x 36
16.	Central Laboratory	1	50 x 36
17.	Hostels including Mess, Gym / Indoor, Reading Room, Warden Room, Store etc.	2 boys / room	To accommodate 250 students
		2 girls / room	To accommodate 250 students

18.	Canteen	1	20 x 12 (kitchen with store)
			20 x 36 Sitting
19.	Wash room (with toilet & urinary facilities)	10	20 x 12 (keeping ladies requirements)
20.	Parking space		As per requirement
21.	Farm stores, threshing yards including implements and tractor sheds	One core complex	
22.	Vehicles shed	1	10 x 80

DEPARTMENTS – Requirements

S. No.	Details	No. of Rooms	Dimensions (in ft)
1.	HoD's Office	12	24 x 12 with wash room facility
2.	Faculty Rooms 1+1	12	12 x 10 18 x 12 w24 x 10 depending on the strength of each deptt.
3.	Clerical/Technical Staff	12	12 x 10 to 24 x 10 depending on the strength of each dept.
4.	Laboratories	15	30 x 60 Larger department will have two
5.	Field / Lab Stores 1. Agronomy 2. Genetic & Plant Breeding 3. Soil Science 4. Horticulture 5. Pesticides & Chemicals	5	More store rooms may be added as per requirement
6.	Green House / Poly House / Nursery facilities (Horticulture department)		Mist Chamber - 30 x 10 Shade Net house - 40 x 15 Poly green house - 30 x 30 Nursery area - 1/2 acre

2. Internal Roads

All the buildings in premises should be connected with well-laid all weather roads. Adequate space should be provided on either side of the road for future expansion.

3. General Amenities:

- i. Lighting : Adequate lighting should be provided in the buildings and on the roads.
- ii. Fan : Sufficient fans have to be provided in the rooms
- iii. Toilets : Separate toilets for boys and girls in all the buildings (There may be a provision for the Transgender)
- iv. Drinking water : Availability of drinking water in all the buildings
- v. Canteen : A well stocked canteen.
- vi. Parking facilities
- vii. Fully equipped dispensary : Fully equipped medical facility
- viii. Telephone facilities : Telephone facilities at wantage points.
- ix. Wi-Fi Internet facility
- x. Transport facilities (for field visit / Educational tour)
- xi. Reprographic facility
- xii. Special facilities for differently abled

XI. LIBRARY

1. The Library should be well equipped and spacious. It should have at least five books (other than text books) per student in its stock subject to a minimum of 5000 at the beginning. Multiple copies of text books in each subjects should be available. It shall not stock notes, examination guides or keys of any kind. In the selection of books, norms or guidelines provided by TNAU should be followed and purchases should be made in consultation with the subject teachers.
2. The college should subscribe to sufficient number of newspapers and magazines. At least 25 journals suitable for students and professional needs of teachers should be subscribed.

3. The Library shall not contain any book or other forms of literature that espouse or propagate communal disharmony or casteism or discrimination based on religion, regions or language, etc.

XII. LAB FACILITIES

The laboratory equipment should be in accordance with the norms adopted by the University.

1. Agronomy inclusive of Agroforestry

1.	Crop Cafeteria	½ acre land small implements like spade, hoe, khurpi, darati etc.
2.	Museum for identification of seeds, fertilizer, weeds, commonly used agro-chemical and medicinal and aromatic plants etc.	Storage bottle Herbarium posting material
3.	Field for establishment of demonstration plots on various good agricultural practices	Small equipment/ implement
4.	Gadgets for Irrigation water measurement, bulk density etc.	
	Equipments	Number
	i Hot air oven	2
	ii Moisture box	30
	iii Moisture meter	5
	iv Tube Auger	10
	v Bucket auger	10
	vi Seed Germinator	1
	vii Conductivity Meter	2
	viii Water Bath	1
	ix Shaker	1
	x Chlorophyl Meter	1
	xi Drip and Sprinkler System	1
	xii Sprayer	3
	xiii Weighing Balance (Electronic 1 gm)	3
	xiv Spring Balance 50 Kg	5

xv	Spring Balance 10 Kg	5
xvi	Top Pan Balance 1 kg capacity	5
xvii	Top Pan Balance 2 kg capacity	5
xviii	Meter Scale	10
xix	Tape	5
xx	Brix meter	2
xxi	pH meter	1
xxii	Nitrogen analysis digestion unit	1
xxiii	Grinding machine	1
xxiv	Shaking machine	1
xxv	Soil thermometer	1
xxvi	Automatic nitrogen analyzer	1
xxvii	Water measuring devices (Parshall Flume, Rectangular Weir, V notch, Trapezoidal weir)	1 each
xxviii	Grinding machine	1

2. Agricultural Economics inclusive of Basic Economics, Mathematics & Computer Science and Statistics

Numbers

1.	Computers	15
2.	Camera	1
3.	Software	As per requirement

3. Agriculture Extension & Communication inclusive of Sociology and Psychology, English

Audio-visual Lab

Numbers

1.	LCD projector	1
2.	Camera (SLR) with zoom, wide-angle, tele-photo lens (digital)	1
3.	Video camera with tripod, lighting accessories and editing facility	1
4.	Computers (workstation) with editing softwares	1

5.	Digital voice recorders	5
6.	Audio recording-mixing consoles	1
7.	Computation softwares for statistics	1
8.	Public Address system	1

