

### HIGHER EDUCATION DEPARTMENT

POLICY NOTE 2016-2017

DEMAND NO.20

### K.P. ANBALAGAN MINISTER FOR HIGHER EDUCATION

(C)

Government of Tamil Nadu 2016

### **CONTENTS**

SI. No.	Headings	Pages
1.	Introduction	1-12
2.	Technical Education	13-27
3.	Collegiate Education	29-40
4.	Universities	41-104
5.	Tamil Nadu Archives	105-106
6.	Tamil Nadu State Council for Higher Education	107-110
7.	State Project Directorate of Rashtriya Uchchatar Shiksha Abhiyan (RUSA)	111-112
8.	Science City	113-119
9.	Tamil Nadu Science and Technology Centre	120-125
10.	Tamil Nadu State Council for Science and Technology	126-135
11.	Tamil Nadu State Council for Technical Education	136-138
12.	Tamil Nadu State Urdu Academy	139

### **POLICY NOTE**

### **DEMAND NO.20 - HIGHER EDUCATION**

2016 -17

### 1. INTRODUCTION

Education plays a critical role in breaking the vicious cycle of poverty, Education, especially Higher Education, builds capacity in our people. It enables people not merely to subsist, but also provided the basis for a better uality of It is also one of the important Millennium Development Goals. vision of the Government of Tamil Nadu in the realm of Higher Education is to make institutions of higher education as centres of innovation, e cellence and development. The major focus is on uality. The mission is to provide orld class uality education, hile opening the portals of higher education to students from rural and marginali ed back ard areas and families.

The Speech of Hon'ble Chief Minister in the National E ecutive Committee Meeting of FICCI.

- 1.1 Tamil Nadu Vision 2023 has envisaged providing "high quality affordable higher education" and becoming "Knowledge Capital" and "Innovation Hub of the country". As one of the most progressive States in the nation on several social and economic indicators, it has created indelible mark in human development index with an impressive GER of 44.8% adopting multiple strategies to foster manifold development in higher education which has thereby paved the way to march ahead as a pioneering State for the rest of the nation to emulate.
- 1.2 The following Directorates / Institutions come under the aegis of the Higher Education Department
  - Directorate of Technical Education
  - Directorate of Collegiate Education
  - Tamil Nadu Archives
  - 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

State Universities (Arts and Science – 12 and Technical – 1)								
Engineering Colleges								
Arts and Science Colleges*								
Colleges of Education								
Anna University affiliated Management College	44							
Anna University affiliated MCA College	3							
Polytechnics								

- \* include physical education, oriental and social work colleges.
- 1.3 The objectives laid down in the State's road map for development in higher education are being realized by various

introduced the different schemes across institutions. The Higher Education Department under the able guidance of the Hon'ble Chief Minister of Tamil Nadu has been spearheading qualitative development in higher education by enhancing reforms that encompass the following areas - academic, research and development, digiti ation, employment and innovation. Access, Equity and Quality have been the salient features that underpin higher education in the State. Introduction of courses, upgradation of existing departments, increasing the number of seats in colleges and universities have provided opportunities for increase in the enrolment in higher education institutions and made it accessible to aspiring youth to enter the portals of higher education institutions. Opening of new Government Arts and Science Colleges and University Constituent Colleges in almost all the districts in the State is an equitable measure undertaken by Government.

1.4 It is noteworthy that the academic quality has been enriched through the following measures:

- Establishment of Foreign Language Laboratories in the State Universities
- Video Conferencing facility
- Smart Classroom facility
- Starting of Centres for Vivekananda Studies in Universities
- Multimodal materials production for the differently-abled
- Guest lectures by renowned professors from foreign universities
- Establishment of University Centres for Technical Writing and Academic Writing to provide scope for employment
- Establishment of Curriculum Development Cells in Universities to adopt the latest trends in pedagogy
- Systematic and continuous training on pedagogy for faculty to enable studentcentric learning
- Capacity building for faculty to keep abreast of the latest in the field like industry innovation and technological advancements.
- 1.5 The distribution of free laptops to undergraduate students of Government /

Government-Aided Arts and Science Colleges opened up avenues for ICT-enabled learning for the socio-economically underprivileged students. TEQUIP - Technical Education Quality Improvement Programme, a centrally sponsored scheme with contribution from the State, Universities as Centres with Potential for Excellence Particular Areas (CPEPA), Colleges as Centres with Potential for Excellence (CPE) and Universities with Potential for Excellence (UPE) have been some of the benchmarks that higher education department has scaled. Establishment of Internal Quality Assurance Cells (IQAC) in colleges has helped to ensure, maintain and sustain quality. establishment of Centres of Excellence tapping the potential of the State Universities in Public Private Partnership (PPP) model wherein industry, leading research institutions at the national and international levels are partnered with is another step to foster quality.

1.6 Quality in higher education is inseparable from Research and Development.R & D Cells have been established in the

Universities and faculty have been encouraged to undertake foreign trips to update on the latest developments in frontier areas of research. This has helped them improve the quality of their own research to standards and international benchmarks. Intellectual Property Rights (IPR) cells have been established in the State Universities to filing of patents and work enable in collaboration with international partners on research projects in various fields.

1.7 Establishment of Digital Libraries in colleges with online catalogues has been the first step toward the setting up of the Networked Digital Library System (NDLS). NDLS hosts the digital resources and institutional repository of the Universities and this enables optimal use of the priceless laptops distributed to students. The promotion of cluster colleges, EDUSAT programmes and the virtual university facility have enriched the academic experience as academicians from reputed institutes and industry personnel share their knowledge through webinars.

- As it is imperative to provide skill coupled with development an industry interface to facilitate better outcomes, Soft Skills Centres have been established in 30 Government Arts and Science Colleges. It is being extended to 32 more Government Arts and Science Colleges in the current year. This ensures that the first generation students are employable soon after graduation. University Business Collaboration Centres in 6 State Universities have ensured industry-academia partnership to harness the latent potential in the students to enable them pursue research employment opportunities. avail or Entrepreneurship Development Centres State Universities and ICT training to students are some initiatives toward employability.
- Internationalization 19 of higher education been initiated through the has Study Abroad Programme which is milestone in the annals of higher education as it has been a first of its kind in the nation providing opportunity for PG students of Government Arts and Science Colleges and faculty members to study one semester in UK. The schemes introduced through the State

Innovation Fund in Anna University, Tamil Nadu Archives and Tamil Nadu State Council Higher Education are noteworthy. for Decision-making has become faster, transparent efficient as higher and all education institutes have informative websites. The Higher Education Department and the Public Department have jointly the authentication of certificates made. faster and systematic by introducing online authentication. This has enabled a hassle-free service to the public by reducing paperwork as verification of certificates is completed through emails in 3 working days.

- 1.10. 'Dr. A.P.J. Abdul Kalam Award' has been instituted from 2015 as per the orders of Hon'ble Chief Minister, as a tribute to the former President Dr. A.P.J. Abdul Kalam which includes a cash award of Rs.5 lakhs, a citation and a gold medal of 8 grams to individuals who have contributed in the development of science, humanities and the welfare of students.
- 1.11 The epoch making strides of the higher education department have been

guided by the succinct strategies and vision of the Hon'ble Chief Minister. Her indomitable spirit to rejuvenate, accelerate, innovate and foster an inclusive growth has enabled the higher education department to grow from strength to strength.

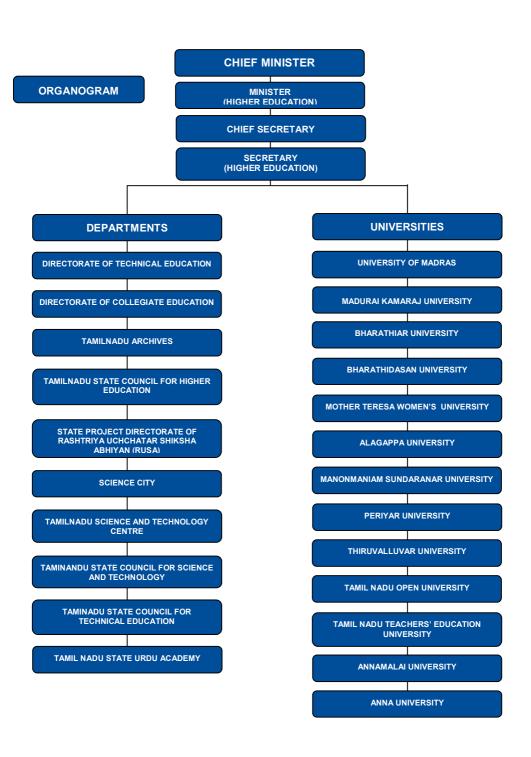
### Financial Outlay 2016-17

Under Demand No.20 Higher Education, the total outlay is Rs.3679.00 crore, of which Rs.938.63 crore is for plan schemes and Rs.2740.37 crore is for non-plan schemes.

