

POLICY NOTE

DEMAND NO.20-HIGHER EDUCATION

2017 – 18

1. INTRODUCTION

*The learned will long for more learning,
when they perceive that while it gives pleasure to themselves,
the world also derives pleasure from it.*

(Thirukkural 399)

1.1. Tamil Nadu is one of the progressive States of India focusing on the quality education for the youth with an impressive Gross Enrollment Ratio (GER) of 44.3 percent, which is much more than National GER of 24.5 percent. Vision 2023 has laid the roadmap for progress in Human Development Index and has envisaged significant increase in the number of higher education institutions to extend coverage to all sections of the population of the State. It seeks to provide inclusive higher education addressing

both access and equity issues. In pursuance of this, 21 Government Arts and Science Colleges, 16 Government Polytechnic Colleges, 4 Government Engineering Colleges and 24 University Constituent Colleges have been established in the State in the last 6 years.

1.2. Tamil Nadu has carved a niche for itself in the National Institutional Ranking Framework 2017 of the Ministry of Human Resource development, Government of India (MHRD-NIRF). Eight State Universities coming under the administrative control of this Department have secured positions in the top 100 Universities ranking. These State Universities have scaled benchmarks in quality in addition to complying with 5 NIRF ranking parameters – (a) teaching, learning and resources, (b) research and professional practice, (c) graduation outcomes, (d) outreach and inclusivity, and (e) perception. It is

noteworthy that 37 colleges in the State are among the top 100 Colleges in MHRD-NIRF.

1.3. The following departments/organisations come under the aegis of Higher Education Department:

- Directorate of Technical Education
- Directorate of Collegiate Education
- Tamil Nadu Archives and Historical Research
- Tamil Nadu State Council for Higher Education
- State Project Directorate of RUSA
- Science City
- Tamil Nadu Science and Technology Centre

- Tamil Nadu State Council for Science and Technology
- Tamil Nadu State Council for Technical Education
- Tamil Nadu State Urdu Academy

In addition, the following Educational institutions fall under the purview of the Higher Education Department:

State Universities – 10 Arts and Science, 1 Technical, 1 Teachers Education and 1 Open	13
Arts and Science Colleges including Oriental Colleges, Colleges of Social Work and Physical Education Colleges and Constituent Colleges	772
Colleges of Education	734
Engineering Colleges	584
Polytechnic Colleges	518

1.4. The Department of Higher Education has been effectively implementing various schemes to encourage aspiring youth to pursue higher studies through the State Government's fees waiver for students of Government Polytechnic colleges and Government Arts and Science Colleges and first generation graduate scholarship for students of Engineering Colleges. It is not an exaggeration that the above measures have played a pivotal role in removing economic barriers leading to better access to higher education, eventually contributing to steady increase in enrollment in institutions of higher education in the State.

1.5. The Department of Higher Education has taken following measures for providing quality higher education:

- establishing Curriculum Development Cells

- setting up smart classrooms with video conferencing facility
- providing Foreign Language Laboratories
- promoting ICT-enabled teaching/learning
- creating Soft Skills Centres
- establishing IPR Cells to register patents
- scaling up research potential
- checking plagiarism
- encouraging research and development through foreign collaborations
- establishing Centres of Excellence in frontier areas

- fostering industry-academia interface
- digitizing institutional resources in the State.

1.6. The Department has been giving an annual award since 2015, instituted in the memory of Dr. A. P. J Abdul Kalam, which includes a citation, a cash award of Rs. 5 lakhs and a gold medal of 8 grams, for individuals for their contribution to the development of sciences, humanities or the welfare of students.

1.7. The department envisions developing strategies to march towards attaining exponential growth in the higher education sector in the coming years, seeking to make Tamil Nadu a desired destination for world-class higher education institutions to collaborate with.

**BUDGET ESTIMATE FOR THE YEAR
2017 - 18**

Under Demand No.20 Higher Education,
Total Outlay is Rs. 3680.39 Crore.

S. No.	Head of Department	Amount Allotted (Rs. In Crore)
1.	Secretariat	4.71
2.	Directorate of Collegiate Education	2125.79
3.	Directorate of Technical Education	1115.80
4.	Universities	321.78
5.	Commissionerate of Archives and Historical Research	10.05
6.	Tamil Nadu State Council for Science and Technology	1.95

7.	Tamil Nadu Science and Technology Centre	4.55
8.	Science City	1.24
9.	Tamil Nadu State Council for Higher Education	94.34
10.	Tamil Nadu State Council for Technical Education	0.18
	Total	3680.39

2. TECHNICAL EDUCATION

2.1 After formation of the State of Tamil Nadu, the Directorate of Technical Education was established on 14th October, 1957, for establishment and monitoring of Technical Educational institutions. This Directorate is responsible for formulating new courses, developing Curricula, working for advancement of Technical Education and Research. The Government of Tamil Nadu has taken effort to formulate new policies and promote developments in the field of Technical Education both at Degree and Diploma level. At present, there are 584 Engineering Colleges and 518 Polytechnic Colleges as detailed below:

No. of ENGINEERING COLLEGES – 584			
Government Engineering Colleges	Government Aided Engineering Colleges	Anna University Department Colleges & Constituent Colleges	Self Financing Engineering Colleges
10	3	17	554

No. of POLYTECHNIC COLLEGES - 518				
Government Polytechnic Colleges	Government Aided Polytechnic Colleges	Affiliated Polytechnic Colleges	Self Financing Polytechnic Colleges	Self Financing Hotel Management & Catering Technology Institutions
46	34	5	418	15

2.2 ACHIEVEMENTS AND INITIATIVES (2011-12 To 2016-17)

2.2.1. Indian Institute of Information Technology (IIIT), Srirangam, Tiruchirappalli

Indian Institute of Information Technology was started at Tiruchirappalli at a cost of Rs. 128 crore on a Not-for-profit Public Private Partnership (N-PPP) mode by the Government of Tamil Nadu along with Government of India and Industry partners.

Hon'ble former Chief Minister of Tamil Nadu inaugurated IIIT, Srirangam on 12-02-2014.

2.2.2. Establishment of 4 Government Engineering Colleges

Four Government Engineering Colleges were established during 2012 - 13 and 2013 - 14. A sum of Rs. 244.60 crore was accorded for the construction of buildings and a sum of Rs. 26.91

crore was sanctioned towards non-recurring expenditure. For the above 4 Government Engineering Colleges, 776 Teaching and Non-Teaching Posts were created.

2.2.3. Establishment of 16 Government Polytechnic Colleges

Similarly, 11 Government Polytechnic Colleges were started during 2013 - 14. A sum of Rs. 282.48 crore was accorded for the construction of buildings and a sum of Rs. 52.08 crore was sanctioned towards non-recurring expenditure. For the above Government Polytechnic Colleges, 1,245 Teaching and Non-Teaching Posts were created.

Another 5 new Government Polytechnic Colleges were started during 2016 - 17 at Dr. Radhakrishnan Nagar (Chennai District), Kadathur (Dharmapuri District), Valangaiman (Thiruvarur District), Ragunathapuram

(Thanjavur District) and Kelamangalam (Krishnagiri District).

For the above 5 Government Polytechnic Colleges, a sum of Rs. 128.30 crore was accorded for the construction of buildings and a sum of Rs. 2.50 crore was sanctioned towards non-recurring expenditure for the purchase of Equipments, Computers, Furniture, Library Books and e-Journals required for the 1st academic year 2016 - 17. For the above 5 Government Polytechnic Colleges, 305 new posts have been sanctioned under Teaching and Non-Teaching categories.

In view of the above, the number of Government Engineering Colleges in Tamil Nadu has increased from 6 to 10 and the number of Government Polytechnic Colleges has increased from 30 to 46 in a short span of 6 years.

2.3 DISTRIBUTION OF FREE TEXT BOOKS

In order to incentivize the students to join Polytechnic Colleges, free text books are being distributed to all the First year Diploma students of Government Polytechnic Colleges. Under the scheme, the books are being distributed for the subjects of English, Engineering Physics, Engineering Chemistry and Engineering Mathematics. Free text books have been issued to 52,649 students for a sum of Rs. 68.06 lakh during the period from 2012 - 13 to 2016 - 17.

2.4 FINANCIAL ASSISTANCE TO ECONOMICALLY WEAKER STUDENTS (CHIEF MINISTER'S PUBLIC RELIEF FUND)

The Government have given financial - assistance to economically weaker students, at the rate of Rs. 25,000 each, to enable them to pursue their B.E. / B.Tech. courses. Totally, 73 students were benefitted during the period from 2012-13 to 2016-17 and Rs. 18,25,000

was provided under the Chief Minister's Public Relief Fund.

2.5 WAIVER OF TUITION FEES AND ISSUE OF FREE BUS PASS TO THE GOVERNMENT POLYTECHNIC COLLEGE STUDENTS

The schemes for waiver of tuition fees and issue of Free Bus Pass are being continued for the students of Government Polytechnic Colleges. A total of 2,41,635 students have benefitted from the year 2011 - 12 to 2016 - 17 under these schemes.

2.6 DISTRIBUTION OF FREE OF COST LAPTOP COMPUTERS

The scheme for distribution of free of cost Laptop Computers was introduced by the Government of Tamil Nadu for the students of Government and Government Aided Schools and Colleges to enable them to acquire better computing skills and also bridge the digital divide between the haves and have-nots.

During the period from 2011 - 12 to 2016-17, a total of 1,84,519 free of cost Laptop Computers have been distributed to the students of Government and Government aided Engineering and Polytechnic Colleges by the Technical Education Department. For the year 2016 - 17 alone, 11,348 free of cost Laptop Computers have been distributed to the Polytechnic Colleges students.

2.7 ENGINEERING ADMISSION THROUGH SINGLE WINDOW COUNSELLING

Students are admitted in Under Graduate Courses in Engineering Colleges based on the marks scored by them in Class XII Board Examinations through Tamil Nadu Engineering Admission (Single Window Counselling) conducted by Anna University as per percentage of Government Quota in total seats as detailed below:

Table 2.1 Engineering Admission through Single Window Counselling

S.No.	Category		Percentage
1	Government Engineering Colleges		100
2	Government Aided Engineering Colleges	Aided Courses	100
		Self Supporting Courses	70
3	Self Financing Engineering Colleges	Non-minority	65
		Minority	50

On-line Registration for students admission through single window counselling was introduced from the year 2016 - 17 onwards.

2.8 TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME – PHASE II (TEQIP-II)

Technical Education Quality Improvement Programme Phase-II (TEQIP-II) scheme has been implemented through Ministry of Human

Resource Development (MHRD) and State Government with allocation of Rs. 142.10 crore. The Project was completed successfully on 31-3-2017. The Project cost was shared between Central and State Government as 75% and 25% respectively till 2014 - 15. From the year 2015 - 16 onwards, it was shared equally.

In Tamil Nadu, 4 Government Engineering Colleges, 3 Government Aided Engineering Colleges, 1 Constituent College of Anna University at Tiruchirappalli and the Department of Computer Science and Engineering of Manonmaniam Sundaranar University participated in TEQIP-II.

Tamil Nadu is identified as one of the well performing States among 23 participating States in TEQIP-II in entire country. In appreciation of the good performance among the participating States in TEQIP-II, an additional fund of Rs. 40 crore was sanctioned (MHRD Share

Rs. 20 crore and State Government Share Rs. 20 crore) to Tamil Nadu.

The following are some of the major achievements under TEQIP - II:

- Modernisation of Laboratories, Workshops and Libraries
- Financial Assistance for 3,786 PG Students
- Financial Assistance for 417 Ph.D. Scholars
- Publication of 5,761 Research Papers and 143 Books
- 56 Patent Rights filed
- 17 Patents obtained
- 7 Institutions were granted Autonomous Status by University Grants Commission (UGC)

- 50 Programmes were accredited by National Board of Accreditation (NBA).
- 1,165 in-house Training Programmes were conducted for Teaching Faculty
- 90 in-house Training Programmes were conducted for Non-Teaching Staff in TEQIP-II Institutions.

A total of 1,743 Teaching Faculty have attended 4,230 Training Programmes in Institutions such as IITs, NITs, NITTTR, IIMs and Government Organizations all over the Country.

2.9. SCHEME OF PROVIDING POST MATRIC SCHOLARSHIP

Central and State Government are jointly implementing Post Matric Scholarship Scheme for the students belonging to SC, ST and SC converted into Christianity. Under this scheme, all compulsory and non-refundable fees fixed by the fee fixation committee, are paid to the above

category students admitted under the Government /Management Quota in Self - Financing Institutions (including minority institutions).

2.9.1. Engineering Colleges

Under this Scheme, Rs. 435.07 crore, Rs. 580.42 crore and Rs. 739.06 crore have been paid respectively during the years 2013-14, 2014 - 15 and 2015 - 16. Accordingly, 80,715, 97,668 and 1,14,859 Engineering students in these years benefitted under the scheme.

2.9.2. Polytechnic Colleges

Under the Post Matric Scholarship Scheme Rs. 66.95 crore, Rs. 80.10 crore and Rs. 134.32 crore have been paid during the years 2013 - 14, 2014 - 15 and 2015 - 16 respectively. Accordingly, 44,555, 51,248, and

60,600 Polytechnic College Students benefitted from the scheme during the above period.

2.10. FIRST GENERATION GRADUATE TUITION FEE CONCESSION

Tuition fee concession is granted to First Generation Graduate students admitted to first year and second year lateral entry in Engineering Colleges in the State through Single Window Counselling.