4. Entomology

Numbers

1.	Binocular Microscope	10
2.	Insect Box	60
3.	Insect Collection Nets	60
4.	Collection Bottles	60
5.	Insect Collection Big Boxes for Museum (1 for each order)	29
6.	Insecticide containers for showing students/ Representative for each group / formulations	As per requirement
7.	Stereomicroscope	1
8.	Electronic Balance	1
9.	Soxhlet Extraction Apparatus	1
10.	Bee keeping equipment	1 Set
11.	Oven	1
12.	Potters Tower	1
13.	Light traps	1 set
14.	Fumigation Chamber	1
15.	Slides/cover slips	As per requirement
16.	pH meter	1
17.	Computer with printer	1 set
18.	Simple microscope	35
19.	Camera Lucida	1
20.	Needles, Forceps, Scissor, Hair brushes and lens	30 sets each
21.	Colour transparencies of different body parts	1 set

22.	Types of sprayers	
	a. power operated	One of each
	b. Hand operated	One of each
23.	Different types of dusters	One of each
24.	Different types of charts	One of each
25.	Display showcases	2
26.	Entomological pins	One pack of each
27.	Insect rearing cages	One of each
28.	Laboratory chemicals acetone, chloroform, formaldehyde, sodium and potassium chloride	On the basis of requirement

5. Genetics & Plant Breeding

Numbers

1.	Microscope	30
2.	Binocular microscope	10
3.	Electronic Moisture Meter	2
4.	Electronic Balance	2
5.	Seed Germinator	2
6.	Automatic seed/grain counter	1
7.	Hot Air Oven	1
8.	Camera Lucida	1
9.	Charts/models/ lamination	1/each
10.	Compound microscope	1
11.	Electrophoresis Apparatus with Centrifuge	1
12.	Heating Mantel	1
13.	Hot plates	1 set
14.	Incubator	1
15.	Lux meter	1
16.	Magnetic stirrer	1
17.	Moisture meter	1
18.	Mono pan balance	1
19.	Purity Analysis Table	2
20.	Refrigerator	1
21.	Sample divide	1

22.	Seed Counter	2
23.	Tissue culture laboratory	1
24.	Top Pan balance	2
25.	Water bath	1

6. Biotechnology

Numbers

1.	Weighing balance (accuracy 0.01 g)	1
2.	Weighing balance(accuracy 0.001 g)	1
3.	pH meters	2
4.	Micropipettes	20 sets
5.	Vortex mixture	2
6.	Horizontal gel electrophoresis units	4
7.	Vertical gel electrophoresis units	2
8.	Gel documentation system	1
9.	Microwave oven	1
10.	Microcentrifuge	1
11.	Compound Microscopes	10
12.	Stereo zoom microscopes	4
13.	Water bath	1
14.	Centrifuge	2
15.	Refrigerated centrifuge	2
16.	PCR machine	1
17.	Laminar air flow chamber	4
18.	Minicoolers	5
19.	Table top shakers	1
20.	Incubators	1
21.	Incubator shakers	2
22.	Magnetic stirrer with hot plate	2
23.	Spectrophotometer (UV-Vis)	1
24.	Water purification unit	1 set
25.	Autoclave	2
26.	Refrigerator	2

27.	-20 degree freezer	1
28.	-70 degree freezer	1
29.	Growth chambers for tissue culture	2
30.	Fume hood	1
31.	Ice maker	1
32.	Calorimeter	1
33.	Nanodrop	1
34.	Elisa reader	1

7. Seed Science and Technology

Numbers

1.	Hot air oven	1
2.	Digital seed moisture meter	1
3.	Seed Germinator	1
4.	Seed dividers	2
5.	Seed triers	2
6.	Seed counter	2
7.	Illuminated purity work board	3
8.	Sieves	3 sets
9.	Dissection Microscopes	30
10.	Advanced microscopes	5
11.	BOD incubator	1
12.	Electronic balance	1
13.	Accelerated ageing chamber	1
14.	EC meter	1
15.	pH meter	2
16.	Distillation unit	1

8. Horticulture

Numbers

1.	Hand refractometer	5
2.	Digital Refractometer	2
3.	Oven	1
4.	Refrigerator	1
5.	Electronic Weighing Balance	2

6.	Top Pan Balance (1 kg & 10 kg. capacity each)	2
7.	Deep Freezer	1
8.	pH Meter	2
9.	Fruit crusher	1
10.	Grinding and Mixing Machine	1
11.	Distillation Assembly	1
12.	Dibbler	16
13.	Digging fork	2
14.	Garden fork	2
15.	Hand cultivator	2
16.	Crow bar	2
17.	Pruning knife	2
18.	Lawn sprinkler	1
19.	Iron Plough	1
20.	Ployhouse	1
21.	Drip Irrigation	1
22.	Seed Germinator	2
23.	Grafting and budding knife	60
24.	Secateur	60
25.	Saw	5
26.	Loppers	5
27.	Mist Chamber	1
28.	Poly house with drip irrigation system	2
29.	Research Microscope	2

9. Food Science & Technology

Numbers

1.	Refrigerator	1
2.	Muffle furnace	1
3.	Weighing balance	2
4.	Water bath	2

5.	Hot air oven	2
6.	Fruit penetrometer	2
7.	Pulper	1
8.	Juice extractor	1
9.	Crown corking machine	1
10.	Spectrophotometer	1
12.	Microwave oven	1
13.	Baking oven	1
14.	Sieve shaker	1
15.	Poly pouch sealer	1
16.	Crusher	1
17.	Masala grinder	1
18.	Dehydrator	1
19.	Cold room	1
20.	Vacuum pump	1

10. Microbiology

A. Instruments:

S. No.	Instrument	Quantity required (30 students per batch)	Justification
1.	Autoclave	2	Media sterilization
2.	Hot air oven	1	Sterilizing glasswares
3.	Laminar air flow chamber	2	Working with microbes
4.	Incubators	2 (37°C and 5°C - 50°C)	To incubate cultures at specific temp.
5.	Refrigerators	1	To store cultures, chemicals etc.
6.	Centrifuge	2	To concentrate the cultures
7.	Refrigerated centrifuge	1	Work with low temp.