### **BUDGET ESTIMATE FOR 2016-17**

Hea	nd of Account	Plan	Non-Plan	Total		
		(Rs.In	lakh)			
2059	Public Works Maintenance and Repairs		2677.19	2677.19		
2202	General Education University and Higher Education	11219.94	230858.54	242078.48		
2203	Technical Education	66938.85	38140.99	105079.84		
2204	Sports and Youth Services	1174.09	1	1174.09		
2205	Arts and Culture Archives	97.00	945.59	1042.59		

	Total	93863.07	274037.82	367900.89
7610	Loans to Government Servants etc.	-	0.01	0.01
4202	Capital Outlay on Education, Sports, Art and Culture	14313.54	0.03	14313.57
3454	Census Surveys and Statistics Gazette and Statistical Memoirs	-	68.88	68.88
3425	Other Scientific Research	119.65	694.85	814.50
2251	Secretariat - Social Services	-	591.65	591.65
2235	Social Security and Welfare	-	60.09	60.09



### 2. TECHNICAL EDUCATION

- 2.1 The Directorate of Technical Education was established on 14<sup>th</sup> October, 1957 with the objective of bringing the coordinated development of Technical Education in the State of Tamil Nadu.
- 2.2 The Government of Tamil Nadu under the able leadership of the Hon'ble Chief Minister has taken constructive efforts to promote quality education in the field of Technical Education both in Degree and Diploma level. Owing to this, the following Engineering / Polytechnic Colleges and other Technical Institutions are functioning under the aegis of this Department in the State:-

### **Engineering Colleges**

SI.No.	Type of Institutions	No. of Colleges
1.	Government Engineering Colleges	10
2.	Government Aided Engineering Colleges	3
3.	Constituent Colleges of Anna University	17
4.	Self Financing Engineering Colleges	553
	Total	583

### **Polytechnic Colleges**

SI.No.	Type of Institution	No. of
		Colleges
1.	Government Polytechnic	41
	Colleges	
2.	Government Aided	34
	Polytechnic Colleges	
3.	Affiliated Polytechnic	5
	Colleges	
4.	Self Financing Hotel	15
	Management and Catering	
	Technology Institutions	
5.	Self Financing Polytechnic	416
	Colleges	
	Total	511

In addition to the above, 5 new Government Polytechnic Colleges have been inaugurated by the Hon'ble Chief Minister of Tamil Nadu through Video Conferencing on 5.8.2016 and thereby the number of Government Polytechnic Colleges have gone upto 46.

### **ACHIEVEMENTS AND INITIATIVES**

# 2.3 INDIAN INSTITUTE OF INFORMATION TECHNOLOGY (IIIT), SRIRANGAM, TIRUCHIRAPPALLI

Indian Institute of Information Technology is an autonomous Institution. It

was started by the Government of Tamil Nadu along with Government of India and Industry partners at a cost of Rs.128.00 crore on a Not-for-profit Public Private Partnership (N-PPP) mode with the main objective of catering to the skilled manpower requirements in the field of Information Technology and related areas.

Hon'ble Chief Minister has inaugurated IIIT, Srirangam with 3 PG courses on 12.02.2014. Further, 3 UG courses have been started from the year 2015-16 with an intake of 60 students in each course.

# 2.4 ESTABLISHMENT OF 4 GOVERNMENT ENGINEERING COLLEGES DURING 2012-13 AND 2013-14

As per the announcement made by the Hon'ble Chief Minister, new Government Engineering Colleges were started at 4 places namely Bodinayakkanur (Theni District), Chettikkarai (Dharmapuri District), Sengipatti (Thanjavur District) and Srirangam (Tiruchirappalli District) during the year 2012-13 and 2013-14. Thus, the number of Government Engineering Colleges has been

increased by more than 50% in the past 5 years.

In this regard, 602 new posts were created in the above 4 Engineering Colleges under various categories viz., Teaching, Technical Supporting Staff, Administrative Staff and Basic Servants upto the year 2015-16.

An amount of Rs.24,460.44 lakh has been sanctioned upto the year 2015-16 for the construction of buildings to the above 4 Government Engineering Colleges and construction of buildings have been completed and are being used by the students.

A sum of Rs.2,014.00 lakh has been sanctioned to the above Colleges for the purchase of Equipments, Computers, Furniture, Library Books and e-journals upto the year 2015-16 and the said items have been procured.

Further, a sum of Rs.345.68 lakh has been sanctioned towards the procurement of Furniture and Cooking Utensils required for the Hostels of the above 4 Government Engineering Colleges upto the year 2015-16 and necessary action has been initiated in this regard.

# 2.5 ESTABLISHMENT OF 11 NEW GOVERNMENT POLYTECHNIC COLLEGES DURING 2013-14

As per the announcement made by the Hon'ble Chief Minister, 11 Government Polytechnic Colleges have been started during 2013-14 year at Srirangam the (Tiruchirappalli District), Gandharvakottai (Pudukottai District), Sankarapuram District), Perunthurai (Erode (Villupuram District). Ariyalur (Ariyalur District), (Krishnagiri District), Jollarpet Uthangarai (Vellore District), Andipatti (Theni District), Usilampatti (Madurai District), Chekkanurani (Madurai District) and Cheyyar (Tiruvannamalai District). Thus, the number of Government Polytechnic Colleges has been increased by more than 30% in the past 5 years.

In this regard, 1153 new posts have been sanctioned under the various categories viz., Teaching, Technical Supporting Staff, Administrative Staff and Basic Servants for the above 11 Polytechnic Colleges from the year 2013-14 to 2015-16.

A sum of Rs.4,950.00 lakh has been sanctioned for the above 11 Polytechnic Colleges for the purchase of Equipments, Computers, Furniture, Library Books and e-journals upto the year 2015-16 and the said items have been procured.

A sum of Rs.17,557.77 lakh has been sanctioned for the construction of various buildings for all the newly established 11 Government Polytechnic Colleges and construction of buildings have been completed and are being used by the students. Further, a sum of Rs.258.02 lakh has been sanctioned towards the procurement of Furniture and cooking Utensils required for hostels of the above 11 Government Polytechnic Colleges and necessary action has been initiated in this regard.

# 2.6 ESTABLISHMENT OF 5 NEW GOVERNMENT POLYTECHNIC COLLEGES DURING 2016-17

During the Budget session 2015-16, under the Tamil Nadu Legislative Assembly the Hon'ble Chief Minister 5 that Government announced new Polytechnic Colleges would be started for the upliftment of the Rural Students in Technical Education. As per the above announcement, 5 Government Polytechnic Colleges have been started from the year 2016-17 Dr. Radhakrishnan Nagar (Chennai District), Kadathur (Dharmapuri District), Valangaiman (Thiruvarur District), Ragunathapuram District) and Kelamangalam (Thanjavur (Krishnagiri District).

approval has been obtained for of establishment the above 5 new Government Polytechnic Colleges for the year 2016-17 and 305 new posts have under various categories sanctioned Teaching, Technical Supporting Administrative Staff and Basic Servants for first year in 2016-17.

Further, a sum of Rs.12,830.00 lakh has been sanctioned for the construction of various buildings for all the above newly started 5 Government Polytechnic Colleges and the building construction works are in progress.

A sum of Rs.250.00 lakh has been sanctioned for the above 5 new Polytechnic Colleges for the purchase of Equipments, Computers, Furniture, Library Books and e-journals required for 1<sup>st</sup> year classes in 2016-17.