Under this scheme, tuition fee concession of Rs. 299.28 crore, Rs. 478.06 crore, Rs. 547.87 crore, Rs. 541.11 crore, Rs. 514.53 crore and Rs. 459.03 crore have been given to the students from the year 2011 - 12 to 2016 - 17 respectively. Accordingly, 1,57,176, 2,49,563, 2,87,021, 2,83,379, 2,69,522 and 2,42,112 students have benefitted during the above period.

2.11. FACILITIES EXTENDED TO SRILANKAN TAMIL REFUGEES

The Sri Lankan Tamil refugee students in Tamil Nadu have been permitted to participate in the counselling for admission to First year and Second year Lateral Entry B.E./B.Tech and Post Graduate courses viz., MBA / MCA/ ME/MTech from the academic year 2011 - 12 onwards.

Tuition fee concession granted to the First Generation Graduate students selected for professional courses through Single Window Counselling in Tamil Nadu, has been extended to the eligible Sri Lankan Tamil refugee students and a total of 160 students benefitted from the academic year 2011 - 12 to 2016 - 17.

2.12. APPOINTMENT OF TEACHING STAFF IN GOVERNMENT ENGINEERING / POLYTECHNIC COLLEGES

187 Assistant Professors have been appointed in the year 2016 - 17 in Government

Engineering Colleges through Teachers Recruitment Board. The Government have issued orders for filling up of another 1,065 Lecturer Posts in Government Polytechnic Colleges through Teachers Recruitment Board and action is being taken for the recruitment.

2.13. DEPLOYMENT OF SURPLUS TEACHING AND NON-TEACHING STAFF OF ANNAMALAI UNIVERSITY

Government directed Annamalai University to identify surplus teaching and non-teaching staff. Accordingly, 337 surplus teaching staff of Annamalai University have been deployed in Government Engineering Colleges and Government Polytechnic Colleges and 376 surplus non-teaching staff have been deployed in Government Engineering / Government Polytechnic Colleges and PWD Technical Education Circle and Divisions as per Government orders for a period of three years on agreement basis.

3. COLLEGIATE EDUCATION

3.1. The Directorate of Collegiate Education was carved out of the erstwhile Directorate of Public Instruction in the year 1965 with a view to administer exclusively the Collegiate Education. Details of colleges functioning under the aegis of this Directorate are as follows :-

Table 3.1 Details of colleges

Type of College	Govt. Colleges	Govt. Aided Colleges	Self Financing colleges	Total
Arts and Science Colleges	83	139	496	718
Physical Education Colleges	0	3	8	11
Oriental Colleges	0	4	0	4
Schools of Social Work	0	2	0	2
Colleges of Education	7	14	713	734
University Constituent Colleges	37	0	0	37
Total	127	162	1217	1506

3.2. ESTABLISHMENT OF NEW GOVERNMENT COLLEGES

The Government sanctioned and commenced 18 new Government Arts and Science Colleges from the year 2013 - 14 to 2015-16. The Government have also established 2 new Government Arts and Science Colleges, one at Mettupalayam (Coimbatore District) and another at Perumpakkam (Kanchipuram District) during 2016-17. One more college at Avinashi (Tiruppur District) has started functioning from the academic year 2017-18.

3.3. INTRODUCTION OF NEW COURSES IN GOVERNMENT COLLEGES

In view of increased enrollment ratio of the students in Government Arts and Science Colleges from 2011-12 to 2016-17, the Government sanctioned 961 new courses and 1934 posts of Assistant Professors.

Table 3.2 Details of New courses

Sl. No	Academic year	No. of Courses	No. of Colleges	Sanctioned Posts
1	2011-12	101	34	143
2	2012-13	298	51	833
3	2013-14	397	51	822
4	2015-16	163	34	124
5	2016-17	2	1	12
	Total	961		1934

3.4 APPOINTMENT / DEPLOYMENT OF ASSISTANT PROFESSORS IN GOVERNMENT COLLEGES

Government undertook the process of identifying surplus teaching staff in Annamalai University. During January 2016, 369 Assistant Professors who were identified as surplus in

Annamalai University have been appointed in Government Arts and Science Colleges and Colleges of Education on agreement basis. 208 more Assistant Professor posts were deployed from the surplus staff of Annamalai University on agreement basis during May 2017. Further, the Teachers Recruitment Board is in the process of recruiting 1,966 Assistant Professors in Government Arts and Science Colleges.

3.5 GUEST LECTURERS IN GOVERNMENT COLLEGES

With an objective of maximum utilisation of infrastructure available in Government colleges, classes are being conducted following a shift system in Government Arts and Science Colleges every year. During the academic year 2016-17, the Government sanctioned 1683 Guest lecturers under shift – I system till vacancies in the regular posts of Assistant Professors are filled up. The Government also sanctioned 1661

Guest Lecturers for Government Arts and Science Colleges under Shift-II system. The Government have enhanced the remuneration of Guest Lecturers from Rs. 10,000 to Rs. 15,000 in February 2016.

3.6 FREE EDUCATION

In the academic year 2016 - 17, 4,63,063 Under Graduate students and 30,403 Post Graduate students from Government and Government Aided Arts and Science Colleges totalling 4,93,466 Students have benefitted from tuition fee waiver scheme.

3.7 FREE BUS PASS TO THE COLLEGE STUDENTS

The Free bus Pass scheme for College students is being continued every year. The Government have provided 8,51,542 Free Bus Passes to the students studying in Government Arts and Science Colleges and Colleges of

Education from the year 2011 - 12 to 2016 - 17. 1,88,256 college students benefitted from this scheme in 2016 - 17.

3.8 FREE COACHING FOR CIVIL SERVICES EXAMINATIONS

Women candidates from Tamil Nadu have established an excellent track record of success in All India Civil Services Examinations. In order to encourage and equip women students to appear in All India Civil Services Examinations, free coaching classes are being conducted since 2001 - 02. A sum of Rs. 10 lakh per year has been earmarked for this scheme and classes are being conducted at Queen Mary's College for women, Chennai and Sri Meenakshi Government College for Women, Madurai. This scheme is being continued in the year 2017 - 18.

3.9 JOB FAIR

For the benefit of students studying in Government and Government Aided Arts and Science Colleges, placement cells have been established. During the year 2016 - 17, a total number of 6,633 students have secured jobs in various companies as against 4,758 during 2015 - 16.

3.10 STIPEND FOR TAMIL MEDIUM STUDENTS

In order to encourage students to study in Tamil medium, scheme of granting stipend was introduced in the year 1971 - 72. At present, Rs. 400 is being sanctioned to each student studying in Tamil medium as stipend. During the financial year 2016 - 17, Government allotted a sum of Rs. 227.86 lakh, benefitting 56,965 students.

3.11 CONDUCT OF SPECIAL COACHING

Students belonging to SC/ST and MBC communities studying in Government Colleges, particularly in rural areas, sometimes face initial problems with subjects like English, Maths and Science. To allay their fears and boost their confidence, special coaching is being given to these students after regular class hours and also during holidays. This scheme is continued every year. During the year 2016 - 17, 8,447 students have benefitted from this scheme.

3.12 STIPEND TO RESEARCH (Ph.D) SCHOLARS

Government have been sanctioning stipend at the rate of Rs. 36,000 per annum to students doing full time research in various subjects in Government and Government Aided Colleges during their period of research. During the year 2016 - 17, 171 Research scholars (Fresh and Renewal) have benefitted from this scheme and

Rs. 61.56 lakh have been awarded to them as stipend.

3.13 PROVISION / IMPROVEMENT OF BASIC AMENITIES, FURNITURE AND EQUIPMENT TO GOVERNMENT COLLEGES

Government sanctioned Rs. 100 crore for providing / improving various facilities viz. furniture, equipment and basic amenities in 62 Government Arts & Science Colleges, 7 Colleges of Education and 24 University constituent colleges. This has enabled the students to pursue their higher education in a better equipped and more comfortable academic environment.

3.14 TUITION FEES SCHOLARSHIP SCHEME TO THE STUDENTS OF ADI DRAVIDA/ TRIBAL / ADI DRAVIDA CONVERTED CHRISTIANS PURSUING POST MATRIC LEVEL STUDIES

Tuition fees Scholarship Scheme to the students of Adi Dravida / Tribal / Adi Dravida

Converted Christian communities studying post matric level studies in Government Aided and Self financing Arts & Science Colleges and Colleges of Education is being implemented. As per the scheme, Tuition Fees is being paid by the Government to colleges directly on behalf of the students of Adi Dravida / Tribal / Adi Dravida Converted Christian communities studying in Arts & Science Colleges and Colleges of Education. The details of students benefitted and the amount sanctioned for them are as follows:

Table 3.3 Details of benefitted students

Year	Government Aided Colleges		Self Financing Colleges	
	Number of Students	Amount (Rupees)	Number of Students	Amount (Rupees)
2013-14	1,38,327	57,52,26,046	1,09,310	168,27,85,925
2014-15	1,45,026	59,33,99,916	1,06,246	175,97,64,007
2015-16	1,47,029	60,22,72,102	1,07,922	174,59,26,403

3.15 SPORTS

Sports is an integral part of education in the Arts and Science Colleges in Tamil Nadu. The students have excelled in Sports and won prizes and medals at the National and International events. Students from Government / Aided/ Self Financing Colleges have excelled in Fencing, Kabaddi, Volleyball, Hurdles, Relay Race, Chess, Hockey, Weight lifting, Power lifting, Running, Swimming and Hand Ball events at All India Inter University, University, State, National and International levels.

3.16 CONSTRUCTION OF OWN BUILDINGS FOR REGIONAL OFFICES OF COLLEGIATE EDUCATION

The Government have sanctioned a sum of Rs. 4.59 crore for the construction of own buildings for the Regional Joint Director of Collegiate Education offices at Trichy, Madurai and Tirunelveli. The building works have been

completed and inaugurated by Hon'ble former Chief Minister on 5.8.2016.

3.17 CONSTRUCTION OF OWN BUILDINGS FOR NEWLY STARTED GOVERNMENT COLLEGES

The Government have started 21 new Government Arts and Science Colleges from the academic year 2013 - 14 to 2017 - 18. Among these colleges, the construction works of own buildings for Government Arts and Science College at Hosur, Komarapalayam, Kangeyam, Uthiramerur, Peravurani, Sivakasi, Karimangalam, Kovilpatti, Karambakudi, Veppanthattai and Manalmedu have been completed and inaugurated by Hon'ble Chief Minister of Tamil Nadu.

The construction works of own buildings for Government Arts and Science College at Dr. Radhakrishnan Nagar (Chennai) and Nagercoil have been completed and Kadaladi, Mudhukulathur, Thiruvadanai and

Sathiyamangalam are in progress (nearing completion). The construction works of own building for Government Arts and Science College, Veerapandi is in progress.

The Government have allotted a sum of Rs. 23.20 crore for the construction of buildings to the Government Arts and Science colleges started at Perumpakkam, Mettupalayam and Avinashi.

3.18 NATIONAL SERVICE SCHEME (N.S.S)

National Service Scheme is being implemented successfully in higher educational institutions in Tamil Nadu since September, 1969. At present, National Service Scheme is functioning with 3,90,700 student volunteers in various educational institutions. During 2016 - 17, an amount of Rs. 13.43 crore has been allocated for the scheme. This scheme is being successfully implemented in Universities, Colleges and various Technical Institutions.

4. UNIVERSITIES

The following are the Universities functioning under the aegis of Higher Education Department:-

1.	University of Madras
2.	Annamalai University
3.	Madurai Kamaraj University
4.	Anna University
5.	Bharathiar University
6.	Bharathidasan University
7.	Mother Teresa Women's University
8.	Alagappa University
9.	Manonmaniam Sundaranar University
10.	Periyar University
11.	Tamil Nadu Open University
12.	Thiruvalluvar University
13.	Tamil Nadu Teachers Education University

4.1 UNIVERSITY OF MADRAS

4.1.1. University of Madras was established in 1857. It is governed by the provisions of the Madras University Act of 1923. It presently has six campuses, namely Chepauk, Marina, Guindy, Taramani, Chetpet and Maduravoyal (Field Lab). In course of time, new Universities were carved out of University of Madras and presently, the University has jurisdiction over Chennai, Kancheepuram and Thiruvallur districts. It is an acclaimed University in the field of Arts and Science education and has 87 teaching and research departments and 116 affiliated colleges. It has the distinction of maintaining high accreditation from the National Assessment and Accreditation Council (NAAC). It has also been recognized by the University Grants Commission (UGC) as 'University with Potential for Excellence'. It also holds the credit for being the first to introduce the concept of autonomous

colleges within the University system. Presently, 23 autonomous colleges are affiliated to the University of Madras, some of which have been identified by the UGC as “Colleges with the Potential for Excellence”. The University has been placed at 41st position among the top Universities of the country in the National Institutional Ranking Framework 2017 (NIRF). It ranked 89th among top universities in the QS BRICS ranking for the year 2016, with a score of 47.7.

4.1.2. The University set up the Institute of Distance Education (IDE) in 1981 to provide wider access to higher education. It presently offers 27 UG courses, 22 PG courses, 18 professional courses and 30 other courses. The IDE also offers M.Sc. (IT) and B.B.A. courses to students from Africa through the e-Network Pan African Project.

4.1.3. The University has on campus student enrollment of 2,681 (Male – 1,186, Female – 1,495). The University has two constituent colleges at Nemmeli and Thiruvottiyur with student strength of 1,599 (Male – 619, Female – 980). The Distance Education Programme has 93,164 students (Male–40,804, Female–52,360).