8.	Student microscope	30 + 5 (spare)	To observe microorganisms
9.	Phase contrast microscope	1	To view live cells
10.	Fluorescent microscope	1	To view fluorescence
11.	Stereo zoom microscope	1	Mycorrhizal observations
12.	Spectrophotometer	1	To monitor the growth of organisms; Biochemical tests.
13.	Weighing balance (1 mg)	2	Media preparation
14.	pH meter	2	Media preparation
15.	Incubator shaker	1	For liquid culturing
16.	Plant growth chambers	1	Nodulation test; Plant infectivity
17.	Gas chromatography	1	Acetylene reduction assay
18.	Fermentor	1	To grow the culture in large scale mass production
19.	Colony counter	2	Enumeration
20.	Magnetic stirrer	1	Media preparation

* If student strength is more than 30, there should be separate batches. Maintaining 30 students per batch is essential for effective practical in Microbiology.

B. Glasswares and consumables :

S. No.	Specifications	Size	Numbers
1.	Basic glasswares:		
	Petri dish	100 ml	100
		200 ml	100
	Test tubes	18 mm	1000
		15 mm	1000

	Boiling tube		50
	Conical flasks of all volumes	100 ml	100
		250 ml	100
		500 ml	50
		1000 ml	25
	Beakers different volumes	100 ml	100
		250 ml	100
		500 ml	50
		1000 ml	25
	Measuring cylinders	100 ml	10
		10 ml	10
		25 ml	10
		50 ml	10
		250 ml	10
		500 ml	10
		1000 ml	2
	Racks	200	
	Screw cap tubes for culture storage	200	
2.	Micropipettes (10-100; 100-1000 μ L)	5 each	1000 tips each
3.	Standard burettes;		30
	Volumetric flasks,	25 ml	50
		50 ml	25
		100 ml	25
		250 ml	10
		500 ml	10
		1000 ml	5
	Screw cap test tubes	10 ml	200
	Schott Duran bottles.	100 ml	50
		250 ml	50

		500 ml	15
		1000 ml	10
4.	Large volume round bottom flasks, flasks for fermentations	1000 ml	5
		2000 ml	5
5.	Glass slides,		400
	Cover slips,		1000
	Tissues, straining kits, standard cultures for observation (<i>E. coli</i> , LAB, Bacillus, yeast, fungal cultures etc.)		2 sets each
6.	Cotton (Abs & non-abs), tissue papers, country filter papers, Whatman filter papers, membrane filters with holders		Sufficient quantity
7.	Sprit lamps / Bunsen Burners		5
	Inoculation needles		40
	Spread rods		50
	Cork borers		All size
8.	All essential chemicals and media		Sufficient quantities
9.	Stage micrometer		10
10.	Ocular micrometer		40

11. Soil Science and Agricultural Chemistry

The requirements for handling the soil science courses in the undergraduate programme for a batch of 30 students - A laboratory with 5 tables accommodating six students per table.

A. Instruments and Equipments:

S.No.	Instruments and equipments	Numbers
1.	pH meter	1
2.	EC meter	1
3.	Flame photometer	1
4.	Spectrophotometer	1

5.	Tensiometer	1
6.	Hand held refractometer	1
7.	GM counter	1
8.	Atomic Absorption Spectrophotometer	1
9.	Electronic balance -2 digit	1
10.	Electronic balance -3 digit	1
11.	Distilled water unit	1
12.	Double distilled water unit	1
13.	Double ring infiltrometer	1
14.	Pressure plate apparatus	1
15.	Hot air oven	1
16.	Hot plate	2
17.	Kjeldahl digestion unit	1
18.	Magnetic stirrer	1
19.	Mechanical shaker	1
20.	Mechanical stirrer	1
21.	Muffle furnace	1
22.	Sand bath	2
23.	Water bath	2
24.	Wiley mill	1
25.	Centrifuge	1
26.	Stablizer	5
27.	Augers	1
	(a) Post hole augers	1
	(b) American soil sampler	1
	(c) Layalpur taper auger	1
	(d) Screw augers	2
	(e) Core sampler	2
28.	Micro-Kjeldhal distillation Unit (12 Flask)	1
29.	Micro-Kjeldhal distillation Unit for plant	1
30.	Soxlet apparatus	1