# 2.7. ESTABLISHMENT OF SELF-FINANCING ENGINEERING AND POLYTECHNIC COLLEGES DURING THE YEAR 2015-16

During the year 2015-16, 1 Self-Engineering College, Self-Financing Financing Institutions offering Bachelor of Architecture. 1 Handloom Technology Institution functioning under Government of Self-Financing Polytechnic India and 2 Colleges have been started Tamil Nadu.

# 2.8 INTRODUCTION OF SHIFT SYSTEM / PART TIME SYSTEM IN SELFFINANCING POLYTECHNIC AND ENGINEERING COLLEGES

The Government permitted for the introduction of Second Shift and Part-Time Diploma and Post Diploma Level Programme in Self-Financing Polytechnic and Engineering Colleges from the year 2014-15 on self supporting basis and the same has been implemented.

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

The Government have given financial - assistance of Rs.17,75,000/- to 71 economically weaker students under the Chief Minister's Public Relief Fund, at the rate of Rs.25,000/- each, to enable them to continue their B.E. / B.Tech. Courses from the year 2012-13.

## 2.10.DISTRIBUTION OF FREE OF COST LAPTOP COMPUTERS

The Government of Tamil Nadu have implemented the scheme of distribution of free of cost Laptop Computers to the students studying in Government and Government Aided Schools and Colleges in the State to facilitate them in acquiring better computer skills and the scheme is being implemented by respective Departments from the year 2011-12.

Under this scheme, 26,765 free of cost Laptop Computers were distributed to the students from 79 Government and Government Aided Polytechnic Colleges during the years 2014-15 and 2015-16. A total number of 1,73,171 free of cost Laptop Computers have been distributed to the students in Technical Education Department from the year 2011-12 to 2015-16 under the innovative scheme introduced by the Hon'ble Chief Minister.

### 2.11 WAIVER OF TUITION FEE AND ISSUE OF FREE BUS PASS TO THE GOVERNMENT POLYTECHNIC COLLEGE STUDENTS

1,95,207 students admitted in Government Polytechnic Colleges have been benefitted by way of waiver of tuition fee of Rs.2,500/- and issue of free bus pass from the year 2011-12 to 2015-16.

## 2.12 ENGINEERING ADMISSION THROUGH SINGLE WINDOW COUNSELLING

Admissions to Engineering Colleges are being done on the basis of marks scored by the students in class XII Board Examinations. of seats in Government Government Aided Engineering Colleges, 70% of seats in Government Aided Colleges (Self Supporting Courses), 65% of seats in Self Financing (Non-Minority) Institutions and 50% seats in Self-Financing (Minority) of Institutions are being included under Single Window Counselling System of Tamil Nadu Engineering Admissions, conducted by Anna University, Chennai.

# 2.13 TECHNICAL EDUCATION UALITY IMPROVEMENT PROGRAMME-PHASE II (TE IP-II)

Technical Education Quality Improvement Programme Phase-II (TEQIP-II), a Centrally Scheme is being implemented Sponsored through Ministry of Human Resource Development and State Government. The total estimate for the scheme Rs.142.12 crore at present. The Project cost is shared between Central Government and State Government in the ratio of 75:25 upto the year 2014-15 and the same has been revised to 50:50 from the year 2015-16.

Under this scheme, 4 Government Engineering Colleges, 3 Government Aided Engineering Colleges, 1 Constituent College of Anna University, Tiruchirappalli and Department of Computer Science Engineering of Manonmaniam Sundaranar University, Tirunelveli were selected. Further, 2 Centres of Excellence (Alternate Energy Research and Environmental Studies) in College of Government Technology, Coimbatore were also selected under TEQIP-II from Tamil Nadu

Tamil Nadu is one of the well Performing States among 22 States participating in TEQIP -II. In appreciation of the performance of TEQIP—II Institutions in Tamil Nadu, MHRD has released its share of Rs.20.00 crore as an Additional Fund. A sum of Rs.120.45 crore has been released to all the TEQIP-II Institutions so far.

## 2.14.FIRST GENERATION GRADUATE TUITION FEE CONCESSION

Tuition fee concession is being granted to First Generation Graduate students admitted to first year and second year lateral entry in Engineering Colleges in the State Government Quota through single window counselling. Under the scheme, fee concession Rs.299.28 crore, Rs.478.06 crore, Rs.547.87 crore, Rs.541.11 crore and crore have been given to the Rs.514.53 students from the year 2011-12 157176, 249563, 2015-16. Accordingly, 287021, 283379 and 269522 students have been benefitted during the above period.

A sum of Rs.2,380.85 crore has been spent towards reimbursement of tuition fee to

First Generation Graduates during the last five years from 2011-12 to 2015-16.

## 2.15. FACILITIES E TENDED TO SRILANKAN TAMIL REFUGEES

The SriLankan Tamil refugee students in Tamil Nadu have been permitted to participate in the single window counselling for admission to Lateral Entry B.E. / B.Tech. and Post Graduate courses viz., M.B.A. / M.C.A. / M.E. / M.Tech. from the year 2011-12.

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 SriLankan Tamil refugee students. Under this scheme, 41 students have benefitted during the year 2015-16.

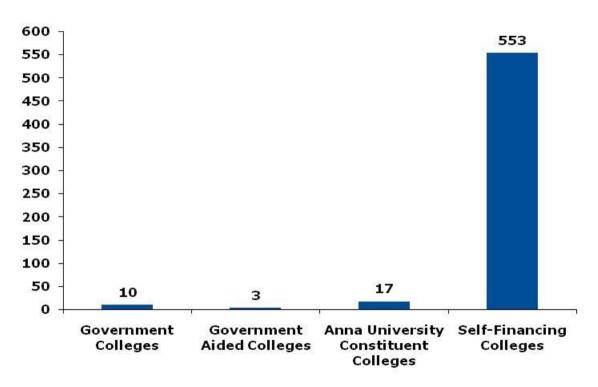
### 2.16 Filling up of FACULTY in Government Engineering and Polytechnic Colleges

151 Assistant Professors were appointed through Teachers Recruitment Board during the year 2013. Necessary steps have been taken to fill-up 192 Assistant Professor Posts in Government Engineering Colleges.

136 Lecturers were appointed through Teachers Recruitment Board during the year 2013 and action is being taken to fill-up 1120 Lecturer Posts in Government Polytechnic Colleges.

TECHNICAL EDUCATION

NUMBER OF ENGINEERING COLLEGES IN TAMIL NADU DURING THE YEAR 2015-16



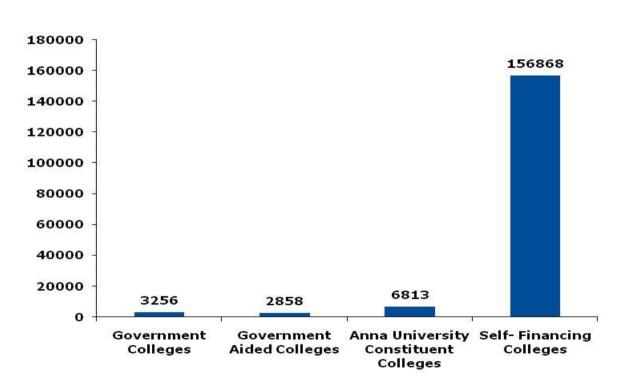
### **TECHNICAL EDUCATION**

## DETAILS OF ADMISSIONS TO FIRST YEAR B.E / B.TECH. / B.ARCH. DEGREE COURSES IN ENGINEERING COLLEGES FOR THE YEAR 2015-16