4.1.4. In the last five years, the University established 12 new Centres and established six new departments of Women Studies, Social Work, Networking Systems and Information Technology, Material Science, Bio-Informatics and Counselling Psychology. It established smart class rooms with video conference facility, Foreign Language Laboratories, an Entrepreneurship-Cum-Skill development Centre and set up a Curriculum Development Cell, beside establishing Centre for Multimodal Material Production for Differently Abled, Swami Vivekananda Centre for Higher Research and

Education, a PG Centre with High Tech Laboratory, Centre for Technical Writing and Academic Writing, University Business Collaboration Centre and Incubation & Technology Transfer Centre. For the benefit of students, it introduced Single Window admission in the Institute of Distance Education, Madras University Free Education Scheme for University and Colleges, Students Insurance Scheme and set up Talking Library for visually impaired, expanded the Sports facilities and Student Amenities including Wi-Fi and Internet facilities. Admissions to the University Departments have been made online since 2016-17.

4.1.5. Activities / Schemes for 2017 - 18

- i) The University proposes to widen the paperless working environment by automated administration with financial assistance of Rs. 1 crore from the RUSA programme.

ii) The University proposes to get online feedback from the students of its departments on faculties.

4.2 ANNAMALAI UNIVERSITY

4.2.1. Annamalai University was established in the year 1929 as a unitary, multi-faculty, residential University. The University administration was taken over by the State Government by enactment of Annamalai University Act, 2013. It has since been administered and managed properly. The National Institutional Ranking Framework (NIRF-2017) has ranked the University at 56th position among the top 100 Universities in India and has ranked the University at 13th among the top 100 Pharmacy Colleges.

4.2.2. The University offers its on-campus programmes, which includes Ph.D., M.Phil., Post Graduate and Under Graduate Degrees, PG Diploma and Diploma, through 50 Departments of Teaching under the Faculties of Arts, Science, Marine Sciences, Indian Languages, Education,

Fine Arts, Engineering & Technology, Agriculture, Medicine and Dentistry. The University also has many specialized centres such as Centre for Rural Development, Centre for Disaster Management, Centre for Skill Development and Centre for Environment, Health & Safety.

4.2.3. The University has Rajah Muthiah Medical College and Hospital, the Rani Meyyammai College of Nursing and the Rajah Muthiah Dental College and Hospital, which offer PG, UG, PG Diploma and Diploma courses. The Medical College has a hospital with 1,260 beds.

4.2.4. In the year 2016 - 17, the University had on its rolls 21,256 on-campus students (Male: 11,068 and Female: 10,188). The University also has 126 international students from 27 countries. Further, the Directorate of Distance Education has on its roll, 2,14,903 students.

4.2.5. The University was accredited with “A” Grade Status by NAAC in 2014. The Springer Nature Report ranked the University as 11th among the top Indian Institutions in International Collaborations (education, research, industrial tie-ups, etc.). In the last five years, the University awarded Ph.D. to 2,630 scholars and M.Phil degree to 1,248 students. The University has a Thirukkural Chair since 2014 to propagate and disseminate knowledge of classical Tamil grammar based on Thirukkural. The University also has Dr. Ambedkar Chair instituted in 2016 to propagate the ideologies of Dr. Ambedkar and to undertake research on education, human rights, socio-economic conditions of the Indian Diaspora.

4.2.6. Department of Science and Technology (DST), Government of India has sanctioned Rs. 15 crore under Phase I of

Promotion of University Research and Scientific Excellence (PURSE) Programme to develop scientific infrastructure.

4.2.7. The University has signed MoUs with International Institutions in Germany, Japan, USA, Scotland, Thailand, Singapore, Sri Lanka and Sweden in the fields of Agriculture, Engineering & Technology, Marine Sciences, Medicine, Arts and Science. It has also entered into an MoU with Neyveli Lignite Corporation of India for offering three year regular Diploma Programme in Mining. The University has also introduced M.E. Welding course under the Industry–Institution interaction programme since 2016 - 17 and 24 students sponsored by industries have been enrolled in the course.

4.2.8. The Directorate of Distance Education started 9 new programmes (5 PG Diploma, 2 Diploma and 2 Certificate) in 2015 - 16 and 44 New Programmes (10 PG Degree, 2 UG

Degree, 12 PG Diploma, 19 Diploma and 1 Certificate) in 2016 - 17.

4.2.9. A sum of Rs. 20 crore has been sanctioned to the University under RUSA, of which administrative sanction for Rs. 11.56 crore has been sanctioned for providing various infrastructure facilities. A sum of Rs. 34 crore under Phase II of PURSE programme is expected to be approved for developing scientific infrastructure facilities.

4.2.10. Activities / Schemes for 2017 - 18

- i) The University has proposed to institute Swami Dayanand Saraswathi Chair with the financial assistance of UGC to propagate his ideas about social awakening.
- ii) The University has proposed to impart skills to workers in unorganized sectors with special focus on vulnerable people

through its Centre for Skill Development with the financial assistance of Central and State Government organizations.

4.3 MADURAI KAMARAJ UNIVERSITY

4.3.1. Madurai Kamaraj University was established in 1965 by the Madurai Kamaraj University Act. It is endowed with a sprawling campus of 745 acres and is functioning with 77 departments under 20 schools. It governs 82 affiliated colleges, 4 evening colleges, 6 Constituent Colleges and 11 approved institutions spread over 4 districts namely Madurai, Theni, Virudhunagar and Dindigul with more than 1.5 lakh students on the roll. The University also has a Distance Education Directorate with an enrollment of about 1.25 lakh students. The University Grants Commission, New Delhi (UGC) has recognized it as a 'University with Potential for Excellence' (UPE).

4.3.2. The University has the honour of having six of its faculty members being awarded the Prestigious Raman Fellowship in the year

2016. It has the distinction of being the only University to offer five year integrated M.Tech Programme on Film and Electronic Media Studies through its Centre for Film and Electronic Media Studies. The University has also established a Networking Resource Centre in Biological Sciences (NRCBS) with the support of the UGC. The University has a Centre for Higher Research and Education in the name of Swami Vivekananda and a Foreign Language Laboratory for teaching English, French, Chinese and German languages. It also has a Business Collaboration Centre that has been entering into MOUs with corporate companies to offer innovative, industry-ready programmes.

4.3.3. Activities / Scheme for 2017 - 18

- i) The Centre for Film and Electronic Media Studies has applied for grant of Rs. 10 crore from the Ministry of Human Resource Development with which it expects to create a 'Design Innovation Centre'.

- (ii) It is proposed to undertake setting up of Campus Wi-Fi, e-Governance, Advanced Library Automation, Multi Speciality Hospital, Modernization of hostel kitchens, solar lighting, rainwater harvesting and Modern Fitness Centre in 2017 - 18 with funding from the RUSA programme.

4.4 ANNA UNIVERSITY

4.4.1. Anna University was established in 1978 as a unitary type University by amalgamating four well known technical institutions: College of Engineering, Guindy, Alagappa College of Technology, Madras Institute of Technology and School of Architecture and Planning. In 2001, it was converted to an affiliating University by bringing all Engineering Colleges in the State of Tamil Nadu under its aegis. It was reconverted to a unitary University in 2010 and in 2012, again converted to an affiliating University with an intention of ensuring uniform quality in engineering education in Tamil Nadu by bringing all engineering colleges under one umbrella.

4.4.2. The University has four campuses in Chennai and has 13 constituent colleges. It also has four regional campuses at Tiruchirappalli,

Tirunelveli, Madurai and Coimbatore and 593 affiliated institutions. It offers 29 UG and 90 PG Programmes with about 16,000 students on the rolls of its departments. Further, 41 UG and 57 PG programmes are being offered in affiliated institutions with about 7,21,276 students on their rolls. It has as many as 12,706 enrolled Ph.D. scholars. About 41.28 percent of students on roll are girls.

4.4.3. Anna University has 'A' grade accreditation by NAAC. In World University Ranking, Anna University is ranked 201 as per QS (Quacquarelli Symonds) in the Faculty of Chemical Engineering during the year 2017. The University stands second in India in 'h' index citations, which is based on number of research papers published by its faculty members and research scholars. It is ranked between 151 and 200 on the global level and seventh at the

national level in the fields of Mechanical, Aeronautical and Manufacturing Engineering.

4.4.4. In last six years (2011 - 2017), Anna University has signed 41 MoUs with Foreign Universities/Institutions and 39 MoUs with Institutions/Industries at National Level. It has undertaken 323 sponsored research projects of a value of Rs. 96.18 crore, 5,014 consultancy services for Rs. 129.33 crore and 8,157 testing works for Rs. 3.08 crore. The University has filed patent applications for 54 inventions and has obtained 6 National patents during the period. It is implementing project titled 'DBT - Anna University Interdisciplinary Life Science Programme for Advance Research and Education' for 5 years from 2014 - 2019 at a cost of Rs. 10.44 crore. 10,115 students of the University departments got placements during the last 6 years.

4.4.5. The NIRF Ranking for 2017 was released on 3rd April, 2017 by the MHRD, New Delhi. Anna University has bagged the following ranks under different categories, among the various Universities / Institutions that took part in the NIRF 2017:

- ❖ 6th Rank in the University category.
- ❖ 8th Rank in the Engineering & Technology category.

4.4.6. Activities / Schemes for 2017 - 18.

- i) Construction of a new Girls Hostel, establishment of Solar Energy and Bio-Gas Generation Systems, procurement of Servers and Computers and purchase of books and Journals under RUSA at a cost of Rs. 10 crore.
- ii) Implementation of research project under RUSA Innovation scheme entitled

'Sustainable Energy Technologies - Efficient renewable energy power generation with energy storage for sustainable smart grid' at a cost of Rs. 6.5 crore.

iii) Centre of Excellence for Cloud Computing, Centre of Excellence for Automobile Technology, establishment of International Centre for Research Facilitation and Training at the cost of Rs. 260 crore and a Mega Auditorium with seating capacity of 5000 persons at a cost of Rs. 50 crore.

4.5 BHARATHIAR UNIVERSITY

4.5.1. Bharathiar University was established in February 1982 with nine academic departments. This University covers Coimbatore, Erode, Tirupur and Nilgiris districts. It has 115 affiliated colleges, which include 10 Government colleges, 3 constituent colleges (one each at Valparai, Gudalur and Modakkuruchi), 16 aided colleges and 86 self-financing colleges. 23 colleges have autonomous status.

4.5.2. The University presently has 39 departments belonging to 13 schools, through which 54 PG courses are being offered, in addition to M.Phil and Ph.D. programmes. In 2016 - 2017, 1209 PG students, 145 M.Phil scholars and 219 Ph.D. scholars were admitted. Moreover, 38,319 students enrolled for various courses under the Distance Education

programme. Currently there are 1,69,510 students (75,636 students of formal education and 93,874 students of Distance Education) studying undergraduate, postgraduate, diploma and research courses in University Departments, affiliated colleges and School of Distance Education.

4.5.3. The University is ranked 18th in India and 1049th in World in university ranking by academic performance for the year 2016 - 2017. The National Assessment and Accreditation Council has re-accredited the University with 'A' Grade consecutively for the third time in March 2016. The University also secured 28th rank at national level and sixth rank at the state level under the National Institute Ranking Framework (NIRF), Ministry of Human Resource Development, Government of India for the year 2016 - 17. The University has a high 'h' index of 38 points according to Scopus data, with

11,749 citations and 2,011 publications. The University also has the credit of being placed at second rank in the country in the implementation of the Government of India's Digital Financial Literacy 'VISAKA' programme.

4.5.4. Activities / Schemes for 2017 - 18

It is proposed to design, develop and implement a Management Information System for Bharathiar University that will integrate the data sources and provide unified access for accurate and timely information for effective decision making at an estimated cost of Rs. 117 lakh.

4.6 BHARATHIDASAN UNIVERSITY

4.6.1. Bharathidasan University was established in the year 1982. It has been accredited with 'A' Grade by the National Assessment & Accreditation Council (NAAC) and is recognized by UGC under 12(B). The University has 21 Schools, 40 Departments and 23 specialized centres conducting more than 100 programmes. It also has 3 model colleges, 6 constituent colleges, 1 model constituent college, 1 PG extension Centre, 19 Government colleges, 19 Government-aided colleges and 78 self-financing colleges. These include 22 autonomous colleges.

4.6.2. In the last five years, the University faculty members have published nearly 2,100 papers in reputed international journals and are conducting high quality research in various fields. The h-index of the University is

72. The University has also modernized learning facilities and converted some of the conventional classrooms into smart class rooms. The University library has been upgraded with ICT based modernized information services, providing digital library access through the dynamic library website and open access resources such as e-books, e-journals, courseware, e-theses and research analysis software to university departments, constituent/model and affiliated colleges. The University has been tapping funding from various institutions of Government of India, including Rs. 17.35 crore under the PURSE (Promotion of University Research in Science Education) Programme for the development of the infrastructure and creation of capital assets, Rs. 2.90 crore from DST-FIST for the departments of Animal Science, Bio-chemistry, Biomedical Science, Chemistry, Mathematics, Microbiology, Physics and Plant Science and

Rs. 5 crore from the UGC under Centre with Potential for Excellence in Particular Areas (CPEPA) for the National Centre for Alternatives to Animal Experiments for executing research. In the XII plan, Bharathidasan University has obtained sanction of Rs. 17.06 crore from UGC for enhancing the facilities at the University. With grants from Government of Tamil Nadu, the University has upgraded the Laboratory of Centre for Remote Sensing and established ICT enabled centre for differently abled persons.

4.6.3. The University has set up world class curriculum cells in 10 disciplines for upgrading their curriculum to best of the world standards. It has also established an indoor sports stadium at a cost of Rs. 44 lakh with partial financial support from the UGC and also two synthetic tennis courts at a cost of Rs. 36 lakh. The University's Institute for Entrepreneurship and Career Development is setting up DDU KAUSHAL Centre under UGC's Deen Dayal

Upadhyay-Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood scheme with grant of Rs. 3.5 crore. The Business Development Centre of the University signed 17 MoUs with specialized Institutions /Agencies /Hospitals to offer certificate, diploma and postgraduate programmes. It has set up a new School of Revolutionary Leaders and Social Thinkers. During 2016 - 17, MBA programme has been started by the Bharthidasan School of Management (BSM) with admission through TANCET.