B. Apparatus

S.No	Apparatus	Numbers
1.	Burette stand	35
2.	Filter stand	35
3.	Heating mantle	5 (1 per table for 5 tables)
4.	Hydraulic conductivity head with tubes	2 sets with 6 sample provision
5.	Nitrogen distillation assembly	35 Nos. of single units
6.	Pipette stand	5 (1 per table for 5 tables)
7.	Sieves (different sizes)	2 mm - 2 Nos, 0.5 mm -2 Nos, 0.2 mm - 2Nos.
8.	Test tube stand	5 (1 per table for 5 tables)
9.	Tripod stand	35
10.	Vacuum cum filter pump	1
11.	10 x lens	15
12.	Clay pipe triangles	35
13.	Core sampler	2
14.	Robinson pipette stand	1
15.	Spatula	35
16.	Test tube holder	35
17.	Tongs	35
18.	Wire gauge	50
19.	Rubber corks (Assorted sizes)	50 Nos in each size
20.	Rubber tubes to connect condensers and distillation flasks	20 meters
21.	Bunsen burner	35
22.	Aluminium cans	35
23.	Stop clock	5 (1 per table for 5 tables)
24.	Polythene/ Plastic funnels	50
25.	Polythene beakers 100 ml	50

C. Glassware

S.No.	Glassware	Numbers
1.	All glass wash bottles	10
2.	Polythene wash / squeeze bottles	50
3.	Auto pipette	5 (1 per table for 5 tables)
4.	Buckner funnel	2 Numbers in each of 10 cm and 15 cm
5.	Burettes	35
6.	Conical flasks- 100 ml	100
7.	Conical flasks- 250 ml	50
8.	Desiccator	5 (1 per table for 5 tables)
9.	Dropping bottle	10
10.	Filter flask 1000 ml 2000 ml	1 1
11.	Glass Beakers different size	Sufficient numbers
12.	Glass Funnels different size	Sufficient numbers
13.	Glass rod	100
14.	Glass tube (7 mm)	100
15.	Graduated pipettes- different volumes	Sufficient numbers
16.	Robinson pipette	2
17.	Iodine flask	35
18.	Kjeldahl flask	15
19.	Measuring cylinders- different volumes	Sufficient numbers
20.	Measuring cylinders with stopper - 100 ml	35
21.	Micropipettes - 100 - 1000 ml	1
22.	Pipettes various size	Sufficient numbers
23.	Reagent bottles 250 ml, 500 ml, 1000 ml, 2000 ml, 5000 ml, 10 Lit.	10 numbers each

24.	Water condenser	5
25.	Reflux condenser	35
26.	Separating funnel	5
27.	Volumetric flasks- different volumes	Sufficient numbers
28.	Vials with screw cap	100

D. Tools and others

S.No.	Tools and others	Numbers
1.	Iron pan	2
2.	Khurpi	2
3.	Munshell colour chart	1
4.	Safety symbols and posters	As required
5.	Spade	2
6.	Topo sheets, cadastral maps and False colour composites	3 in each
7.	Tube auger	2
8.	Wooden mallet	3
9.	Moisture bottle	35
10.	Pestle and mortar	5
11.	Polythene shaking bottles	100
12.	Porcelain basins	35
13.	Porcelain tiles	35
14.	Silica basin and crucibles	35 in each

12. Environmental Sciences

		Numbers
1.	Electronic Top pan balance (0.1 g capacity)	2
2.	Electronic Top pan balance (1 mg capacity)	2
3.	Hot air oven	2
4.	pH Meter	5
5.	EC Meter	5

6.	Flame Photometer	1
7.	Visible spectrophotometer	1
8.	Hot Plate	2
9.	Distilled water unit	2
10.	Water Bath	1
11.	Rotary Shaker	2
12.	Binocular Microscope	20
13.	BOD Incubator	2
14.	Autoclave	2
15.	Laminar Air Flow	1
16.	Microwave oven	1
17.	Digestion block	2
18.	Bouyoucos Hydrometer	5
19.	Infiltrometer	2
20.	Hydraulic conductivity meter	1
21.	Atterberg's limitsmeter	5
22.	Nitrogen Analyser	2

13. Agrometeorology

Numbers

1.	Thermometer Max	5
2.	Thermometer Min	5
3.	Digital Anemometer	2
4.	Cup Anemometer	2
5.	Pan Evaporimeter	1
6.	Soil thermometer	
	05 cm.	5
	10 cm.	5
	15 cm.	5
7.	Rain gauge	1
8.	Self recording Rain gauge	1
9.	Sunshine Recorder	1
10.	Stevenson's Screen	1

11.	Thermograph	1
12.	Hygograph	1
13.	Soil Heat Flux Plate	1
14.	GPS	10
15.	AWS (optional)	1
16.	Lysimeter (optional)	1
17.	Luxmeter	2
18.	Solar Pyranometer	1

14. Plant Pathology

Numbers

1.	Compound Microscope with photo display arrangement	3
2.	Stereo binocular microscope	5
3.	Sample processing Board (Dry preservation of samples)	4
4.	Wet preservation Jars	50
5.	Autoclave	2
6.	Oven	1
7.	Deep Freeze	1
8.	Centrifuge (3000 rpm)	1
9.	Refrigerator	1
10.	Water bath	2
11.	Electronic balance	2
12.	Microscope (compound)	30
13.	Weighing machine	1
14.	Incubator	2
15.	Ocular meter	5
16.	Stage Micrometer	5
17.	Camera Lucida	5
18.	Colony Counter	1
19.	Humidifier	1