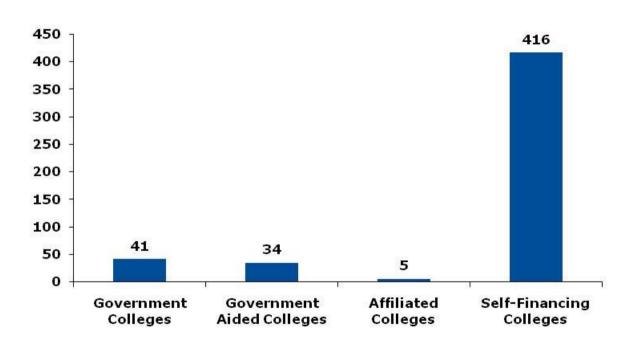
TYPES OF COLLEGES	Colleges	Sanctioned Intake	ос		BC (Others)		BC (Muslim)		MBC / DNC		SC		SC (A)		ST		TOTAL		al ted	
	No. of Co		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total Admitted	
Government Engg. Colleges	10	3760	54	38	842	729	92	49	515	363	260	196	52	40	18	8	1833	1423	3256	
Govt. Aided Engg. Colleges	3	2880	199	126	948	611	60	31	305	214	155	136	31	24	14	4	1712	1146	2858	
Self – Financing Engg. Colleges	553	271261	13380	4508	43745	24408	5162	1556	22553	9635	17411	10219	2056	1291	630	314	104937	51931	156868	
Anna University Constituent Colleges	17	8560	171	177	1612	1449	188	112	1062	788	533	470	121	72	38	20	3725	3088	6813	
TOTAL	583	286461	13804	4849	47147	27197	5502	1748	24435	11000	18359	11021	2260	1427	700	346	112207	57588	169795	

#### **TECHNICAL EDUCATION**

### NUMBER OF STUDENTS ADMITTED IN ENGINEERING COLLEGES IN TAMIL NADU DURING THE YEAR 2015-16



## TECHNICAL EDUCATION NUMBER OF POLYTECHNIC COLLEGES IN TAMIL NADU DURING THE YEAR 2015–16



### **TECHNICAL EDUCATION**

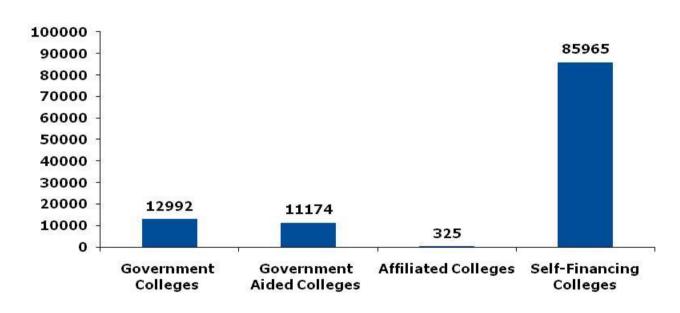
### DETAILS OF STUDENTS ADMISSION TO FIRST YEAR DIPLOMA COURSES IN POLYTECHNIC COLLEGES FOR THE YEAR 2015-16

		. 0	0	C	BC (O	hers)	BC (M	uslim)	мвс/	DNC	S	C	sc	(A)	S	т	тот	AL	70
TYPES OF COLLEGES	No. of Colleges	Intake 2015-16	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	Total Admitted
Government Polytechnic Colleges (Regular)	41	11735	81	42	3097	786	342	62	2793	557	1598	483	251	67	66	16	8228	2013	10241
Government Polytechnic Colleges-Shift (14 Colleges)	*	3420	63	5	1049	50	127	3	774	53	474	53	79	2	16	3	2582	169	2751
Government Aided Polytechnic Colleges (Regular)	34	15049	336	40	4545	565	610	41	2568	350	1228	226	215	39	58	2	9560	1263	10823
Government Aided Polytechnic Colleges – Shift (3 Colleges)	*	360	17	1	180	3	25	0	86	0	37	1	1	0	0	0	346	5	351
Diploma Level Programmes in Engineering Colleges by Shift (5 Colleges)	*	720	250	21	87	4	5	0	34	1	103	12	18	0	3	1	500	39	539
Affiliated Institutions	5	349	23	1	129	3	12	0	78	2	70	1	5	0	1	0	318	7	325
Hotel Management and Catering Technology Institutions	15	1050	10	1	38	3	o	o	17	o	9	o	0	0	0	0	74	4	78
Self-Financing Polytechnic Colleges (Regular)	416	175814	8061	615	24556	1607	3737	108	19385	1073	20715	2755	1433	276	645	116	78532	6550	85082
Self-Financing Polytechnic Colleges – Shift (12 Colleges)	*	1440	16	0	271	0	33	0	323	0	227	0	5	0	8	0	883	0	883
Total	511	209937	8857	726	33952		4891	214	26058		24461	3531	2007	384	797	138	101023		

<sup>(\*)</sup> Diploma level programmes under shift system are being conducted in 29 Polytechnic Colleges (14 Government, 3 Government Aided and 12 Self Financing) and 5 Engineering Colleges.

## TECHNICAL EDUCATION

## NUMBER OF STUDENTS ADMITTED IN POLYTECHNIC COLLEGES IN TAMIL NADU DURING THE YEAR 2015-16



## 3. Collegiate Education

3.1 The Directorate of Collegiate Education was established in the year 1965 to administrate the Collegiate Education exclusively by bifurcating the erstwhile Directorate of Public Instruction into Directorate of School Education and Directorate of Collegiate Education. The present Government is very keen in making Tamil Nadu the most advanced State in the field of Higher Education.

At present, the Director of Collegiate Education governs

SI. No.	Colleges	Total
1	Government Arts and Science Colleges	80
2	Government-Aided Arts and Science Colleges	139
3	Self-Financing Arts and Science Colleges	467
4	Government-Aided Physical Education Colleges	3

5	Self-Financing Physical Education Colleges	8
6	Government-Aided Oriental Colleges	4
7	Government-Aided Schools of Social Work	2
8	Government Colleges of Education	7
9	Government-Aided Colleges of Education	14
10	Self-Financing Colleges of Education	703
11	University Constituent Colleges	37
	Total	1464

# 3.2 ESTABLISHMENT OF 18 NEW GOVERNMENT ARTS AND SCIENCE COLLEGES

The Government have established the following 18 new Government Arts and Science Colleges during the academic years 2013-14, 2014-15, 2015-16 and 2016-17:

- i. Hosur (Krishnagiri District)
- ii. Komarapalayam (Namakkal District)
- iii. Kangeyam (Tiruppur District)

- iv. Uthiramerur (Kancheepuram District)
- v. Peravurani (Thanjavur District)
- vi. Sivakasi (Virudhunagar District)
- vii. Karimangalam (Dharmapuri District)
- viii. Kovilpatti (Thoothukudi District)
- ix. Kadaladi (Ramanathapuram District)
- x. Mudhukulathur (Ramanathapuram District)
- xi. Thiruvadanai (Ramanathapuram District)
- xii. Karambakkudi (Pudukottai District)
- xiii. Manalmedu (Nagappattinam District)
- xiv. Veppanthattai (Perambalur District)
- xv. Dr. Radhakrishnan Nagar (Chennai District)
- xvi. Veerapandi (Theni District)
- xvii. Sathyamangalam (Erode District)
- xviii. Nagercoil (Kanyakumari District)

# 3.3 NEW COURSES IN GOVERNMENT COLLEGES

Taking into consideration the considerable increase in enrolment ratio of the students in Government Arts and Science Colleges from 2011-12 to 2015-16, the Government have sanctioned 959 new

courses along with the creation of 1924 posts of Assistant Professors.

SI. No.	Academic Year	No. of Courses	No. of Colleges	Sanctioned Posts
1	2011-2012	101	34	145
2	2012-2013	298	51	833
3	2013-2014	397	51	822
4	2015-2016	163	34	124

# 3.4 APPOINTMENT OF ASSISTANT PROFESSORS IN GOVERNMENT COLLEGES

The Government have appointed 1010 Assistant Professors in Government Arts and Science Colleges and Colleges of Education during the year 2015. The Government have issued orders to fill up 1858 Assistant Professors posts in the Government Arts and Science Colleges and 25 Assistant Professors posts in Government Colleges of Education totally 1883 Assistant Professors through direct recruitment by Teachers Recruitment Board.

# 3.5 GUEST LECTURERS IN GOVERNMENT COLLEGES.

Classes are conducted in shift system in Government Arts and Science Colleges every year. During the academic year 2015-16, the Government have sanctioned appointment of 1683 Guest lecturers under shift-I system till vacancies in the regular posts of Assistant Professors are filled up. The Government have also sanctioned 1661 Guest Lecturers under Shift II system. The Government have enhanced the salary of Guest Lecturers in February 2016 from Rs.10,000/- to Rs.15,000/-.