4.6.4. Activities / Schemes for 2017 - 18

(i) Construction of Building for Common Instrumentation Facility.

(ii) Construction of Hostel for International Students in the Main Campus.

(iii) Creating facilities to digitalize palm leaf inscriptions and manuscripts of ancient books.

4.7 MOTHER TERESA WOMEN'S UNIVERSITY

4.7.1. Mother Teresa Women's University, Kodaikanal was established in 1984. It seeks to achieve the motto of 'Towards Equal Status' by empowering women through higher education. It has been entrusted in its constituting Act with the responsibility of (i) monitoring Women's Education at all levels in the State (ii) developing research facilities for women (iii) fulfilling the social responsibilities and to offer consultancy services. The University has 17 departments with three Research and Extension Centres at Chennai, Madurai and Coimbatore. The University has 2 constituent colleges, 5 Self-Financing Colleges, 2 Government colleges, 2 Aided Colleges, 8 Community Colleges. During 2016 - 17, this University and two constituent Arts and Science colleges had 1,143 students on the roll.

4.7.2. The University has a research and extension centre at Coimbatore established in August 2016. It is implementing UGC sponsored Innovative Programme for PG Diploma in Professional Ethics at a financial outlay of Rs. 24 lakh. It is in the process of upgrading its infrastructure with funding of Rs. 2.50 crore under the RUSA programme.

4.7.3. The University has to its credit Best Research paper award 2010, 2011, 2013, 2014, 2015 and 2016, Best Educationist Award 2013, Best Thesis Award 2013, Young Scientist Award 2014, Dr. Abdul Kalam Life Time Achievement National award 2015, Best Teacher Award 2015, Glory of India International Award 2016, Rashtriya Gaurav Award 2016, Best Scientist Award 2016 and Dr. Radhakrishnan award for Excellence 2016.

4.7.4. The University places emphasis on sports development and has the distinction of its players securing cash prizes of Rs. 2.88 lakh and 274 medals at National and State level tournaments between 2013 and 2016. It has the record of placing 5 players in the Railways, 10 players in the State Police and 12 players as Sub-Inspectors of Police.

4.8 ALAGAPPA UNIVERSITY

4.8.1. Alagappa University was established in 1985 and has been accredited with A+ Grade by NAAC (CGPA:3.64) in its third cycle, the first University in Tamil Nadu to get such accreditation. It is a member of Association of Indian Universities and Association of Commonwealth Universities. The University has jurisdiction over Ramanathapuram and Sivaganga districts. It has 5 faculties comprising of 34 Departments, 9 Directorates & Centres and 2 University Constituent Colleges of Education and Physical Education. It also has 33 Affiliated Colleges, 6 Evening Colleges and one Constituent Model college of Arts and Science in Paramakudi.

4.8.2. The University offers 151 programmes in the University Departments, 117 programmes in the Affiliated Colleges, 58 programmes

through Distance Education and 83 programmes through collaborative mode. All programs in the affiliated colleges are following semester pattern under Choice Based Credit System (CBCS) with Continuous Internal Assessment (CIA) to ensure quality education. There are 4,730 students in the University Departments, 44,881 students in the Affiliated Colleges studying various programmes. The University has 226 faculty members and 222 administrative and technical staff.

4.8.3. The University has a Directorate of Distance Education with 130 Learning Centres in Tamil Nadu. It has enrollment of about 54,000. The University also has six UGC–SAP (Special Assistance Programme) Departments and four DST-FIST (Fund for Improvement of Science and Technology) departments.

4.8.4. In the last six years, twelve new departments, viz. Department of Energy

Science, History, Botany, Microbiology, Special Education and Rehabilitation Science, Fine Arts, Catering Science and Hotel Management, Skill Development, Social Work, Computer Science, International Business and Logistics Management have been established. University inked overseas MoUs with Twenty four Foreign Universities / Research Institutes in the countries of USA, United Kingdom, Japan, Italy, Mexico, Australia, Finland, Czech Republic and Republic of Korea. Innovative programmes, viz. B.Ed. (Special Education), PG Diploma in VAT and Service Tax, PG Diploma in Pharmacogenomics and MBA (Logistics Management) were introduced during this period under UGC innovative programme scheme. The University received ISO 9001: 2015 Certification Award for Quality in providing Higher Education and Research Activities and Clean and Green Campus Award (2016) and World Environment and Livelihood (WEAL)

Award (2017) from National Institute of Cleanliness and Education Research (NICER), New Delhi. During the period of last five years, the 'h' index of Alagappa University improved from 22 to 53.

4.8.5. The University has been encouraging innovation and patenting of technology. In the last five years, twenty two patents were filed by the faculty members of the Departments of Biotechnology, Industrial Chemistry, Physics and Oceanography and Coastal Area studies, of which two were published.

4.8.6. A Para Sports Centre has been established at a cost of Rs. 65 lakh to train the differently-abled sports students. Twenty students trained in this Centre, won 17 Gold, 8 Silver and 5 Bronze medals at National level events. Two students of Para Sports Centre have been selected for World Dwarf Games to be held in Canada on 4-13, August 2017.

4.8.7. In 2016-17, the University Central Library was fully automated with Radio Frequency Identification Device (RFID) monitoring system to facilitate quick access and retrieval of books. Padma Bhushan Dr. RM. Alagappa Chettiar museum has been established in the University campus at a cost of Rs. 79 lakh commemorating his invaluable and immeasurable education services. Centre for Tamil Culture was established to promote the values of tamil tradition and culture. A Museum for Tamil Culture has also been established at a cost of Rs. 50 lakh to preserve the antique materials exhibiting the traditional and cultural values of Tamil Languages and Tamil people. The University also created University Science Instrumentation Centre (USIC) in the Science Campus with selected high-end equipment to keep them as common facilities.

4.8.8. Activities / Schemes for 2017 - 18

- (i) Efforts will be made to further enhance the International Collaborative Researches / Projects through the Centre for International Relations to increase the rate of Faculty and Students overseas exchanges.
- (ii) With the support of Alumni of Alagappa University initiatives will be taken to train the university students so as to get better placements.
- (iii) Strategic plan will be drawn to focus on innovation and creativity by establishing linkages with Industries and strengthening Industry academic partnership.

4.9 MANONMANIAM SUNDARANAR UNIVERSITY

4.9.1. Manonmaniam Sundaranar University was established at Tirunelveli in 1990 in the name of the renowned Tamil scholar and philosopher Mr. Sundaram Pillai (1855 - 1897) and caters to three Southernmost districts viz. Tirunelveli, Tuticorin and Kanyakumari.

4.9.2. It has 4 constituent colleges, 6 University Colleges, a PG extension Centre at Nagercoil and 73 affiliated colleges (4 Government colleges, 25 aided colleges, 7 aided autonomous colleges and 37 Self Financing colleges). It has 26 departments/centres in the University, 22 community colleges and 67 Extension Learning Programme Centres. Student strength in University departments is 1,372 (Male:366, Female:1,006) and in constituent/university colleges, it is 6,484

(Male:1,794, Female:4,690). Affiliated colleges have student strength of 95,322 (Male:38,129, Female:57,193).

4.9.3. The University has a Directorate of Distance Education that provides 48 courses. Number of students on roll is 17,966.

4.9.4. Activities / Schemes for 2017-18

- i) Two new PG courses, namely Cyber Security and Data Analytics are being introduced in the academic year 2017 - 18.

- ii) Free education will be given to transgender students taking admission in any course. Meritorious transgender students will be awarded scholarship of Rs. 3000 per month.

iii) The following works are under way in the University :

1. Construction of Indoor Stadium at a cost of Rs. 138 lakh
2. Construction of Gymnasium building at a cost of Rs. 60 lakh.
3. Construction of Women's Hostel building in the main campus at a cost of Rs. 1 crore.
4. Provision of entrance gate, lawn development, drainage facility and road maintenance at a cost of Rs. 5 crore.
5. Construction of new buildings for University Constituent Colleges at Nagalapuram, Kanyakumari and Kadayanallur at a cost of Rs. 7.25 crore each.

6. Construction of Staff Quarters inside the University at a cost of Rs. 2.50 crore.
7. Construction of Women's hostel building at Centre for Marine Science and Technology, Rajakkamangalam, Kanyakumari district at a cost of Rs. 75 lakh.
8. Construction of own buildings for University Colleges at Sankarankoil, Panagudi, Puliangudi and Thisayanvilai at a cost of Rs. 4 crore.
9. Installation of 500 kVA transformer inside the University campus at a cost of Rs. 1 crore.

4.10 PERIYAR UNIVERSITY

4.10.1. Periyar University was established in the year 1997. The University is recognized by the University Grants Commission under section 2(f) and 12(B). NAAC has awarded 'A' Grade to Periyar University with a CGPA of 3.15 and it has been placed at 85th rank among 724 entries across India by NIRF-MHRD. The University has at present five Science Schools and three Arts schools comprising 27 departments offering 29 PG programmes and 28 Research programmes. The present faculty strength is 164 in the various University departments, 28 in five constituent colleges at Mettur, Pennagaram, Harur, Pappireddipatty and Edappadi and 20 in PG centre in Dharmapuri. At present, 96 colleges are affiliated to Periyar University from the districts of Salem, Namakkal, Dharmapuri and Krishnagiri with the student strength of 2 lakh.

4.10.2. In the last six years, the University opened seven new departments and introduced nine new programmes. Five of its departments received awards under DST- FIST and three departments received awards under UGC - SAP. Buildings in constituent colleges were constructed at a cost of Rs. 29.75 crore. Additional buildings were constructed in the University Campus for Rs. 16 crore. Eleven new programmes were granted affiliation. The University signed 25 MoUs with various Industries / Institutions and its department of Commerce entered into a Foreign Collaborative Programme with U.K. for Rs. 1.67 crore. 27 University Departments were clustered into 8 Schools. The University also entered into collaboration with FSSAI for Food Safety Training and Certificate Programmes.

4.10.3. In 2016-17, 53 research projects were undertaken from various funding agencies to the tune of Rs. 4.92 crore. The University revamped syllabi of all its programmes. As many as 4,510 students were placed in 28 different companies across India through campus interviews. The University introduced medi-claim policy for accident claims for all the students. It also established a centre for Yoga and meditation research and a Centre for Rural Development and Upliftment of weaker sections. Construction works of value of Rs. 15.75 crore were completed in the period.

4.10.4. Activities / Schemes for 2017-18

- i) The University will be hosting the Indian Council of Social Science Research (ICSSR) Congress during 18-22, December 2017.

- ii) It proposes to undertake collaborative research programmes with National and International Institutions.
- iii) Solar Plant of One Mega Watt will be established in the campus.
- iv) The University will seek to improve its NIRF ranking in 2018 to within top 50.
- v) It will initiate steps to implement cloud computing and e-Governance in the campus.

4.11 TAMIL NADU OPEN UNIVERSITY

4.11.1. Tamil Nadu Open University (TNOU) was established by the Government of Tamil Nadu in 2002 for promotion of Open Learning and Distance Education systems in the State and for the co-ordination and determination of standards in such systems. The University has been providing cost-effective, socially-relevant Open and Distance Learning (ODL) to the hitherto unreached and disadvantaged groups such as those living in remote and rural areas including the working people, housewives, physically handicapped and SC/ST students.

4.11.2. The University presently offers 148 programmes through 13 schools of study and has 419 study centres spread across the State. It admits the students throughout the year under two admission cycles, viz. Calendar Year (Jan. – June) and Academic Year

(July-Dec.). During the year 2016 - 17, 26,361 students registered in the University, including 13,279 female candidates. Currently, 78 Ph.D. scholars and 67 M.Phil scholars are pursuing their research studies under full-time and part-time streams.

4.11.3. The University has been accorded the 12(B) Status of the University Grants Commission (UGC) in January, 2016. It is also one of the few institutions in the country to have been identified by IGNOU for launching MOOCs under the SWAYAM (Study Web of Active Learning for Young and Aspiring Minds) and SWAYAM Prabha platforms by utilizing Electronic Media Production and Research Centre to facilitate the students by way of Direct to Home (DTH) and through MHRD SWAYAM MOOCs Website.

4.11.4. In the last five years, the University has established seven zonal centres, one each at

Chennai, Coimbatore, Dharmapuri, Madurai, Nilgiris, Trichirappalli and Villupuram and seven constituent community colleges. It received special grants from the State Government for establishing infrastructure such as Smart Classrooms with Video Conferencing Facilities, Foreign Language Laboratory, Entrepreneurship and Skill Development Centre (ESDC) and Curriculum Development Cell and for inviting Renowned Professors from foreign Universities to give lectures.

4.11.5. The University has set up new zonal centres at Villupuram and Nilgiris in the year 2016-17 and offering Educational Services. It introduced Online Admission System in the Calendar Year 2017.

4.11.6. Activities / Schemes for 2017 - 18

(i) The University is proposing to offer short-term, non-credit Certificate Programmes in

Skill Development in various areas, including basic computing, office automation, programming techniques, computer applications, multimedia systems, hair dressing, tailoring and dress making, surface embellishment, bridal makeup and flower decoration, fashion jewellery making and proficiency in English.

(ii) The University is proposing to introduce 22 new programmes in the academic year 2017 - 18, which includes 3 Postgraduate, 5 Undergraduate, 7 PG Diploma, 3 Diploma, 2 Certificate and 2 Vocational Diploma Programmes.