15. Animal Sciences

Numbers

1.	NIRS™ 5000/6500 Feed and Forage Analyzer	1
2.	Hand and electric centrifuge	1
3.	Analytical balance	1
4.	Hot air oven	1
5.	Micro kjeldhal N digestion & distillation apparatus	1
6.	Soxhlet unit for fat estimation	1
7.	Hot plate, Fiber Tech.	1
8.	Vacuum pump	1
9.	Willy mill grinder	1
10.	Platform balance (100 kg cap)	1
11.	Gerber centrifuge unit (for milk fat testing)	1
12.	Milk analyzer (automatic)	1
13.	Crude fiber estimation unit	1
14.	Distilled water unit	1
15.	Animal Models	1
16.	Chaff cutter	1
17.	Butter Churner	1
18.	L.P.G. gas Unit	1
19.	Gobar gas plant	1

16. Dairy & Poultry

Numbers

1.	Incubator cum hatcher	1
2.	Brooder machine	1
3.	Feeder	1
4.	Waterer	1
5.	Egg candling machine	1
6.	Debeaker	1
7.	Vaccinator	1
8.	Milking machine	As per requirements

9.	Milking bucket	As per requirements
10.	Milking can	As per requirements
11.	Animal and bird identification tools	As per requirements
12.	Chaff cutter	1
13.	Lactometer	1
14.	Castrator	1
15.	Shearer	1
16.	Electric dehorner	1
17.	Common medication device	1
18.	Cattle crate	1

17. Agricultural Engineering inclusive of Farm Management

Numbers

1.	Working models of MB plough, Disk plough and indigenous plough	2 sets each
2.	Working model of different harrows	6
3.	Seed drill	4
4.	Different types of threshing drums	6
5.	Working models of reaper and mowers	4
6.	Different types of sprayers and dusters	8
7.	Cut model of CI & SI engine	2
8.	Cut model of Tractor	1
9.	Abani level	2
10.	Arrow and pegs	3
11.	Bell conveynor (model)	1
12.	brass metal sieves	1
13.	Brass metal sieves (set of all sizes)	1
14.	Bucket elevator (model)	1
15.	Centriguge with 8 tube facility	1
16.	Chains (20 metre, 30 metre, Engineers, Guntur Revenue 3 each)	4
17.	Cleaning cum grinding machine (model)	1

18.	Clinometers	5
19.	Cross staff (open, Octangle, Adjustable 5 each)	4
20.	Digital testing kit	1 set
21.	Drainage equipment (12 flask unit)	1 set
22.	Drawing boards	1
23.	Dumpy level with stand	2
24.	Electrical magnetic stirrer	1
25.	Glassware washing unit with 3 trays	1
26.	Hand level	1
27.	Heating metal with six flask facility	1
28.	Horizontal shaker	1
29.	Hot platters with 8 tube facility	1
30.	Hydraulic conductivity meter	1
31.	Infiltrometer	1
32.	Infrared moisture meter	1
33.	Installation of LPG gas system in Laboratories with cylinders, stoves, burners and fitting	1 set
34.	Level staff (4 m folding)	2
35.	Mashel plant colour chart	1 set
36.	Mashel soil colour chart	1 set
37.	Mechanical sieve shaker with set of sieves	1
38.	Moisture meter (OSAW)	1
39.	Open pan evaporimeter	1
40.	Optical square	1
41.	Plane table with accessories	1
42.	Prismatic compass with stand	2 each
43.	Quick setting level	20 each
44.	Rain Gauge	1
45.	Ranging rod	1
46.	Sand bath (30 cm x 45 cm)	1
47.	Screw conveyor (model)	1

48.	Sieve shake for agreement analysis	1 set
49.	Soil testing kit	1 set
50.	Spiral separator (model)	1
51.	Suction machine	1
52.	Teseometer	1
53.	Theodolite	1 each
54.	Water measuring devices	1

XIII. FARM EQUIPMENT

S.No.	Particulars	Quantity
1.	Tractors	2 Numbers with accessories
2.	Power Tillers	2 Numbers with accessories
3.	Farm Machineries	As given below

1. Farm Machinery / Implements

Tractor motorized plough	- Disc plough	- 2 Nos.
Tractor motorized	- Rotavator	- 2 Nos.
Tractor motorized	- Cultivator	- 2 Nos.
	- Crop seeder	- 1 No.
	- Multi crop breeder	- 1 No.
Trailer 2 wheeler and 4 wheelers		- 2 Nos.
Power Weeder		- 2 Nos.

2. Farm Tools and Implements

S.No.	Equipment Required	Quantity (Nos.)
1.	Secateurs	30
2.	Grafting, budding knife	30
3.	Spade	30
4.	Hand hoe	30
5.	Garden rake	30
6.	Garden fork	30

7.	Crow bar	10
8.	Pruning saw	10
9.	Sprayers (Knapsack)	5
10.	Power sprayers	5
11.	Rose can	20
12.	Shovel	10
13.	Garden shears	10
14.	Scythe	20
15.	Fruit harvester	5
16.	Tree Pruner	10
17.	Iron pan	30
18.	Rocker sprayers	3
19.	Wheel barrow	5
20.	Tractor	1
21.	Hoe set	1
22.	Desi Harrow	1
23.	Threshing machine	1
24.	Tractor	1
25.	Trailer	1
26.	Mould board plough	1
27.	Reversible plough	1
28.	Cultivator	1
29.	Iron ridger	1
30.	Leveler	1
31.	Dented hoe	1
32.	Tractor driven seed drill	1
33.	Knapsack spray pump	1
34.	Kudali	30
35.	Tikay	30
36.	Secaior	5
37.	Sickles	30