### 3.6 FREE EDUCATION

During the academic year 2015-16, 4,43,748 Under Graduate Students from Government and Government-Aided Arts and Science Colleges and 28,665 Post Graduate Students from Government and Government-Aided Arts and Science Colleges summing upto a total of 4,72,413 students have benefitted.

# 3.7 FREE BUS PASS TO THE COLLEGE STUDENTS

The Government have sanctioned Free Bus Passes to the 6,63,286 students of Government Colleges, from the year 2011-12 to 2015-16.

# 3.8. FREE COACHING FOR CIVIL SERVICES E AMINATIONS

To encourage the women students to appear in All India Civil Services Examination, free coaching classes are conducted from 2001-02. A sum of Rs.10.00 lakhs per year has been earmarked for this scheme and classes are conducted at Queen Mary's College, Chennai and Sri Meenakshi Government College for Women, Madurai. This scheme is being continued in 2016-17 as well.

### 3.9 OB FAIR

With establishment of Placement Cells for the benefit of students in the Government/ Government-Aided Arts and Science Colleges, during the academic year 2015-16, a total of 4,758 students have obtained jobs in various companies through job fair.

## 3.10 STIPEND FOR TAMIL MEDIUM STUDENTS

To encourage more number of students to study in Tamil Medium, scheme of granting stipend was introduced in the year 1971. Presently, Rs.400/- is sanctioned to each student as stipend. In the academic year 2015-16, 34,890 students have benefitted with the sanction of Rs 139.56 lakhs.

## 3.11 SPECIAL COACHING FOR SLOW LEARNERS

Students from SC/ST and MBC communities studying in Government Colleges, particularly in rural areas, face difficulties in understanding English, Maths and Science subjects. To motivate them to be conversant with these subjects and to compete with other bright students, special coaching classes are conducted and this will enable them to secure good marks in the examinations. During the year 2015-2016, 10598 students have benefitted through this scheme.

## 3.12 STIPEND TO RESEARCH (Ph.D) SCHOLARS

Under this scheme, a sum of Rs.36,000/per student/annum is paid as stipend to the
students doing full-time research courses in
various subjects in Government and
Government-Aided Colleges. During the year
2015-16, 138 students have benefitted
with the expenditure of Rs.49.64 lakhs.

### 3.13 INFRASTRUCTURE IMPROVEMENT

The Hon'ble Chief Minister had made an announcement in the floor of the Legislative Assembly under Rule 110 on 02.05.2012 to provide infrastructural and basic amenities at a cost of Rs.100 crore in 62 Government Arts and Science Colleges, 7 Colleges of Education and 24 University Constituent Arts and Science Colleges enabling students to pursue education in a conducive environment. The expenditure met from the funds is as follows:

Details of Works	Amount Sanctioned in Rs.
Furniture from TANSI (69 Government Colleges)	19,99,98,364
Furniture from TANSI (69 Government Colleges and 24 University Constituent Colleges)	24,49,76,745
Building Repairs through PWD	26,80,45,000
Total	71,30,20,109

# 3.14 Scholarship Scheme for the students of Adidravida / Tribal / Converted Christian Communities pursuing higher education in Self-Financing Colleges

Tuition fees Scholarship Scheme to the Students of Adidravida / Tribal / Converted Christian Communities studying in Self-Financing Arts and Science and Education Colleges is implemented. As per the scheme, Tuition Fees is being paid by the Government to colleges directly on behalf of the students of Adidravida/Tribal/Converted Christian Communities studying in Arts and Science Colleges and Colleges of Education. During

the year 2015-16, Rs.116,02,04,650 was sanctioned benefitting 92,766 students.

### 3.15 SPORTS

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 BUILDING FOR REGIONAL OFFICES OF COLLEGIATE EDUCATION.

The Government have sanctioned Rs.4.59 crore for the construction of own building for the Offices of Regional Joint Director of Collegiate Education at Trichy, Madurai and Tirunelveli Districts. The building works have been completed and inaugurated by Hon'ble Chief Minister on 5.8.2016.

# 3.17 CONSTRUCTION OF OWN BUILDING FOR NEWLY STARTED GOVERNMENT COLLEGES DURING 2013-2015.

The Government have sanctioned a sum of Rs.45.68 crore for construction of buildings for Government Arts and Science Colleges at (Namakkal Kumarapalayam District), Karambakkudi (Pudukottai District), Sivakasi District), (Virudhunagar Kovilpatti (Thoothukkudi District), Peravurani District), and (Thanjavur Uhiramerur (Kancheepuram District) and buildings have been inaugurated by Hon'ble Chief Minister of Tamil Nadu.

The construction of buildings for Government Arts and Science College, Hosur has been completed at a cost of Rs.7.97 crore.

An amount of Rs.4.15 crore has been paid Hindu Religious **Endowment** to and purchase Department for land. of construction of building own for the Government Arts and Science College for Women, Karimangalam (Dharmapuri District) at a cost of Rs.7.97 crore. The building works have been completed.

construction of buildings Dr. Radhakrishnan Nagar Government Arts College started in the academic year 2015-16 been initiated and currently construction is in progress. The construction of buildings for the Government Arts College, Sathyamangalam Arts and Science Government Nagercoil are in Progress. Land identification of construction for the buildings for Science Government Arts and College, Veerapandi is under process by the District administration.

## 3.18 NATIONAL SERVICE SCHEME (N.S.S)

From September 1969, National Service Scheme is implemented in Tamil Nadu. present, National Service Scheme functioning with 3,90,700 student volunteers Nadu in various educational Tamil in institutions. The expenditure for the Scheme by both Central and State is shared Governments in the ratio 7:5. The Scheme is successfully implemented in Universities, Colleges and various Technical Institutions.

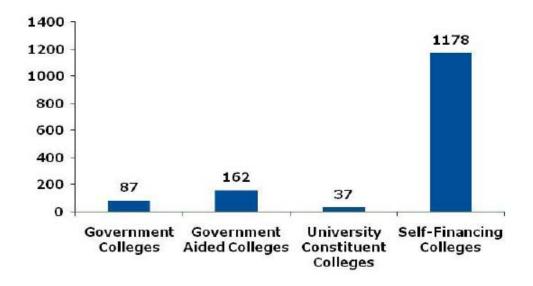
#### COLLEGIATE EDUCATION

## NUMBER OF ARTS AND SCIENCE COLLEGES AND COLLEGES OF EDUCATION IN TAMIL NADU DURING THE YEAR 2015-16

TYPES OF COLLEGES	GOVERNMENT COLLEGES	GOVERNMENT AIDED COLLEGES	SELF FINANCING COLLEGES	TOTAL
Arts and Science Colleges	80	139	467	686
Physical Education Colleges	0	3	8	11
Oriental Colleges	0	4	0	4
School of Social Work	0	2	0	2
Colleges of Education	7	14	703	724
University Constituent Colleges	37	0	0	37
Total	124	162	1178	1464

#### **COLLEGIATE EDUCATION**

## NUMBER OF ARTS AND SCIENCE COLLEGES AND COLLEGES OF EDUCATION IN TAMIL NADU DURING THE YEAR 2015-16



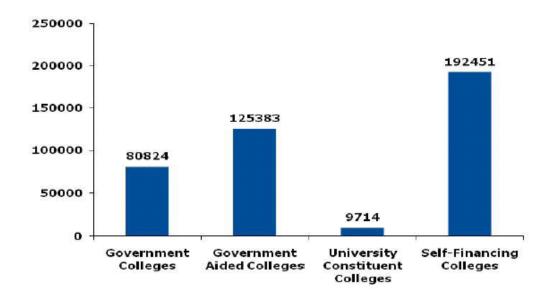
#### COLLEGIATE EDUCATION

## NUMBER OF STUDENTS ADMITTED IN ARTS AND SCIENCE COLLEGES AND COLLEGES OF EDUCATION DURING THE YEAR 2015-16

Types of	Sanctioned Strength							Admitted Strength				
Colleges	UG	PG	M.Phil.	B.Ed.	Ph.D.	Total	UG	PG	M.Phil.	B.Ed.	Ph.D.	Total
Government Colleges	354012	82206	15360	7668	4500	463746	61770	14357	2641	1267	789	80824
Government Aided Colleges	642036	132180	17052	12006	2946	806220	96703	23116	2948	2101	515	125383
University Constituent Colleges	53400	2112	0	0	0	55512	9339	375	0	0	0	9714
Self Financing Colleges	708996	164610	7860	399540	1662	1282668	104084	17773	1373	68931	290	192451
Total	1758444	381108	40272	419214	9108	2608146	271896	55621	6962	72299	1594	408372