4.12 THIRUVALLUVAR UNIVERSITY

4.12.1. Thiruvalluvar University was established at Vellore by the Government of Tamil Nadu on 16.10.2002 by the Thiruvalluvar University Act, 2002. The University has 123 colleges affiliated to this University, out of which 10 are Government, 9 are Government Aided, 6 are University Constituent Colleges, one MBA Institution, 89 self-financing Arts and Science Colleges, 3 Oriental Colleges, 6 Constituent Colleges, 1 P.G. Extension Centre and 5 Research institutions. The jurisdiction of this university covers Vellore, Thiruvannamalai, Villupuram and Cuddalore districts. The University has seven departments, viz. Tamil, English, Mathematics, Biotechnology, Zoology, Economics and Chemistry. As on date, number of students on roll in the University Departments is 274 and that in the affiliated Colleges is 47,470.

4.12.2. The University was granted 12(B) status by the University Grants Commission in 2014. It is in the process of obtaining NAAC Accreditation. It has also entered into MoUs with National Taiwan Ocean University, Keelung, Taiwan and NIM CARE, Chennai to encourage its students and faculty to pursue research programmes and acquire international experience. It has also signed MoU with Hong Kong Baptist University to pursue an exchange of scientists, graduate students, post-doctoral researchers and professionals.

4.12.3. The efforts taken by the University in giving thrust to research work has resulted in over 30 percent increase in enrollment of Ph.D. scholars and more than doubling in the number of research supervisors.

4.12.4. The University campus has been equipped with Wi-Fi connectivity. The University library has about 6,130 Books and 342 M.Phil.

Dissertations and provides access to 29 journals and online information resources from INFLIBNET.

4.12.5. The University has been giving special emphasis on development of sports. Eight lane grass running track at a cost of Rs. 7 lakh and Standard Size Basket Ball Court with Synthetic back board at a cost of Rs. 5 lakh are being provided with UGC assistance.

4.13 TAMIL NADU TEACHERS EDUCATION UNIVERSITY

4.13.1. Tamil Nadu Teachers Education University was established to promote excellence in teacher education. It has 734 affiliated colleges of education including 7 Government, 14 Government Aided and 713 Self-Financing colleges of Education. The University has six departments of study and research. It has on campus M.Phil. and Ph.D. degree programmes since 2014 and four-year integrated B.Sc.– B.Ed. and B.A.-B.Ed. degree programmes since 2016-17. M.Ed. degree programme is being offered in the University department from 2017-18 for which approval of National Council for Teacher Education has been obtained.

4.13.2. The University has under its aegis 732 colleges offering B.Ed. courses, 141 colleges

offering M.Ed., M.Phil. courses and 12 colleges offering Ph.D. In the year 2016 - 17, 52,280 B.Ed. students, 5,510 M.Ed. students, 284 M.Phil. students and 227 Ph.D. students were admitted in affiliated colleges in addition to 93 Ph.D. students in University departments. The University introduced online admission to B.Ed., B.Ed. (Special Education) and M.Ed. Degree Programmes from the academic year 2016 - 17.

4.13.3. Activities / Schemes for 2017 - 18

(i) The University proposes to take up construction of Auditorium and Staff Quarters in 2017 - 18.

(ii) Five University Constituent colleges are being established.

5. TAMIL NADU ARCHIVES

5.1. Tamil Nadu Archives, located at Egmore in Chennai acts as the custodian of public records and provides them to departments for reference and therefore plays an important role in decision making process in the Government. The Archives also provides copies of records to general public sought under the Right to Information Act, 2005.

5.2. The Tamil Nadu Archives, earlier called Madras Record Office, was established in 1909. The Archives houses records of various departments of the Secretariat and the erstwhile Board of Revenue, old records of some of the Heads of Departments, Collectorates and District Courts prior to 1857. It also has in its possession some valuable records in Dutch, Danish and Persian languages.

5.3. Acclaimed authors, historians and researchers from Universities and colleges, from within the country and abroad, visit Tamil Nadu Archives for their research work. The Archives also has an Archives Library that has a good collection of rare books and is a rich treasure trove of knowledge to the scholars.

5.4. Tamil Nadu Archives has a Gazetteer section that is engaged in the work of publishing District Gazetteers for various districts. Tamil Nadu Archives also has six District Record Centres, one each located in Coimbatore, Madurai, Thanjavur, Tiruchirapalli, Cuddalore and Salem.

5.5. Tamil Nadu Archives implemented a project for improving the web access to its records and internal networking of systems in the Archives at a cost of Rs. 67 lakh over two years i.e. 2015-16 and 2016 - 17 with funding from the Tamil Nadu Innovation Initiatives Fund.

This project has been followed up by another project of Rs. 105 lakh sanctioned from the e-Governance Initiative Fund for development of digi-Archives and is being implemented through the Tamil Nadu e-Governance Agency. This project will be completed in 2017-18. With the completion of this project, archival records would be available in website with search and index facility.

5.6. Government sanctioned a sum of Rs. 10 lakh for scanning of records in Tamil Nadu Archives in 2016-2017 and is allocating a similar sum for the year 2017 - 18. The National Archives of India has approved a project of Rs. 47 lakh for scanning and microfilming of records and provision of computers and accessories to six district record centres. The project is being funded to the extent of 75 percent by the Government of India and the remaining 25 percent is contributed by the State Government. This project is being implemented in the year 2017 - 18.

6. TAMIL NADU STATE COUNCIL FOR HIGHER EDUCATION

6.1. The Tamil Nadu State Council for Higher Education (TANSCHÉ) was established by an Act of the Tamil Nadu Legislative Assembly in the year 1992 for the promotion and coordination of higher education at the State level and coordination of the State level programmes with those of the University Grants Commission.

6.2. In the last five years, TANSCHÉ has coordinated with Universities in setting up University Business Collaboration Centres (UBCCs) in 6 State Universities – University of Madras, Alagappa University, Bharathidasan University, Bharathiyar University, Madurai Kamaraj University and Manonmaniam Sundaranar University. These Centres have been acting as Academia-Industry Interface to facilitate internships, industry sponsored research projects, consultancy services,

preserve and maintain bio-diversity, and also get placements support. These UBCCs help in building tie-ups with industry, enable placement and encourage participation of industry in education through internships and campus placements.

6.3. TANSICHE has established Soft Skills Centres in 62 Government Arts and Science Colleges to provide computer literacy, communication skills, personality development and interview skills to prepare them for jobs on completion of their degrees. Response of students has been very encouraging. It has also been implementing the scheme to provide Special Care for Slow Learners for preventing dropouts by arranging coaching and remedial classes in 6 Government Arts & Science Colleges and 18 University Constituent Colleges. It has been implementing two research promotion schemes, namely (a) Minor Research Project for

Teachers and (b) Student Mini Projects for PG Students, with the objective of promoting research aptitude among the teachers and students of Government Arts and Science Colleges/University Constituent Colleges.

6.4. The Government of Tamil Nadu sanctioned creation of Networked Digital Library System to digitise all the available resources in the State Universities and colleges for easy access to the students. A sum of Rs. 69.50 lakh each has been released to Anna University and Tamil Nadu Open University.

6.5. TANSICHE has obtained sanction of Rs. 62.4 lakh from Tamil Nadu innovative Initiatives (TANII) for the CLIL project: Content and Language Integrated Learning, which aims at enhancing communication skills of students in Government Arts and Science Colleges and University Constituent colleges. The duration of the project is 3 years (2015 - 18). It has also

developed a bridge course book titled "The wor(l)d in your stride", which is being issued at free of cost to first year undergraduate students of all 19 autonomous Government Arts and Science colleges at a cost of Rs. 12.50 lakh, to fill the gaps in the interactive English communication development skills.

6.6. TANSCHÉ is coordinating setting up of 5 Centres of Excellence in Higher Education envisaged in the Vision 2023 document, namely – Solar and clean energy technology (Anna University), Aerospace (Anna University), Basic sciences (University of Madras), Auto & Automotive Technology (Anna University) and Biotechnology (University of Madras and Madurai Kamaraj University).

7. STATE PROJECT DIRECTORATE OF RASHTRIYA UCHCHATAR SHIKSHA ABHIYAN (RUSA)

7.1. Rashtriya Uchchatar Shiksha Abhiyan is a centrally sponsored scheme for funding the State Universities and Government colleges to achieve equity, access and excellence in Higher Education with the Central and State Government funding in the pattern of 60:40.

7.2 An amount of Rs. 5 crore was received as preparatory grant which was effectively utilized for preparation of State Higher Education Plan and for the establishment of State Project Directorate.

7.3 An extensive as well as intensive State Plan was prepared considering the future needs of Higher Education. The State Higher Education plan aims to address multiple and graded inequalities in Higher Education.

7.4 The Project Approval Board of RUSA considered Tamil Nadu's State Higher Education Plan and sanctioned Infrastructure grant of Rs. 200 crore for 10 State Universities with NAAC accreditation and Rs. 8 crore for two existing Government Colleges to be upgraded to Model Degree Colleges. Further Rs. 130 crore was sanctioned for 44 Government Arts and Science colleges and 21 University constituent colleges as infrastructure grant.

7.5 The Project Approval Board of RUSA also approved establishment of two Government Engineering colleges in Namakkal and Thiruvallur district at a cost of Rs. 26 crore each. Land has been identified and construction work will commence once the funds are released. The State has also been sanctioned Rs. 13.30 crore for Vocational Education and Rs. 15 crore for Research and Innovation. Thus the total funds approved for the State are

Rs. 423.30 crore and Tamil Nadu is one among the maximum benefitted States in this scheme.

7.6 Funds provided to the 10 State Universities and 55 Government Colleges have been effectively utilized in construction of class rooms, hostels, toilet blocks, laboratories, renovation of administrative buildings and purchase of computers, books, e-resources and sports equipments.

7.7 Fund allotted for Research and Innovation is being utilized for research on sustainable energy technologies by 7 State Universities.

7.8 Thus the State Government along with RUSA is taking focused and concrete efforts to make Tamil Nadu a leading centre of teaching, learning and research in Higher Education.

8. SCIENCE CITY

8.1 The Guindy - Taramani Institutional belt consisting of about 60 educational and research institutions like IIT, Anna University, CLRI, Institute of Mathematical Sciences, Cancer Institute, etc. belonging both to Central and State Governments has been declared as Science City with the objective of promoting Science and Technology. Science City has more than 1500 Ph.D. holders and 3500 research scholars in its member institutes. More than 1000 research projects in the areas of Science, Engineering & Technology are being carried out in the institutes of Science City area. Research equipment worth around Rs. 500 crore is available in institutions located within Science City area.

8.2 Science City was registered as a non-profit making organization under the

Tamil Nadu Societies Registration Act, 1975. The main objective of Science City is Promotion of Science and Technology by organising programmes for popularization of Science amongst school and college students.

8.3 ACTIVITIES

Science City has been carrying out the following activities during the year 2016-2017 :

8.3.1. Organised programmes for popularization of Science such as popular lectures, seminars in important areas, programmes highlighting the latest developments in Science and Technology for the benefit of school and college students.

8.3.2. Science City Newsletter is being brought out every month. It contains articles in Tamil and English about contemporary science topics.

8.3.3. Organised National level Seminars / Conferences.

8.3.4. Science City has been awarding Life Time Achievement Awards, Young Scientist Award and Children's Science Academy Awards to school children across the State for carrying out distinguished work in the field of Science and Technology.

8.3.5. Organised Summer Training Programmes in Physics, Chemistry and Biology for the benefit of post graduate students under which 90 students benefitted.

8.3.6. Organised workshop on Physics research and how to write research journals for the benefit of post graduate students. 100 students benefitted from this workshop.

8.3.7. Organised hands on experiments in science for Chennai school students. 250 school students benefitted from these experiments.

8.3.8. Organised Health awareness programme on Vaccines and control of diseases for the benefit of college and school students. 200 students benefitted from these awareness programme.

8.3.9. Organised three one day workshops on 'Science for Socio-economic upliftment of rural poor' on Scientific advancement of value addition in milk, Hygienic value addition in meat and Scientific techniques in farm waste management. 100 farmers benefitted from these workshops.

8.3.10. Organised Chennai Science Festival (CSF) in the month of February 2017. Aim of Science Festival is to motivate college and school students to develop interest in Science and opt for careers in Science. The festival involves a mega science exhibition, panel discussions, public lectures, scientific entertainment such as science demos, puppetry,

and competitions for school and college students such as quiz, essay, elocution, science models etc.

8.3.11. Organised four days Awareness Workshop on Nanotechnology for Post Graduate Students from which 100 students benefitted.

8.3.12. Organised workshop on 'Molecular Biological Techniques' during the month of March 2017 for the benefit of post graduate students in Life Science. 30 students benefitted from this workshop.

8.4 Science City will be organizing the following programmes in the financial year 2017 – 2018:-

- i) Summer Training Programmes in Basic Sciences.
- ii) Workshop on Nanoscience and Nanotechnology for college students.

- iii) Workshop on Molecular Biological techniques for college students.
- iv) Workshop on Processing Milk, Meat and Fish Products.
- v) Workshop on Aeromodelling for college students.
- vi) Seminar on Recent Trends in Information and Communication Technology (Cloud Computing, Open Source, Artificial Intelligence etc.)
- vii) Workshop on Science for the Socio Economic Upliftment of the Rural Poor – scientific cattle rearing, maintenance and breeding techniques.
- viii) Science for the rural school students.
- ix) Identification of need based rural innovations and honoring the innovators – Rural Innovators Award.

- x) Workshop on Wealth from Waste for Home makers.
- xi) Workshop on Biotechnology and Genetic Engineering.