38.	Vaibhav sickles	30
39.	Sara vantra	1
40.	Rotavator	1
41.	Danthi	1
42.	Two bowled seed drill	1
43.	Power sprayer	1
44.	Chameli	20
45.	Wooden seed drill	1
46.	Disc plough	1
47.	Wooden ridger	1
48.	Sugarcane juice extractor	1
49.	Disc harrow	1
50.	Akola hoe	1
51.	Mitsubishi power tiller	1
52.	Gatoor type spray pump	1
53.	Jowar sulphur mixture barrel	1
54.	Maruti foot sprayer	1
55.	Dompy level	1
56.	Farm counter marker	1
57.	Meesalaguntaka	1
58.	Winnowing machine	1
59.	Marker	1
60.	Mogari	10
61.	Dibbler	1
62.	Seed storage acrylic boxes	30
63.	Sprinkler irrigation system	1
64.	Drip irrigation system	1
65.	Narvegiion harrow	1

XIV. FARM ANIMAL AND LIVESTOCK

S.No.	Animals	Numbers
1.	Work Bullock	1 pair
2.	Cow/Buffaloes	6
3.	Goat and sheep	20 each
4.	Poultry unit	100 birds
5.	Pigs	5

XV. TRANSPORT FACILITIES

The following vehicles should be available (minimum)

- | | | |
|------|------------------------|---|
| I. | Car | 1 |
| II. | Jeep/Car for staff | 1 |
| III. | Bus | 2 |
| IV. | Pickup van | 1 |
| V. | Tractors with Trailors | 2 |

XVI. WATER RESOURCES

1. Minimum water requirement is 1000 mm for 10 acres of Wetland
2. Minimum 400 mm per annum water required for 70 acres of Garden Land, Orchard, Botanical Garden, Herbal Garden and Woodlot.
3. To meet water requirement of hostel, laboratory and building maintenance.
4. Drinking water

Sources :

1. Open wells
2. Bore wells
3. Farm ponds

Rain water harvesting

1. Rain water falling on building roofs to be collected and canalized to a collecting tank.
2. Suitable methods should be taken to harvest the surface run-off water in the premises.

XVII. POWER SUPPLY

- | | |
|---------------------------|------------------|
| 1. Minimum power required | 75 KVA |
| 2. Generator (stand by) | 20 KVA (minimum) |
| Total | 75 KVA |

Source :

- | | | |
|----------------------|---|--|
| 1. Government Supply | : | 75 KVA |
| 2. Other Sources | : | |
| Renewable Energy | : | a. Solar
b. Wind Energy
c. Bio-gas Plant |

XVIII. SPORTS FACILITY

Adequate facilities may be provided for Outdoor and Indoor games, including sports equipment.

1. Four hundred meters tract with Pavilion & Gallery
2. Courts :

Volley Ball	-	2
Foot Ball	-	1
Basket Ball	-	2
Kabbadi	-	1
Kho-Kho	-	1
Tennis	-	2
3. Indoor Games facilities

Table tennis	-	2
Shuttle badminton	-	2
Gymnasium	-	2 (each for Boys and Girls hostel)

ANNEXURES
Annexure I

TAMIL NADU AGRICULTURAL UNIVERSITY
(A State Agricultural University)
Coimbatore – 641 003

Application for Starting New Agricultural College/Institute

1. DETAILS OF PROPOSED COLLEGE / INSTITUTE			
a. Name:			
b. Address :			
.....			
..... Pincode :			
c. Phone No:	d.	Fax No:	
e. Website:	f.	E-mail:	
2. DETAILS OF EDUCATIONAL AGENCY			
TRUST / INSTITUTION / SOCIETY		TRUSTEE / SECRETARY	
Name :		Name :	
Address:		Address:	
.....		
.....		
Phone No: (O)		Phone No: (O)	
(R)		(R)	
(M)		(M)	
E-mail :		E-mail :	
Fax:		Fax:	

3. Nature of the proposed College (Please tick the relevant box):

S.No.	Details	Men	Women	Both
i.	Degree			

4. Location

- a. Name of the City / Municipal Town / Town Panchayat / Village Panchayat :
- b. Revenue District / Taluk :
- c. Nearest Post Office :
- d. Nearest Railway Station :

5. Status of Educational Agency: (Please attach the copy of Bye Law/Constitution)

- a. Registered Society :
- b. Trust :
- c. Corporate Entity :
- d. Others (Please specify) :

6. Land Details

- a. Site Survey No. of the Land (Please attach a map of the location) :
- b. Area of the Land :
- c. Nature of ownership (Please attach the Own In the name of the Trust copy of the original documents)
- d. Whether the land is clearly demarcated by Fencing/ boundary wall (Please attach the copy of the original documents and the topographical sketch of the college) YES No
- e. Whether the land is contiguous YES No
- f. Whether the surroundings are suitable for Educational purpose YES No
- g. Whether land use certificate obtained YES No
- h. Whether land continuity certificate obtained YES No
- i. Whether the college has other institutions in the same premises (please provide the details) YES No

7. Need and justification for establishing the new College: (Attach the justification in enclosure)

8. Building Details (The College should have a permanent building)

PERMANENT Building:

- a. Location
- b. Whether Building Plan is approved by Local authorities / Town and country planning YES No
- c. Whether the Building is RCC roofed YES No
- d. Building Completion Certificate obtained (Please attach a copy) YES No
- e. Stability Certificate of the Building obtained (Please attach a copy) YES No
- f. Whether adequate arrangements are made for the disposal of the laboratory wastes YES No
- g. Whether adequate toilet facilities available for Gents / Ladies YES No
- h. Whether the buildings have trouble free access for Differently abled person YES No

9. DETAILS OF FACILITIES AVAILABLE

(a) Class rooms

S. No.	Room No.	Area in Sq.ft.	Proposed No. of Students to be accommodated (Norms: 10 sq.ft. per Student)
i.			
ii.			
iii.			
iv.			