#### COLLEGIATE EDUCATION

## NUMBER OF STUDENTS IN ARTS AND SCIENCE COLLEGES AND COLLEGES OF EDUCATION IN TAMIL NADU DURING THE YEAR 2015-16



### 4. UNIVERSITIES

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

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

### **4.1 UNIVERSITY OF MADRAS**

4.1.1 University of Madras was established on September 5, 1857. It was examining body started and as an subsequently research and teaching functions of the University were consolidated by the enactment of Madras University Act of 1923. The University has at present six campuses viz., Chepauk, Marina, Guindy, Taramani, Chetpet and Maduravoyal (Field Lab) all within Consequent to Amendments Chennai. Madras University Act and formation of separate Universities, the University of Madras is leading in imparting Arts and Science education in higher education, with teaching and research departments and 134 Affiliated Colleges and 52 Affiliated Research Institutions. The University of Madras continuously receiving high accreditation from the National Assessment and Accreditation Council (NAAC) and is recognized 'University with Potential for Excellence' by University Grants Commission. the University of Madras was the first to introduce the concept of autonomous colleges within the University systems enabling the Autonomous

Colleges to design their own curriculum, syllabus and conduct of examinations. There are 23 autonomous colleges affiliated to the University of Madras. UGC has recognized some of the colleges for the Colleges with Potential for Excellence. Established in 1981, the Institute of Distance Education offers 27 UG courses, 21 PG courses, 20 Professional courses and 29 other courses. The Institute of Distance Education also offers M.Sc. (IT) and B.B.A. courses to the African students, through e-Network Pan African Project.

# 4.1.2 Major Achievements during the past 5 years

- The University has established two Constituent Colleges at Nemmeli and Thiruvottiyur.
- The University has established 6 new departments, viz. Women Studies, Social Work, Networking Systems and Information Technology, Material Science, Bio-Informatics and Counseling Psychology.

- University The of Madras has implemented the schemes from the funds allotted by the Government of viz.. Tamil Nadu establishment Smart Class Ωf Rooms with Conference Video Facility, Language Laboratories, Foreign Entrepreneurship-Cum-Skill Development Centre, Inviting Renowned Professors from Foreign Universities, Curriculum Development Cell.
- The University has established for Multimodel Centre Material Production for Differently Abled, Swami Vivekananda Centre for Higher Research and Education, PG Centre with High Tech Laboratory, Centre for Technical Writing Academic Writing, and University Collaboration Centre. Business Incubation and Technology Transfer Centre.
- The University has also established 12 new Centres of research.
- The University is the only University amongst Government funded

Universities to host both Technology Business Incubator and Techno Entrepreneur Promotion Outreach Centres.

- The University has received Rs.31.40 crores from the Department of Science and Technology under PURSE programme to the Science Departments, and Rs.5.016 crores from the Department of Bio-Technology.
- The University has been implementing a novel 'Earn While you Learn' scheme for its students for the last 10 years.
- University The has established 7 Centres for research under scheme viz. (1) Centre for Studies in Comparative Religions (2) Centre for Rural Development and Strategic Studies (3) Centre for Terrorism. **Victims** Security and of (4) Centre for Cognitive and Behavioural Research (5) Psycho & Music Therapy Project (6) Laboratory for Traditional & Standardisation Testing and (7) Multilingual Dictionary Project.

- The University Centre for International Relations has admitted 118 overseas students for various courses.
- Under the University with Potential for Excellence (UPE) Phase II Programme, projects on 'Bio-medical Research and New Materials Research' are in progress.

## 4.2 Madurai Kamaraj University

4.2.1 Madurai Kamaraj University established in 1965 through Madurai Kamaraj University Act and inaugurated on February 1966, is a pioneer institution contributing highly to the developments in the region and nation by providing world class Higher Education. It was the University started in the State of Tamil Nadu. The University started its functioning in the city campus in 1966 and subsequently shifted to the present sprawling 745 acre campus in the year 1972. Madurai Kamaraj University is functioning with 77 departments 20 schools. It governs 91 affiliated colleges, evening colleges and 12 approved institutions spread over 4 districts namely Madurai, Theni, Virudhunagar and Dindigul with more than 1,40,000 students on roll. The University has a Distance Education Directorate with an enrolment of about 1.25 lakh students. The University Grants Commission, New Delhi (UGC) has awarded the status of "University with Potential for Excellence" (UPE) to the Madurai Kamaraj University in the year 2006 and is the youngest University to get the status. The University with a glorious past has stepped into the Golden Jubilee Year in 2016.

### 4.2.2 Uni ue achievements

- The University has been re-accredited in 2015 by NAAC with 'A' grade in the 3<sup>rd</sup> Cycle.
- Six members of faculty from the University has been awarded with the Prestigious Raman Fellowship in the year 2016 by the University Grants Commission.
- A young faculty of the School of Bio-technology has received an award of International Fellowship for the Young Bio-medical Scientists for the year 2016-17 from the Indian Council of Medical Research, New Delhi and another Young faculty has been awarded the fellowship by the Indian Association of Applied Microbiologists.
- The Centre for Film and Electronic Media Studies with state of the art facilities offers a Five year Integrated M.Tech. Programme on Film and Electronic Media

- Studies, which is one of its kind in the country.
- The Networking Resource Centre in Biological Sciences (NRCBS) is a unique UGC supported programme.
- The Optical Fiber cabling is being laid for 22 academic blocks in the University and the LAN work has been completed in six departments at a cost of Rs.55 Lakhs.

# 4.2.3 Major Achievements during the past 5 years

- The University Business Collaboration Centre has signed MoUs with Corporate companies to offer Innovative, Industry Ready Programmes.
- Entrepreneurship-cum-Skill
   Development Centre has trained
   1200 students during 2013 to 2016 in various IT Skill sets.
- Three Cluster class rooms with Multimedia facilities each costing Rs.60 lakh have been established to upgrade the quality and modernize the teaching learning facilities.

- Multi Centre for Model Material Production for differently-abled has been established and the library has provided special access to the disabled by providing Ramp navigation. The library has developed an air-conditioned centre with access to Braille materials to facilitate the visually challenged. 230 are benefitted through students this Centre
- The Centre for Higher Research and Education in the name of Swami Vivekananda has been established, which has benefited 400 students and 16 Research scholars.
- The Foreign Language Laboratory for teaching English, French, Chinese and German Languages has been established, which has benefited 157 students.
- Solar Energy Plant with a capacity of 100 KW has been installed at a cost of Rs. 1 crore which generates 400 units daily. The cost saved is Rs.50,000 per month.

## 4.3 Bharathiar University

- 4.3.1 The Bharathiar University was established in February 1982 under the provisions of the Bharathiar University Act 1981. The university was established with academic departments. Currently University has 39 Departments in 14 schools. Through these departments, 54 PG courses are offered besides conducting M.Phil and Ph.D. programmes. During 2015-16, 1066 PG students, 168 M.Phil. Scholars and 198 Ph.D. Scholars are undergoing their courses. Moreover 31,272 students have been enrolled for various courses through Distance Education programme.
- 4.3.2 The University is accredited with 'A' Grade for the third time in March 2016 by the National Assessment and Accreditation Council. The Bharathiar University has been ranked as 14<sup>th</sup> at national level and 1<sup>st</sup> at state level by the Ministry of Human Resource Development, Government of India.
- 4.3.3 The University is endowed with 113 affiliated Colleges in the districts of

Coimbatore, Erode, Thirupur and Nilgiris. Of them 7 are Government Colleges, 3 are Constituent Colleges located in Valparai, Gudalore and Modakkuruchi (Sivagiri), 16 are aided colleges and the remaining 87 are Self-Financing Colleges.