9. TAMILNADU SCIENCE AND TECHNOLOGY CENTRE

9.1 Tamil Nadu Science and Technology Centre (TNSTC) was established by the Government of Tamil Nadu in 1983, as an autonomous body, under the Chairmanship of Hon'ble Minister for Higher Education. The main objective of the centre is to popularize Science and Technology among the public in general and students in particular. TNSTC is committed to its mission of making science an inspiring and exciting experience for people of all ages.

9.2 The Periyar Science and Technology Centre (PSTC), Chennai houses the famous B.M.Birla Planetarium and Dr.Solomon Victor Heart Museum. Additionally, Fun Mirrors Gallery, Periyar Gallery, Transport Gallery, Information Technology Gallery, Ramanujan –Mathematics Gallery, Indian Space Research Gallery, Life Sciences Gallery, Ocean Gallery, Defence

Research Gallery, Hall of Nuclear Energy and Electronics & Communication Gallery are also housed at PSTC.

9.3 In the same Centre, there are interesting outdoor exhibit facilities like Science Parks, 3D Science Theatre, Evolution Park and State Level Energy Park covering a wide range of topics related to astronomy, science, technology and mathematics.

9.4 The two new Defence Research Gallery and Hall of Nuclear Energy with a wealth of information in respective fields were inaugurated by former Hon'ble Chief Minister of Tamil Nadu on 5th August, 2016.

9.5 Tamil Nadu Science and Technology Centre has established a Science Centre with planetarium, known as Anna Science Centre at the city of Tiruchirappalli, a Regional Science

Centre at Coimbatore and a District Science Centre at Vellore.

9.6 ACTIVITIES

- Tamil Nadu Science and Technology Centre offers a wide range of enrichment programmes for students aimed at complementing the school's formal science education as well as enriching events, competitions, workshops, seminars, Statewide Science Exhibition and Motivation Contests, spend-a-day in Science Centre activities and outreach activities for school students, teachers and general public.
- The activities of the Science and Technology Centre also include organising temporary exhibitions, conducting workshops / seminars, lectures, short-term courses, astronomy

camp and quiz competitions periodically to reach out to several thousands of students and general public. Every year, the United Nations announces the 'science theme of the year' to celebrate by organising out-reach activities. Following the theme of the year, Tamil Nadu Science and Technology Centre organizes several programmes for the benefit of the student community.

- Sky Observation Camps are also conducted during astronomical events as well as on a regular basis to observe the night sky through Telescopes. These programmes are very popular among the students and public.
- A Science Museum on wheels and a Mathematics Museum on wheels were

developed to reach the remotest parts of the State of Tamil Nadu.

- To attract the school students towards science, INSPIRE Awards are being distributed. Competitions at District, State and National Level are being conducted for the Awardees from VI to X Standards. So far, 73,473 INSPIRE Awards (citation and Rs.5000/- each) were distributed to the students of Tamil Nadu. So far, 10 students were sent to Japan for better understanding of the Science and Technology concepts and the Research Developments.

9.7 FACILITIES ESTABLISHED FOR POPULARISING SCIENCE AND TECHNOLOGY CONCEPTS

For popularizing Science and Technology concepts, the following facilities were

inaugurated by the former Hon'ble Chief Minister on 5th August 2016 :-

9.7.1 Evolution Park in Anna Science Centre-Planetarium, Tiruchirappalli

Tamil Nadu Science and Technology Centre has established an **Evolution Park** at Anna Science Centre, Tiruchirappalli at a cost of Rs. 70 lakh, on lines of similar park at Chennai. The park has started attracting large number of curious visitors with the desire to know more about the evolution of life. Since inception, about 29,250 visitors have made use of the facility.

9.7.2 Innovation Hub at Periyar Science and Technology Centre, Chennai

An Innovation Hub was established in Periyar Science and Technology Centre, Chennai at a cost of rupees one crore. The students are provided with facilities for opening gadgets and reassembling them on their own. In addition,

children are encouraged to identify real-life problems, investigate projects and work for solutions under the guidance of experts. Since inception, 530 students have made use of the facility and got trained. Many students regularly use the facility to learn the concepts of science and technology and enhance their knowledge and innovate.

9.7.3 Defence Research Gallery at Periyar Science and Technology Centre, Chennai

A Defence Research Gallery which depicts the technology and science involved in Weaponry, Rocketry and other defence systems was established at Periyar Science and Technology Centre. The gallery was established at a cost of rupees one crore with assistance from the Defence Research and Development Organisation (DRDO) in Periyar Science and Technology Centre, Chennai. Since inception about 1,55,000 visitors made use of the facility.

9.7.4 Hall of Nuclear Energy at Periyar Science and Technology Centre, Chennai

In order to explain the intricate mechanisms of harnessing the nuclear power and also to dispel the misconceptions and unfounded fear about the nuclear power plants, a '**Hall of Nuclear Energy**' was established in Periyar Science and Technology Centre, Chennai at a cost of Rs. 2.4 crore with financial assistance from Nuclear Power Corporation of India. Since inception, about 1,55,000 visitors made use of the facility.

9.7.5 3D Science Theatre at District Science Centre, Vellore

The scientific concepts can easily be communicated if they are presented with immersive effect. In order to provide information on scientific themes in an engaging manner, 3D immersive Projection movies are useful. A 3D Science Theatre has been developed at

a cost of Rs. 23 lakh at District Science Centre, Vellore.

9.8 FOR POPULARISING SCIENCE AND TECHNOLOGY CONCEPTS, THE FOLLOWING ACTIVITIES WILL BE TAKEN UP DURING 2017-2018

9.8.1 Digital Planetarium at Periyar Science and Technology Centre, Chennai

To enhance the quality of providing information on astronomy and astrophysics concepts, a digital State of the art Technology Hybrid Planetarium will be incorporated in the existing planetarium. The digital planetarium will be providing dynamic presentation of the astronomical concepts. The estimated cost of Hybrid Planetarium System is Rs.10 crore.

9.8.2 Establishing Innovation Hub in Regional Science Centre, Coimbatore

The Regional Science Centre, Coimbatore will be provided with an innovation hub at a cost of Rs. 180 lakh. This lab will have, discovery

hall, idea lab, break and remake corner, build from scrap corner and an idea box area. This will provide opportunity for the students to understand the concepts and develop creative ability skills. The project will be implemented on 50:50 cost sharing basis by National Council Science of Museums (NCSM) and Tamilnadu Science and Technology Centre, Chennai.

9.8.3 Establishing Innovation Hub in Anna Science Centre, Tiruchirappalli

With an objective of providing an opportunity to learn and understand Science and Technology development and cutting edge technology, it is proposed to establish an innovation hub at Anna Science Centre, Tiruchirappalli at a cost of Rs. 150 lakh.

This will motivate the students to undertake new product development and inspiration to take career in Science and Technology. The project will be implemented on 50:50 cost sharing basis by National Council of Science Museums (NCSM) and Tamil Nadu Science and Technology Centre.

9.8.4 Establishing Portable Planetariums at Chennai, Tiruchirappalli and Vellore Centres

Tamil Nadu Science and Technology Centre, through its planetariums at Chennai and Tiruchirappalli is actively engaged in popularization of Astronomical Concepts. For the benefit of the students all over Tamil Nadu, four portable planetariums will be procured at an estimated cost of Rs. 40 lakh (Chennai – 2 Nos, Tiruchirappalli & Vellore – 1 each).

9.8.5 Establishing Astronomical Observatory at Periyar Science and Technology Centre, Chennai

An astronomical observatory is a place where very good telescopes and instruments like imaging devices, analyzing instruments, etc. are kept for the people to observe the celestial objects and to carry out research on astrophysics. The telescopes will be kept in a building with a movable domed roof. The dome will have the facility to open and to turn towards the sky in desired direction. An astronomical observatory will be established at an estimated cost of Rs. 40 lakh.

10. TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

10.1. Tamil Nadu State Council for Science and Technology was formed in 1984 by Government of Tamil Nadu as an autonomous apex body to aid development of Science and Technology (S&T) sector of our State. This Council is implementing many S&T schemes related to research and development, extension and field oriented programmes to fulfill this mandate.

10.2. The Government has allocated a total sum of Rs. 1200.70 lakh for the period from 2011 - 12 to 2016 - 17 and Rs. 194.61 lakh has been allocated during the year 2017 - 18 to help the Council to expand its activities. The Council has not only been increasing its activities but also improving the coverage of its various S&T schemes to increase its outreach.

10.3. STUDENT PROJECTS SCHEME

Under this scheme, final year B.E/B.Tech/B.Arch students and PG students of Science, Medicine, Agriculture, Veterinary Science and Engineering are provided with maximum of Rs.10,000/- as grant per project. Priority is given to projects that are socially relevant and useful. From the year 2011 - 12 to 2016 - 17, this Council supported 1,550 projects with a total cost of Rs. 110.92 lakh benefitting 3,650 students. During the year 2017 - 18, it is planned to implement this scheme with a budget of Rs. 20 lakh to support 250 student projects.

10.4 SCIENCE AND TECHNOLOGY PROJECTS

Scientists and researchers in sectors such as Agricultural Science, Biological Science, Environmental Science, Engineering and Technology, Medical Science, Physical Science, Social Science and Veterinary Science

are provided with financial assistance to carry out the research. From the year 2011 - 2012 to 2016 - 17, Council supported 90 projects with a total cost of Rs. 193.15 lakh benefitting 175 researchers. During the year 2017-18, a budgetary allocation of Rs. 35 lakh has been made to support 15 research projects.

10.5 YOUNG STUDENT SCIENTIST PROGRAMME

Under this scheme, students studying in IX standard are motivated to take-up science and research as their career in future. In the month of May, selected students from various districts are housed in a reputed college / university with research facilities and exposure is given on various aspects of Science and Technology. From the year 2011 - 12 to 2016 - 17, Council supported 65 programs with a total cost of Rs. 132.10 lakh benefitting 2800 students.

It is planned to implement this programme in 10 districts during the year 2017 - 18 with a budget of Rs.15 lakh.

10.6 YOUNG SCIENTISTS FELLOWSHIP SCHEME

Young scientists and researchers of our State below 40 years of age are facilitated to acquaint themselves with latest techniques in science, research and development. They are provided with a fellowship of Rs.10000 per month for a period of 2 to 6 months in addition to their regular salary by their parent institutions. They take-up training or learn sophisticated instrumentation techniques / modern research methodologies or do collaborative research work with senior scientists in the host Research Centers. From the year 2011 - 12 to 2016 - 17, Council supported 135 researchers with a total cost of Rs. 16.45 lakh.

It is planned to continue this programme during the year 2017-18, with a budget of Rs. 3 lakh.

10.7 PARTIAL ASSISTANCE FOR SEMINAR/ WORK SHOP

Partial financial assistance is provided to educational and research institutions within the State of Tamil Nadu, to organize seminars / symposia / workshops. From the year 2011 - 12 to 2016 - 17, Council supported 215 programmes with a total cost of Rs. 53.39 lakh benefitting 11,000 students and researchers. It is planned to implement this programme during the year 2017 - 18 with a cost of Rs. 10 lakh to support 50 seminars / workshops.

10.8 POPULARISATION OF SCIENCE AND TECHNOLOGY

Financial support is provided to Universities, Colleges and Voluntary Organisations to popularise Science and

Technology among school children, farmers and public. This objective is achieved through conduct of Science Exhibitions, Training Programmes, Popular Lectures on various aspects of Science and Technology. From the year 2011 - 12 to 2016 - 17, Council supported 460 programmes with a total cost of Rs. 50.79 lakh benefitting 23,000 students and researchers. During the year 2017 - 18, it is planned to support 50 programmes with a budget of Rs. 7.50 lakh.

10.9 TRAVEL GRANT FOR YOUNG SCIENTISTS

Young scientists and researchers of Tamil Nadu below 40 years of age are provided with 50% of air fare in case of international conferences and 100% train fare (First class / Second A/C) in case of national conferences to present their research findings. From the year 2011 - 12 to 2016 - 17, Council supported

92 scientists with a total cost of Rs. 16.03 lakh. During the year 2017-18, it is planned to implement this programme with a budget of Rs. 2.50 lakh to enable researchers to present their research related papers in scientific forum.

10.10 ASSISTANCE FOR SCIENCE & TECHNOLOGY PUBLICATIONS IN TAMIL

To enable science and technology publications in Tamil, financial assistance is provided to organizations/scientists/authors for publishing science magazines for the benefit of children and also to bring out science related books in Tamil for general public. From the year 2011 - 12 to 2016 - 17, Council supported 24 publications with a total cost of Rs. 2.76 lakh benefitting 24,000 students and public. During the year 2017 - 18, it is planned to implement this programme with a budgetary allocation of Rs. 0.50 lakh.

10.11 TAMILNADU SCIENTISTS AWARD (TANSA)

The scheme is aimed at encouraging Research and Development contributions by the State Scientists and Researchers by recognizing their contribution by way of conferring this prestigious award of Rs. 50000 and a citation. TANSA is given in 10 disciplines of (i) Agricultural science (ii) Biological science (iii) Chemical science (iv) Engineering and Technology (v) Environmental science (vi) Medical science (vii) Mathematical science (viii) Physical science (ix) Social Science and (x) Veterinary Science. From the year 2011 - 12 to 2015 - 16, Council awarded 50 awardees with a total cost of Rs. 23.32 lakh. During the year 2016 - 17, action was taken to select the scientists for TANSA with an outlay of Rs. 7 lakh. It is planned to continue this scheme

during the year 2017 - 18 with a budget of Rs. 7 lakh.