(b) Laboratory

S. No.	Room No.	Area in Sq.ft.	Proposed No. of Students to be accommodated (Norms: 35 sq.ft. per Student)
i.			
ii.			
iii.			
iv.			

(c) Computer Labs

S. No.	Room No.	Area in Sq.ft.	Proposed No. of Students to be accommodated (Norms: 20 sq.ft. per Student)
i.			
ii.			
iii.			
iv.			

(d) Computing facilities

S.No.	Details	Configuration
i.	Server	
ii.	Terminals	
iii.	Printer	
iv.	Networking	
v.	Internet - Broadband connectivity	

(e) Whether the College has required furniture in the Classrooms and Laboratories YES No

(f) Library Facilities

S. No.	Facilities	Available / Not Available
i.	Area of the Library	
ii.	Furniture	

iii.	Seating Capacity	
iv.	Reprographic facility	
v.	Availability of Internet (give details)	
vi.	No. of Books	
vii.	No. of Text book	
viii.	Reference book	
ix	Journals	

(g) Play Ground Facilities

- i. Area of Land available :
- ii. Facilities available for Outdoor Games :
- iii. Provision for Indoor Games :

(h) Hostel (Please tick the relevant box) :

- i. Boys Girls
- ii. Whether the hostel is RCC roofed rooms YES No
- iii. Hostel Strength

S.No.		No. of Rooms	No. of students / room
1.	Boys		
2.	Girls		

- iv. Whether the hostel has proper Cooking facility YES No
- v. Whether the hostel has proper Recreational Facilities YES No
- vi. Whether the hostel has proper furniture & fittings YES No

vii. Utilities

S.No.	Details	Yes	No
a.	Toilets		
b.	Bath room		
c.	Drinking water		
d.	Water for other use		
e.	Laundry facilities		
f.	Telephone		
g.	Internet		
h.	Recreation facilities		
i.	Medical facilities		

(i) Transport facilities for Field Visit

10. Details of Financial Allotment from the Educational Agency for running the College

S.No.	Estimated Facilities	Source of Funds	Amount (Rs.)
a.	Building		
b.	Laboratories		
c.	Library Books		
d.	Furniture and Fittings		
e.	Hostel		
f.	Recurring expenditure		
g.	Others		
	Total Amount (Rs.)		

11. Whether the Trust / Society undertakes to appoint Qualified teaching, non-teaching and supporting staff as prescribed by the University and the Government of Tamil Nadu and pay salary as recommended by the State Government YES No
12. Whether the Trust / Society agrees to Undertake to collect tuition fees and other fees only at the Rates prescribed by Government / University from time to time YES No
13. Whether the Trust / Society agreeing to admit Students as per guidelines prescribed by the Government /University from time to time YES No
14. Whether the Trust / Society agrees to undertake not to collect capitation fee or donation from the students or parents YES No

15. APPLICATION FEE AND REGISTRATION FEE

Application Fee : Rs.1,00,000/-
(Rupees One lakh only)

Registration Fee : Rs.50,000/-
(Rupees Fifty thousand only)

Application fee and Registration fee to be paid in the form of crossed Demand draft / Bankers Cheque drawn in favour of "The Comptroller, TNAU, Coimbatore" payable at Coimbatore.

16. Details of Application Fee remitted:

Demand Draft / Bankers Cheque No.	Date	Name of the Bank	Amount (Rs.)

17. Details of Registration Fee remitted:

Demand Draft / Bankers Cheque No.	Date	Name of the Bank	Amount (Rs.)

18. Details of General Amenities:

S. No.	Amenities	Norms	Available / Not available
a.	Principal Room	300 Sq. feet	
b.	Office room	30 Sq. feet / staff	
c.	Faculty room	40 Sq. feet / faculty	
d.	Blackboard (Glass)	8 x 4 feet	
e.	Lighting	4 tube lights per class room	
f.	Fan	2 fans per class room	
g.	Toilets (Separate for Boys / Girls)	One for 50 boys One for 25 girls in each floor	
h.	Drinking water	Provision in each wing	
i.	All weather approach road (length)		
j.	Canteen		
k.	Parking facilities		
l.	Medical facilities		
m.	Telephone facilities		
n.	Rain water harvesting		
o.	Transport facilities		
p.	Reprographic facility		
q.	Barrier free environment for differently abled persons		

DECLARATION

I/We hereby certify that the particulars furnished above are correct and the Trust / Society agrees to abide by the rules and regulations prescribed by the University from time to time for running College / Institute.