- 4.3.4 The Honourable Chief Minister of Tamil Nadu, declared open the Post Graduate Extension centre at Erode on 06.05.2013. At present this centre is functioning with 5 departments and 150 students.
- 4.3.5 Currently 1,63,814 students (73,814 students of formal education 90,000 students of Distance Education) are studying Undergraduate, Postgraduate, Diploma, Post Graduate Diploma and Research courses in the University Departments, affiliated Colleges and School of Distance Education.
- 4.3.6 The Government of Tamil Nadu identified the Department of Physics as Centre with Potential for Excellence in a particular area (CPEPA) for creating advanced research laboratory to enhance high-quality research programmes.

# 4.3.7 Major achievements during the past 5 years

- Kausal Kendras (centre for faculty improvement) have been sanctioned to affiliated colleges.
- As per the guidelines given by the Government of Tamil Nadu, permission had been accorded to two self-financing colleges to commence the community colleges.
- The University Grants Commission had granted permission to two self-financing colleges for B.Voc. Programme.
- As announced by the Honourable Chief Minister, under the Rule 110, students hostels at the cost of Rs.350 lakhs has been constructed.
- The Honourable Chief Minister of Tamil Nadu declared open the Academic staff college Hostel constructed at the cost of Rs.296 lakhs during the year 2015.
- The Department of Career Guidance is regularly organizing "job fair" for the

students of University Departments and also for the students of all affiliated colleges. The university is conducting orientation programmes for the faculty members.

 Four Departments have been awarded Special Assistance Programme by the University Grants Commission, New Delhi, through the Special Assistance Programme (SAP) Rs.3.25 Crore has been released to the university.

## 4.4 Bharathidasan University

Bharathidasan University, named after the great revolutionary Tamil Poet Bharathidasan, was established in the year 1982. The University has two campuses the main campus at Palkalaiperur and City campus at Kajamalai. Besides these two campuses, the University has the Bharathidasan Institute of Management (BIM) located at Tiruverumbur. In September 2012, Bharathidasan University was Re-accredited with "A" Grade by NAAC. The University has Schools, 40 Departments 21 23 specialized centres conducting programmes at different levels. 174 colleges have been affiliated to Bharathidasan University spread over eight districts, viz: Trichirappalli, Pudukkottai, Karur, Perambalur, Ariyalur, Thanjavur, Tiruvarur, and Nagapattinam. The University has 4 model colleges, 6 constituent colleges, and One PG **Extension Centre.** 

# 4.4.2 Major Achievements in the past 5 years

- Bharathidasan University, one among the four state universities, to be placed among the top 150 educational institutions in the QS BRICS ranking based on "H" index of publications with a rank of 145.
- 19 Patents have been registered and approved.
- UGC has sanctioned Rs.5 Crore towards the status of Centre with Potential for Excellence in Particular Area (CPEPA) for National Center for Alternatives to Animal Experiments (NCAAE).
- DBT has sanctioned Rs.1.70 crore during the first phase for the establishment of the National Repository for Fresh Water Micro Algae and Cynobacteria.
- Solar Power Plants for 500KWp at the main campus and for 200KWp at the Khajamalai campus have been installed.
- In addition to 7 departments 2 more Departments have been awarded with Special Assistance under the SAP Programme of UGC.

- Under the DST FIST (Funds for Improvement of Science and Technology) Five departments have been benefitted and the amount Rs.4.89 crore has been generated.
- The DST, New Delhi under the PURSE (Promotion of University Research in Scientific Excellence) Programme has sanctioned Rs.9.00 Crore as grant –inaid based on 'H' index.
- 299 research projects are sponsored by UGC, CSIR, DST, DBT, DRLS, DRDO, ICSSR, ICMR, etc. to the tune of Rs.3,242 lakhs.
- Bharathidasan University has 4311 publications indexed by SCOPUS with 43026 citations and 'H' -index of 75, as on 4<sup>th</sup> August 2016.
- The UGC has sanctioned a sum of Rs.120 lakhs for the construction of a Hostel for Women and Rs.240 lakhs for the construction of a Sports Complex including a Fitness Centre and two Synthetic Tennis Courts for the Department of Physical Education under XII Plan.

- In order to foster global competence among students, World Class Curriculum Cells in 10 different disciplines have been created.
- IECD of Bharathidasan University has established the UGC's DDU KAUSHAL Centre (Deen Dayal Upadhyay-Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood) with a grant of Rs.3.5 crore. The Centre is offering three B.Voc programmes.
- IECD of Bharathidasan University has generated employment opportunities to over 20,847 persons and 2.10 lakhs school children were trained in IT skills.
- The Six year M.Tech. programmes namely M.Tech. Biotechnology, M.Tech. Computer Science and M.Tech. Geological Technology and Geoinformatics have been re-introduced in the academic year 2015-16.
- New PG programmes namely MBA under newly established Bharathidasan School of Management, M.A. Economics (5 year integrated), M.Sc. Geology

- (5 year integrated) and M.A. Development Studies have been introduced at the University Departments in the current academic year.
- The university informatics centre has been upgraded to a higher bandwidth.
   LAN and Wi-Fi connectivity provided to all the new buildings including the hostels, class rooms and departments.
- Training and Placement Cell of Bharathidasan University has been established.
- University has created Centre for Organometallic Chemistry.
- "Manimandapam" for Pavendar Bharathidasan, in view of his 125<sup>th</sup> Birthday Celebrations, has been constructed.

## 4.5 Mother Teresa Women's University

4.5.1 Teresa Women's Mother University was established in the year 1984 the former Chief by Minister Dr. M.G.Ramachandran in the presence of a Noble Laureate for peace Mother Teresa. Motto of the University is "To ards E ual Status" with a vision of holistic empowerment of women through education. The objective of the University is to monitor Women's Education at all levels in the State, to develop research facilities for Women, to fulfill the social responsibilities and to offer consultancy services. University is located at Kodaikanal in District. Women's Colleges Dindigul Dindigul and Theni Districts are affiliated to the University. Mother Teresa University has 2 - Constitutent Colleges, 5 - Self Financing Colleges, 2 - Government Colleges, 2 - Aided Colleges and 8 - Community Colleges and the University 18 has Departments 3 Research & Extension Centres at Chennai, Madurai and Coimbatore.

The courses offered by the University are:

Courses	Nos.
Ph.D	24
M.Phil	26
P.G	25
P.G Diploma	14
Certificate	7

The University has 1238 students and 68 academic and 82 administrative staff.

## 4.5.2 Major Achievements in the past 5 years

- The University has gone for the NAAC Re-Accreditation in the month of January 2015 and has been accredited with B Grade. The University has been selected as the Nodal Agency for conducting State Eligibility Test in Tamil Nadu for lecturership in 2016.
- M.Ed Special Education (MR) regular programmes has been introduced.
- Various Awards and Prizes have been received by the university viz.
  - Best Scientist Award from Indian Academic Researchers Association in collaboration with publication

- division, Bharathidasan University, Trichirapalli on 2016
- ▲ ICTACT Woman Academic Leader -2015
- ▲ Best Vice Chancellor award 2013,
- ▲ Bharat Seva Rathan Gold Medal award – 2013,
- ▲ Talented Biotechnologist award 2013,
- ▲ Best Faculty in English 2013,
- ▲ Best Thesis award 2013,
- Devang Mehta Business School award for outstanding contribution to education by Bloomberg TV – 2012,
- ▲ Tamil Nadu Young Scientist award -2012,
- ▲ Best Poster award 2012,
- ▲ Best Paper award 2010, 2011, 2013 & 2014.

- ▲ NASA award 2015
- ▲ Cash prize of Rs.1,05,000/- and 101 Medals have been received in various sports events by the students.
- Government of Tamil Nadu has established Tamil Nadu Common Wealth Mother Teresa Women's International Centre, Incubation and Technology Transfer Centre, Centre for Gandhian Studies and Vivekanandha Studies.
- The 2(F) and 12(B) status have been received for the Women's University College of Education (constituent college of University), Kodaikanal, Sri Adi Chunchanagiri Women's College, Cumbum, Nadar Saraswathi College of Arts and Science, Theni.
- Campus wide LAN has been established in the University.
- MHRD has approved Mother Teresa University to monitor - RMSA & SSA projects in 17 Districts and proposals worth an amount of Rs.35 lakhs have been completed.