10.12 CREATION OF SCIENTIFIC AWARENESS

Financial assistance is given to various institutions in our State to create scientific awareness among the self help groups, farmers and students. From the year 2011-12 to 2016 - 17, Council supported 70 programmes with a total cost of Rs. 38.55 lakh benefitting around 10,750 people. It is planned to implement this programme in ten districts during the year 2017-18 at an outlay of Rs. 6.50 lakh.

10.13 QUALITY IMPROVEMENT OF SCIENCE EDUCATION IN RURAL SCHOOLS

In service training is provided to school teachers who are handling the science subjects of VI, VII and VIII standards to update their knowledge on the current syllabus and new areas. This programme is conducted for a period

of five days in Arts and Science Colleges of our State. From the year 2011 - 12 to 2016 - 17, Council supported 70 programmes with a total cost of Rs. 55.68 lakh benefiting 3,500 teachers. It is planned to implement this programme in the year 2017 - 18 for 10 districts with an allocation of Rs. 9 lakh.

10.14 DISSEMINATION OF INNOVATIVE TECHNOLOGY

Under this scheme, innovative technologies useful in improving employment potential are disseminated by academicians and scientists through training programmes and workshops. From the year 2011 - 12 to 2016 - 17, Council supported 98 programmes with a total cost of Rs. 51.05 lakh benefitting 3,000 students, self help group and public. During the year 2017 - 18, it is planned to implement this programme with a budget of Rs. 9 lakh.

10.15 APPLICATION OF SCIENCE & TECHNOLOGY IN RURAL AREAS

The application of science and technology are demonstrated in the rural areas through selected educational and research institutions in order to make it accessible to rural masses. From the year 2011-2012 to 2016 - 17, Council supported 60 programmes with a total cost of Rs. 66.10 lakh benefitting 17,000 rural people. It is planned to implement this programme in the year 2017 - 18 for 10 districts at an outlay of Rs. 10 lakh.

10.16 SCIENCE AND TECHNOLOGY CAPACITY BUILDING FOR INDUSTRIAL NEEDS

To enable graduates to acquire skill sets relevant to industries and motivate them for self employment this programme is organized with the active collaboration of industries and colleges including Polytechnics. From the year 2011 - 12 to 2016 - 17, Council supported 60

programmes with a total cost of Rs. 66.10 lakh benefitting 14,000 students. It is planned to implement this programme in the year 2017 - 18 for 10 districts with an allocation of Rs. 10 lakh.

10.17 PROGRAMME FOR BRIDGING THE GAP IN RESEARCH FUNDING FOR RESEARCH SCHOLARS IN COLLEGES

Proposals received from research students of various colleges are evaluated and selected students are provided with financial support to conduct their research studies. From the year 2011 - 12 to 2016 - 17, action was taken to support 25 candidates with a total cost of Rs. 75 lakh. It is planned to implement this programme in the year 2017 - 18 at an outlay of Rs. 15 lakh.

10.18 IMPROVEMENT OF SCIENCE AND TECHNOLOGY INFRASTRUCTURE FACILITIES AT GOVERNMENT COLLEGES

The Science and Technology (S&T) infrastructure facilities available in Government colleges are improved to create a better eco system for research and development. For this purpose, financial support is provided to improve the infrastructural facilities such as laboratory equipment and instrument facilities in Government Colleges of our State. From the year 2011 - 12 to 2016 - 17, action was taken to support 13 Government Colleges with a total cost of Rs. 60 lakh. It is planned to continue this programme in the year 2017 - 18, with a budget of Rs. 15 lakh.

11. TAMIL NADU STATE COUNCIL FOR TECHNICAL EDUCATION

11.1 The Tamil Nadu State Council for Technical Education was established by an Act of the Tamil Nadu State Legislative Assembly in the year 2010, to assist UGC and AICTE in maintaining the norms and standards in Technical Education, to evolve perspective plan for development of Technical Education in the State, to identify Centres of Excellence in the Technical University, to suggest necessary examination reforms etc., and revise the curriculum with reference to the latest developments in Engineering and Technology.

11.2 IMPORTANT ACHIEVEMENTS DURING THE PERIOD FROM 2011-12 TO 2016- 17

- In coordination with National Board of Accreditation, an International Conference on Accreditation on the lines of the

Washington Accord and Abet imperatives was conducted during May 2011 in Chennai.

- This Council coordinated the conduct of special training programme in English language (Bridge Course) at Anna University, Chennai with a view to enhance the comprehension of English as a subject to the faculty members of English and also to the fresh entrants of Engineering Education with the active coordination of the British Council during July 2012.

- Certain Educational Resources are available with the Tamil Nadu State Council for Technical Education, Chennai on the subjects such as Technical English, Engineering Physics and Engineering Mathematics and are distributed to various Engineering Colleges.

- An International Seminar on 'Present Trend of Hybrid Pedagogy in English Language Teaching' by Professors from Cambridge was organized during November 2014 in active collaboration with the Anna University and TEQIP Facilitation Unit at Directorate of Technical Education in Chennai.

- Train-The-Trainers Programme was conducted for 180 teachers by NASSCOM on 'Foundation Skills in Integrated Product Development (FSIPD)' in coordination with the Anna University Faculty Development Centre, at Chennai, Tirunelveli and Nagercoil.

- A revised perspective plan for improvement of quality of Technical Education in the State is being prepared.

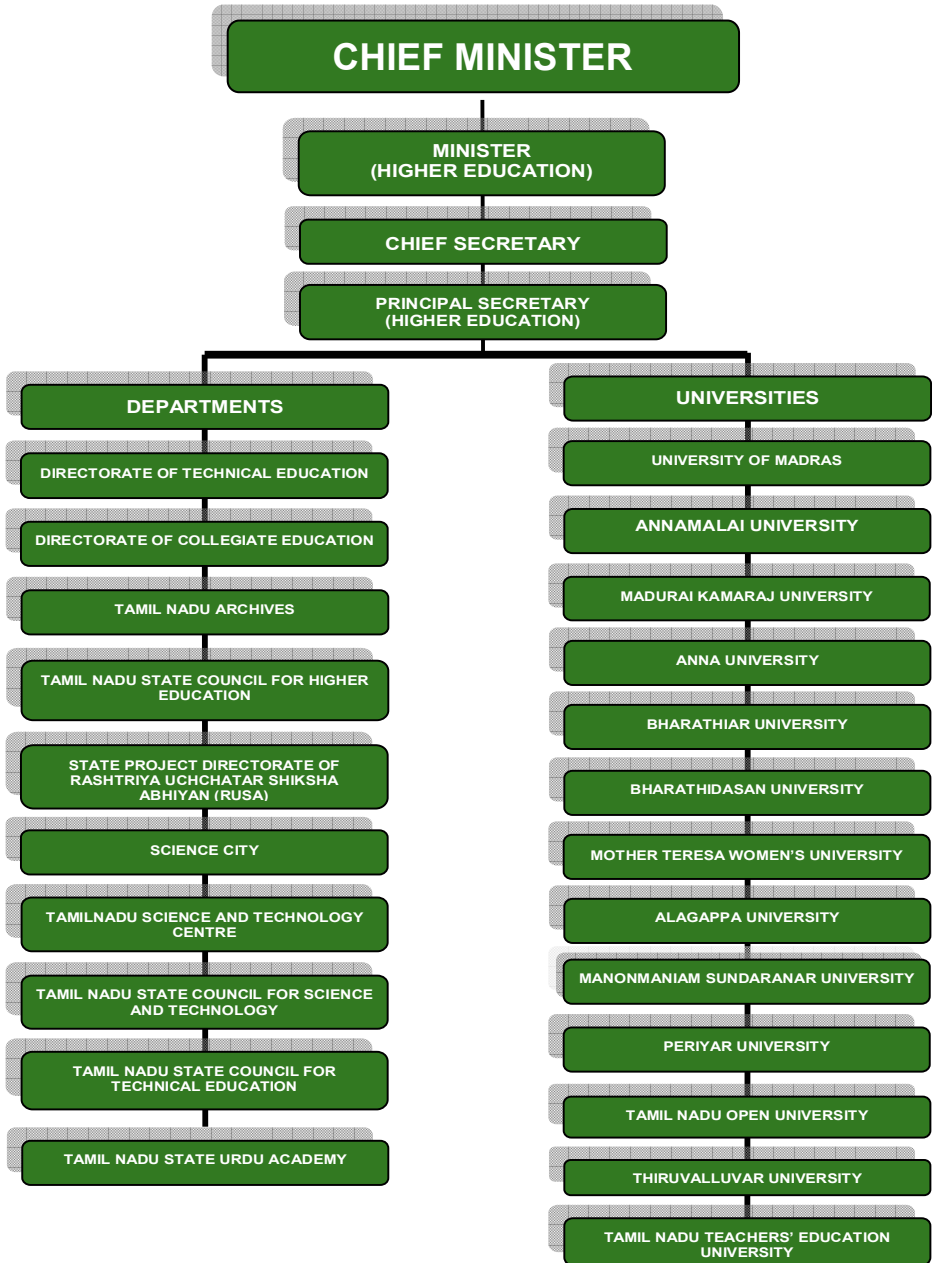
12. TAMIL NADU STATE URDU ACADEMY

12.1. The Tamil Nadu State Urdu Academy was established in the year 2000 with Hon'ble Minister for Higher Education as its Chairperson. At present, Urdu language course is being offered in 20 Colleges and Arabic language is being offered in 5 Colleges in the State.

12.2. The Academy co-sponsors All India Mushairas conducted by National Chamber of Commerce. It also gives 'Dr. Abdul Huq Award' for Literary Excellence to six poets with a cash award of Rs. 25,000 each and gives merit awards and cash prizes to State rank holders in Urdu language.

K.P. Anbalagan
Minister for Higher Education

ORGANOGRAM



COLLEGIATE EDUCATION

NUMBER OF STUDENTS ADMITTED IN ARTS AND SCIENCE COLLEGES AND COLLEGES OF EDUCATION DURING THE YEAR 2016-17

Types of Colleges	Admitted Strength					
	UG	PG	M.Phil.	B.Ed.	Ph.D.	Total
Government Colleges	64165	14499	2207	1281	699	82851
Government Aided Colleges	98507	23347	2106	2140	526	126626
University Constituent Colleges	12819	408	20	0	27	13274
Self Financing Colleges	105623	17949	1373	69122	252	194319
Total	281114	56203	5706	72543	1504	417070

TECHNICAL EDUCATION
DETAILS OF STUDENTS ADMITTED TO FIRST YEAR DIPLOMA COURSES IN
POLYTECHNIC COLLEGES FOR THE YEAR 2016-17

TYPES OF INSTITUTIONS	No. of Colleges	OC		BC (Others)		BC (Muslim)		MBC/DNC		SC		SC(A)		ST		TOTAL		Total Admitted
		BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	
GOVERNMENT INSTITUTIONS	46	146	25	4294	696	493	43	4229	633	2204	498	251	79	82	15	11699	1989	13688
GOVERNMENT AIDED INSTITUTIONS	34	431	51	4705	517	651	28	2768	278	1189	194	207	23	52	2	10003	1093	11096
AFFILIATED INSTITUTIONS	5	15	1	92	0	8	0	63	0	72	0	2	0	1	0	253	1	254
SELF-FINANCING INSTITUTIONS	418	6721	690	23366	1576	3656	116	19411	1160	24262	3886	1678	347	887	159	79981	7934	87915
DIP. LEVEL PROGRAMS IN FIVE ENGINEERING COLLEGES BY SHIFT	*	137	12	72	5	3	1	35	4	116	7	30	11	2	0	395	40	435
HOTEL MANAGEMENT & CATERING TECHNOLOGY INSTITUTIONS	15	6	1	29	4	1	0	12	1	12	0	0	0	0	0	60	6	66
Total	518	7456	780	32558	2798	4812	188	26518	2076	27855	4585	2168	460	1024	176	102391	11063	113454

***Diploma Level Programs offered in five Engineering Colleges by Shift system**

TECHNICAL EDUCATION

DETAILS OF STUDENTS ADMITTED TO FIRST YEAR B.E / B.TECH. / B.ARCH. DEGREE COURSES IN ENGINEERING COLLEGES FOR THE YEAR 2016-17

TYPES OF COLLEGES	No. of Colleges	OC		BC (Others)		BC (Muslim)		MBC / DNC		SC		SC (A)		ST		TOTAL		Total Admitted
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
Government Engg. Colleges	10	84	49	877	584	100	47	513	333	258	218	59	41	21	8	1912	1280	3192
Govt. Aided Engg. Colleges	3	208	120	887	624	63	28	330	184	193	105	29	25	11	7	1721	1093	2814
Self – Financing Engg. Colleges	554	10990	3796	38697	21143	4431	1241	19599	8210	16373	9880	1552	1110	628	277	92270	45657	137927
Anna University Constituent Colleges	17	156	135	1754	1256	191	116	1132	705	562	461	92	58	33	15	3920	2746	6666
TOTAL	584	11438	4100	42215	23607	4785	1432	21574	9432	17386	10664	1732	1234	693	307	99823	50776	150599