Signature
of the person duly authorized
by the Trust / Society

Place:

Date :

ANNEXURE II DETAILS OF FEES PAYABLE TO THE UNIVERSITY (Non-refundable)

S.No.	Details of Fee Payable	Amount (Rs.)
1.	Registration Fee for each degree program	Rs.50,000/- (Rs. Fifty thousand only)
2.	Application Fee for each UG degree program	Rs.1,00,000/- (Rupees One lakh only)
3.	Affiliation fee for each UG Degree Program	Rs.20,00,000/- (Rupees Twenty lakhs only)
	Standing Committee Inspection Fee to be paid to the University	
1	Fee for first and second visit of the Standing Committee	Rs.1,00,000/- (Rupees One lakh only)
2	Fee for each additional visit of the re-inspection by Standing Committee	Rs.1,00,000/- (Rupees One lakh only)

Note: All the fees to be paid in the form of Demand draft drawn in favour of the Comptroller, TNAU payable at Coimbatore.

Annexure III (a)

DOCUMENTS TO BE ATTACHED WITH APPLICATION

1. Registration of the Society / Trust along with details of Constitution and Memorandum of Association.
2. Letter from the Competent Authority designated by the Government concerned for classification of land and its location as Metropolitan or other areas.
3. Land Use Certificate from the Competent Authority designated by the Government concerned.
4. Registered land (along with EC for a period of 30 years) documents in the name of the applicant.
5. Building Plan of the proposed college prepared by a registered Architect and approved by the Competent Authority designated by the Govt. Concerned.
6. Registered documents by the registered Trust / Society earmarking land and buildings for the proposed college.
7. Details of the latest fund position along with photocopies of relevant bank accounts, including the evidence of the Corpus Fund earmarked for the purpose.
8. Detailed Project Report giving Background of the society / Trust, development plan for the college with timeline, Architectural master plan indicating the land use, Policy with regard to faculty recruitment, Structure of academic and administrative governance, Sources of financing of capital and operating expenditure and Resource projections and their utilization schedule.
9. Background of the Trust / Society with reference to its experience in promoting, managing and operating educational institutions; details of its promoters including their background; its activities in the social, charitable and educational spheres since its inception and its Vision and Mission.
10. Topographical sketch of the land in Village Map with Survey Nos. duly coloured along with surrounding area with Survey Nos. signed by the Thasildar to show that the lands are continuous and in one block. College Land should be colored different in the sketch.
11. Clearance Certificate from the Government for holding excess land by the Trust / Society.

Annexure III (b)

PROCESS CHART FOR GRANTING AFFILIATION TO NEW COLLEGE / INSTITUTE

Nature of action	Period during which action to be taken	Action to be taken
1. Issue of Application and Guidelines	Throughout the year	----
2. Receipt of completed application with prescribed fees	Before December 31 st	-----
3. First inspection by Standing Committee	January & February of current year	University Standing Committee to visit the College / Institute for inspection
4. Second inspection by Standing Committee, if needed	March and April	If satisfied based on Standing Committee report and recommendations, it will be placed in the ensuing Academic Council and Board of Management and University will forward the proposal to the Government for issuing G.O.
5. Provisional affiliation	On receipt of the Government approval on or before 31 st May to admit candidates in that academic year. If Government approval is not received before 31 st May the students shall be admitted only in the next academic year.	University will issue the temporary affiliation after signing MoU. After one year based on the Standing Committee inspection and discussions with the students, provisional affiliation will be issued.

ANNEXURE - IV

Essential Requirements as guided by AICTE norms

I. The College should have a Governing Council

The 11 Members of the Governing Council of a college shall be:

- 1 Chairman : A technical expert either an entrepreneur or an industrialist or an educationist of repute
- 2 to 5 : Members to be nominated by the Registered Society / Trust of the College Management
- 6 & 7 : Two eminent professionals / Government Officer from the area of Agriculture
- 8 & 9 : Two Professors in the field of Agricultural Sciences
- 10 : Dean of Govt. Agricultural College
- 11 : Member Secretary – Dean of respective college (ex-officio)

The term of the members, except the ex-officio member, shall be for a period of three years.

Functions of the Council

The Governing Council besides being the supreme administrative authority of the college, shall have the following additional functions:

- To monitor the academic and other related activities of the college
- To consider the recommendations of the Staff Selection Committee
- To consider the important communications, policy decisions received from the University, Government, etc.
- To monitor the students and faculty development programmes
- To review the academic and other related activities of the college
- To review the students and faculty development programmes
- To visualize and formulate perspective plans for the development and growth of the college.
- To formulate Master Plan for campus development, facilitating implementation of the provision of the perspective plan

II. Complaints cum Redressal Committee

Composition of Womens' harassment committee.

The composition of the complaints cum redressal committee shall be:

Headed by a senior lady member.

50% of the members represented by ladies, one student member.

A third party either an NGO or an outside activist who is familiar with the issue of sexual harassment in work place.

Functions

- To enquire the complaints received from the aggrieved women in respect of sexual harassment.
- To recommend to the Dean of the College, the penalty to be imposed.

The Dean upon receipt of the report from the committee shall, after giving an opportunity of being heard to the person complained against, submit the case with the committee's recommendation to the Governing Council of the College.

The Governing Council shall confirm with or without modification the penalty recommended after duly following the prescribed procedure.

III. Registers and Records to be maintained by College

The college shall maintain and make available the following Registers, Records and Documents as and when demanded by the University:

1. Department wise faculty profile
2. Record of students (year wise)
3. Department wise Non-Teaching Staff Profile
4. Academic performance record of students (year wise)
5. Copy of Regulations, Curriculum and Syllabi
6. Record of Research / Consultancy / Extension activities (department wise)
7. Record of student projects
8. Record of Achievements, Award and Recognition (department wise)
9. Master time table and Academic calendar
10. Stock register for equipment