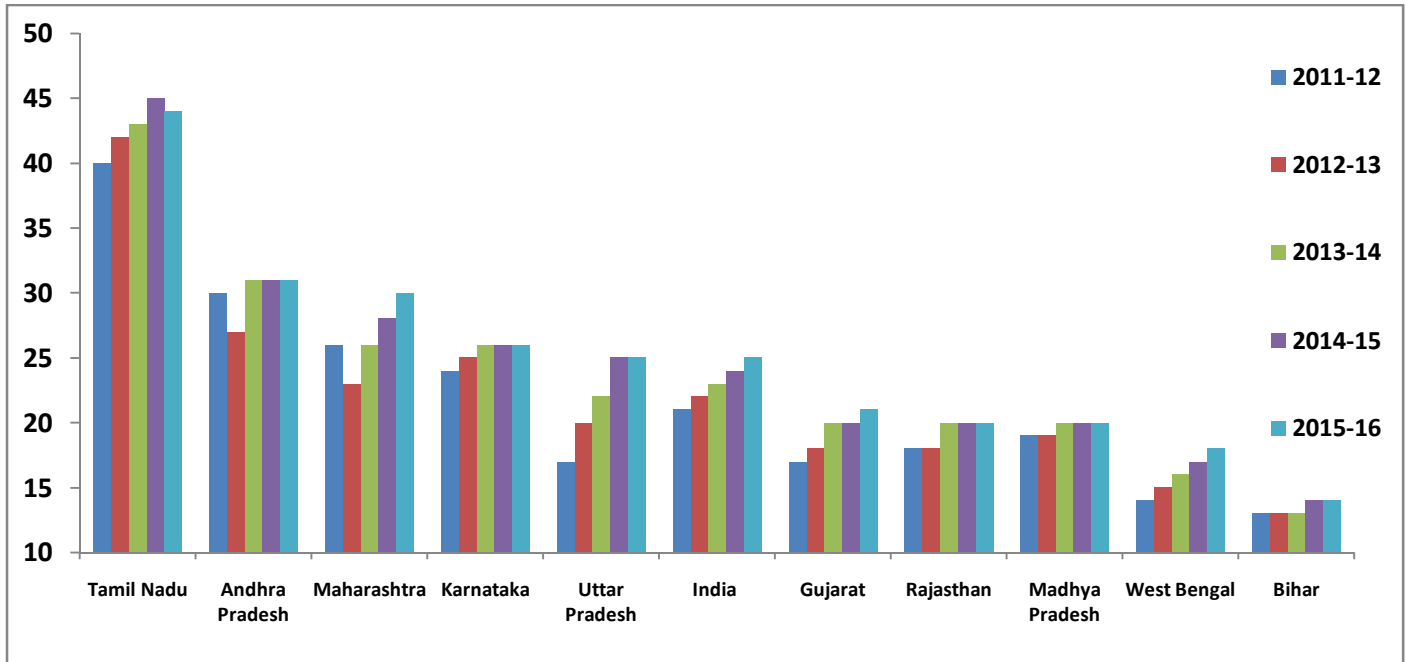
UNIVERSITIES**NUMBER OF STUDENTS STUDYING IN THE UNIVERSITY CAMPUS DURING THE YEAR 2016-17**

Sl. No.	Name of the University	Students Strength		Total
		Male	Female	
1	University of Madras	522	661	1,183
2	Annamalai University	11,113	10,205	21,318
3	Madurai Kamaraj University	953	924	1,877
4	Anna University	9,550	6,457	16,007
5	Bharathiar University	1,225	2,099	3,324
6	Bharathidasan University	726	1,098	1,824
7	Mother Teresa Women's University	-	766	766
8	Alagappa University	1,486	3,244	4,730
9	Manonmaniam Sundaranar University	366	1,006	1,372
10	Periyar University	1,549	2,254	3,803
11	Tamil Nadu Open University	88	57	145
12	Thiruvalluvar University	106	168	274
13	Tamil Nadu Teachers Education University	66	34	100
TOTAL		27750	28973	56723

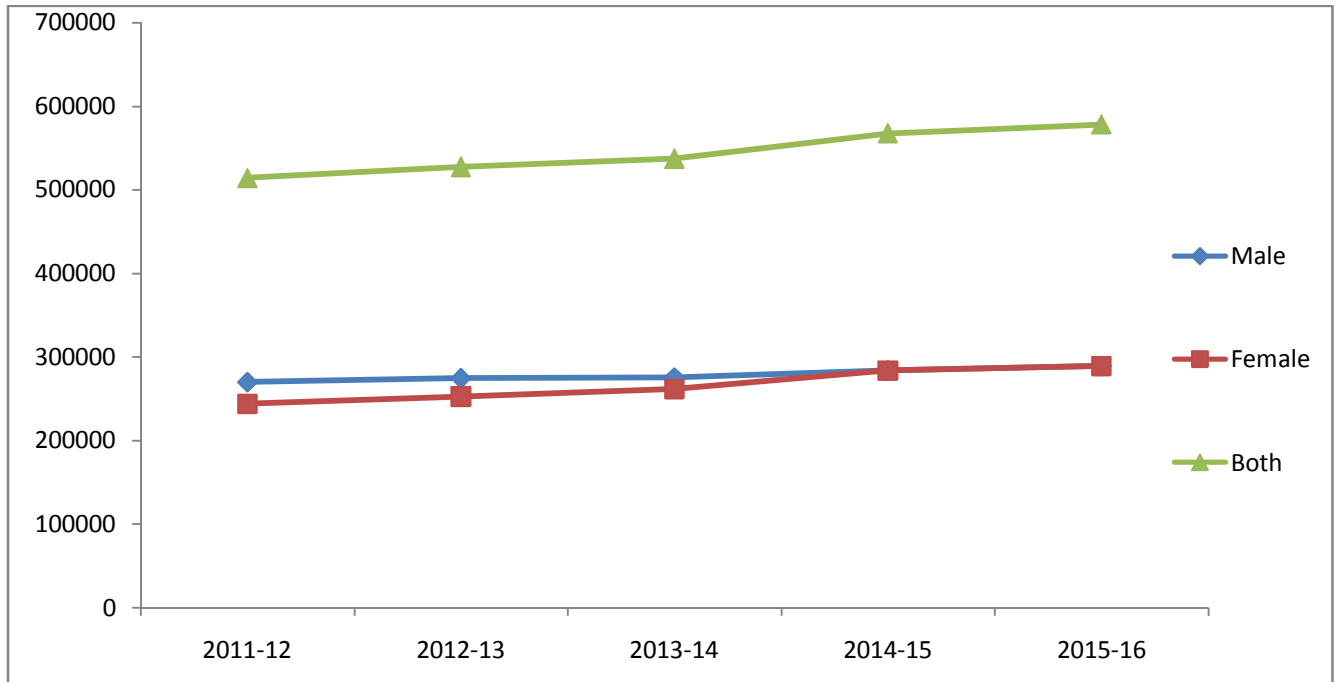
UNIVERSITIES
NUMBER OF STUDENTS STUDYING IN THE DISTANCE EDUCATION DURING THE YEAR 2016-17

Sl.No	Name of the University	Students Strength		Total
		Male	Female	
1	University of Madras	11,410	14,105	25,515
2	Annamalai University	95,203	1,19,700	2,14,903
3	Madurai Kamaraj University	-	-	-
4	Anna University	2,996	2,994	5,990
5	Bharathiar University	47,236	66,544	1,13,780
6	Bharathidasan University	5,797	9,331	15,128
7	Mother Teresa Women's University	-	2,796	2,796
8	Alagappa University	26,734	29,232	55,966
9	Manonmaniam Sundaranar University	7,755	10,211	17,966
10	Periyar University	37,000	30,000	67,000
11	Tamil Nadu Open University	13,082	13,279	26,361
12	Thiruvalluvar University	-	-	-
13	Tamil Nadu Teachers Education University	-	-	-
TOTAL				

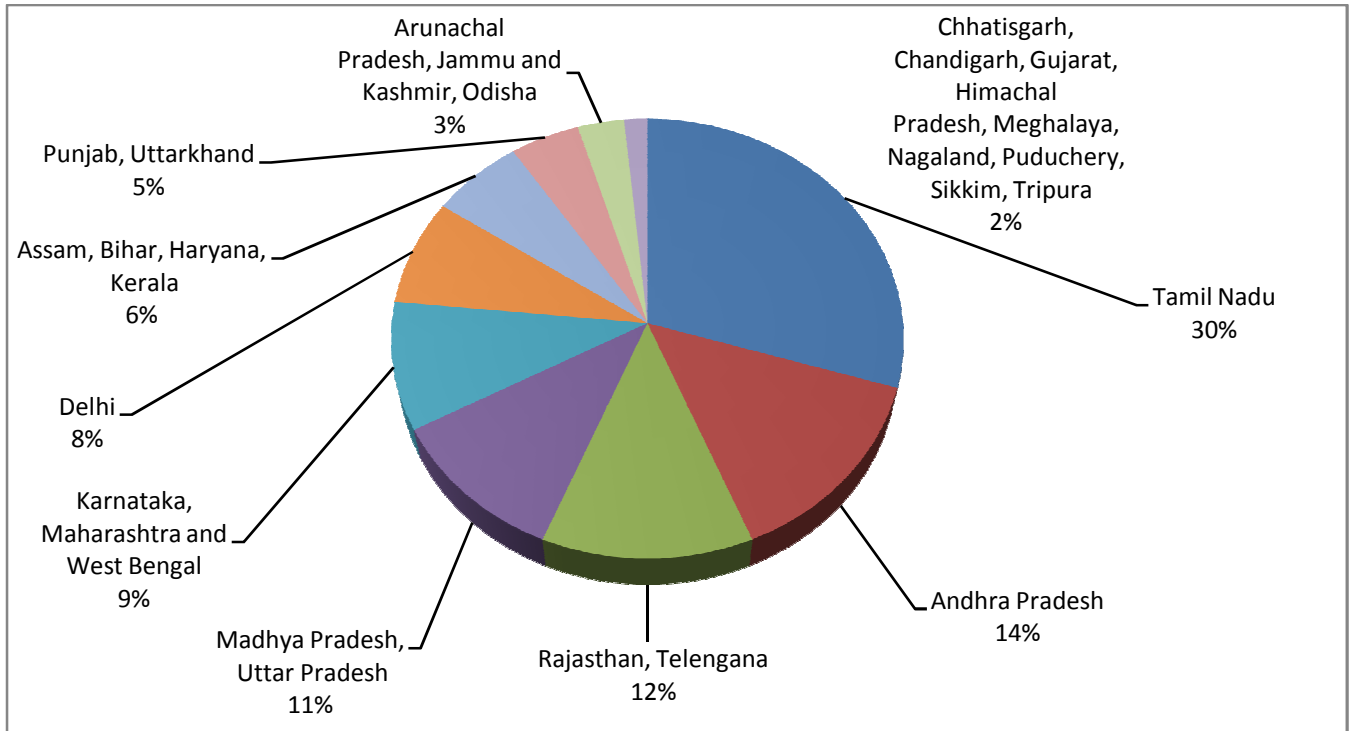
GROSS ENROLLMENT RATIO IN MAJOR STATES & INDIA



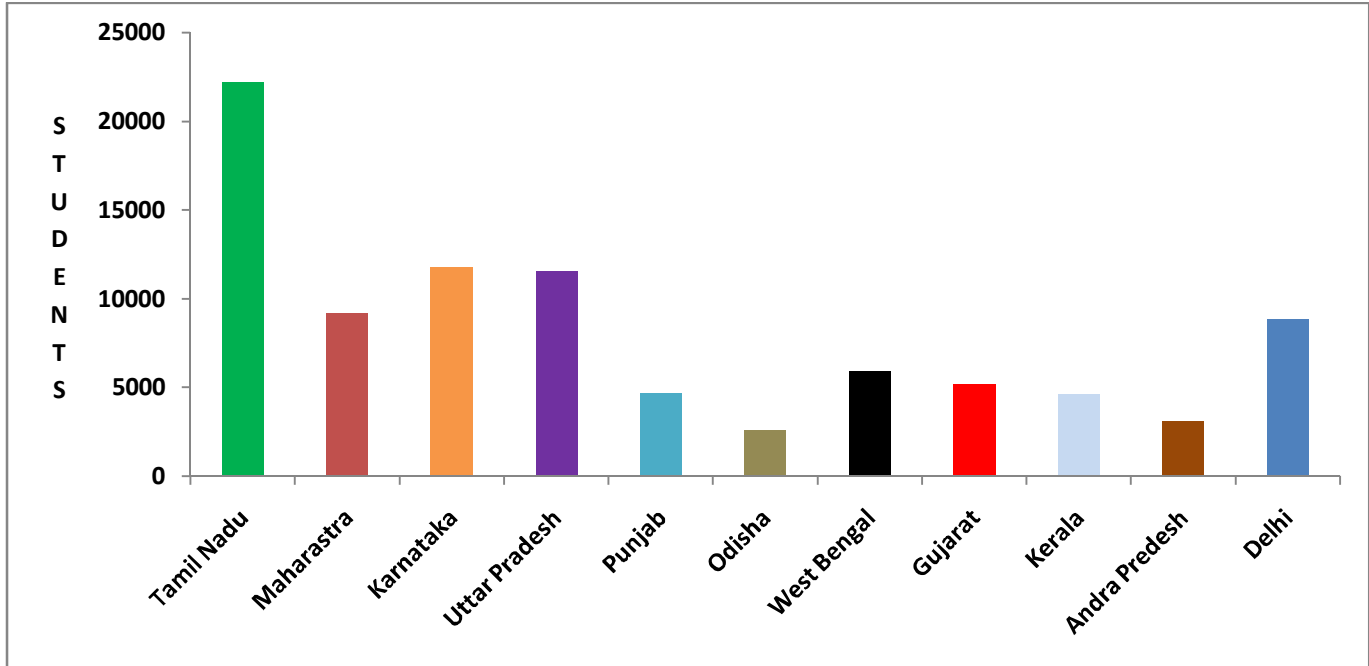
ENROLLMENT (GENDER WISE) FOR SC AND ST CATEGORY STUDENTS



STATE-WISE DUAL MODE UNIVERSITIES (2015-2016)



STUDENTS ENROLLMENT AT PH.D. LEVEL DEGREE AS UPTO 2015-2016



STUDENTS ENROLLMENT AT M.Phil. LEVEL DEGREE AS UPTO 2015-2016