- UGC has approved and sanctioned Rs.24 Lakhs to start the Innovative Programme on "Post Graduate Diploma in Professional Ethics".
- University has been granted Rs.14.00 Crore by various funding agencies.
- 29 MoUs including 6 International MoUs are signed by the University.
- During the year 2015 -2016 M.Phil and Ph.D in Special Education have been introduced, The University has launched the following Journals: Journal of Studies in Education and Allied Sciences", SPARK
   Journal for Humanities, WUSUF -Journal for Sciences.

#### 4.6 Alagappa University

- 4.6.1 Alagappa University is a State University established in 1985, recognized by the University Grants Commission and reaccredited with 'A' Grade by NAAC. The main objective of the University is to foster research and disseminate knowledge in various branches of learning. It is a member of Association of Indian Universities and Association of Commonwealth Universities.
- 4.6.2 It has a vast campus of over 418 acres in Karaikudi and a campus of over 12 acres in Thondi.
- Alagappa University 4.6.3 has Schools of Learning, comprising 34 Departments, 7 Centres, One Constituent College of Education and One Constituent Physical Education College. Besides, it has 33 Affiliated Colleges, 6 Evening Colleges and one new Constituent Arts and Science College spread over in the Districts of two Ramanathapuram and Sivaganga.
- 4.6.4 78 programmes in the University Departments, 83 programmes in the Affiliated

Colleges, 65 programmes through Distance Education and 54 programmes through collaborative mode are offered. All programs in the University Departments and Affiliated Colleges are Semester pattern under Choice Based Credit System (CBCS) with Continuous Internal Assessment (CIA) to ensure better education.

- 4.6.5 At present, 215 faculty members and 226 administrative and technical staff are working in Alagappa University.
- The Directorate of Distance Education in Alagappa University is taking opportunities to the door steps educational of Eighty Eight thousand people, young and old, in every the nook and corner of the nation. The University has a vast network of 159 Learning Centres. 54 Need based skill oriented programs are offered at Certificate, Diploma, UG, PG Diploma and PG levels in Catering and Hotel Management, Fine Arts, Designing, Paramedical Sciences, Textile Aeronautical Nautical and Sciences, Biotechnology, etc., through Collaborating Institutions of good repute.

## 4.6.7 Major Achievements during the past five years

- Nine new departments, viz. Department of Energy Science, Life Long Learning, History, Botany, Microbiology, Special Education & Rehabilitation Science, Catering Science & Hotel Management, Fine Arts and Skill Development have been established during the last five years.
- Four innovative programmes, viz. B.Ed. (Special Education), MBA (Logistics Management), PG Diploma in VAT & Service Tax and PG Diploma in Pharmacogenomics, were introduced during the last five years under UGC innovative programme scheme.
- UGC has awarded UGC-BSR Research Fellowship, five of each, to the Departments of Physics, Industrial Chemistry and Biotechnology continuously for the past three years.

- Eight of our faculty members have been selected for UGC Research Award during the period of five years.
- ITC, Kolkatta & Tablets (India) Ltd., Chennai has sponsored a Consultancy projects with the funding of Rs.142.83 lakhs to the Department of Biotechnology.
- Thirteen patents were filed by the faculty members of the Department of Biotechnology, Industrial Chemistry and Oceanography and Coastal Area studies.
- A Para Sports Centre has been established at a cost of Rs.65.00 lakhs to train the differentlyabled sports students to participate at State and National level competitions. Many of the differently-abled students won gold / silver medals at State and National level games and track events.
- Padma Bhushan Dr. R.M. Alagappa Chettiar museum is being established in the University campus at a cost of Rs.79 lakhs commemorating his

invaluable and immeasurable educational services.

 Efforts are made to ensure the entire University Campus as Green Campus with adequate Percolation Tanks for rain water harvesting in the campus.

#### 4.6.8 Uni ue Achievements

- Alagappa University Study Circle was established with the objectives of imparting capacity-building training to the students to enhance their employability skills and coaching for UPSC / NET / SET / TNPSC and competitive examinations.
- Resource School for differently-abled children in the Special Education wing was established to give training to differently-

- abled children and counseling to their parents.
- A Scheme of providing free education to one student in each Department and Constituent College of Alagappa University is introduced from the year 2016-17.

## 4.7 MANONMANIAM SUNDARANAR UNIVERSITY

- Manonmaniam 4.7.1 Sundaranar University was established in 1990 and is Prof. P. Sundaram named after Pillai (1855-1897), a distinguished Professor of Philosophy and a renowned Tamil writer, who Tami hthai Va thu The composed the University caters to the educational needs of districts of the southern Tirunelveli, Thoothukudi and Kanyakumari.
- The University has teaching and departments, affiliated colleges research Manonmaniam Sundaranar including University Constituent colleges, Manonmaniam Sundaranar University colleges and PG Extension Centre at Nagercoil. Three new departments, namely the Department of Sciences, Department of Animal Plant and Department of Renewable Energy Science were started during academic year 2014-15 and 5 a integrated course in Mathematics, Physics, Chemistry and Environmental Sciences has been started from the academic

2016-17. Under the Directorate of Vocational Education, Community Colleges have been approved and job oriented, work related and skill based courses are offered.

Smart Class Rooms with Video 4 7 3 Conferencing facility in all the three campuses of the University and one Foreign Language Laboratory in the main campus have been established. The Curriculum Development Cell been established with funding from Government of Tamil Nadu to the tune of Rs.1.00 crore. 24 PG Boards and 6 UG Boards of Study have been benefitted by the various programmes conducted by the Curriculum Development Cell. 24 Foreign Experts and 28 National Experts have visited the University to revise the existing UG and PG Syllabi. Centre for Diaspora Studies (CDS) has been founded in 2015 in the Department of Sociology. The University offers 48 courses through Distance Education mode as per the guidelines of Distance Education Bureau of the University Grants Commission. The University Library has uploaded 1812 PhD thesis from the INFLIBNET Centre and a special software is used for the benefit of visually challenged

students. Anti – Ragging cell is functioning effectively to ensure ragging free campus. Adequate CCTV cameras are fixed in the main blocks of the University and surveillance is ensured. The Examination Wing of this University has introduced Single Answer Booklet with Bar code system, result publication through SMS, and introduction of Hall Ticket with students' image scanning.

4.7.4 As a part of the Silver Jubilee Celebrations, Silver Jubilee Arch and Life size Sundaranar Bronze Statute were constructed in the University campus. The university has received a grant of Rs.1.68 crores for the construction of Sports Complex Rs.1.00 crore for the construction of Women's hostel in the campus from the University Grants Commission, New Delhi and the construction of these buildings have been started. The university has also received Rs.75.00 lakhs for the construction Manovani F.M. and Rs.75.00 lakhs Women's hostel at CMST campus from the University Grants Commission, New Delhi. Students Amenity Centre is constructed in the campus at a cost of Rs.27.00 lakhs from the University Silver Jubilee fund.

4.7.5 A Memorandum of Understanding (MoU) has been signed between the Centre of Indian Geo-technology and Institute Geomagnetism for the purpose of research on magnetic and climate change. Geo A Memorandum of Understanding (MoU) has been entered between the University and Software Technology Park of India (STPI) for establishment of Software Incubation Centre. The University has received Rs.2.5 crore for the development of infrastructure in the university and Rs.75 lakhs as the share for construction of constituent colleges building from RUSA schemes.

#### 4.8 Periyar University

4.8.1 Periyar University was established an Act of the Tamil Nadu Legislative Assembly with a Motto 'To impart knowledge to the society through formal and informal modes and to contribute to nation building'. The University is recognized by the University Grants Commission under section 2(F) and 12(B). The districts namely Salem, Namakkal, Dharmapuri and Krishnagiri come under the jurisdiction of the University'. 13 Government Arts Colleges, 4 Government Aided Colleges, 5 Constituent Colleges and 73 Self Financing Colleges are affiliated to Periyar University. As per the Order of Tamilnadu Government. 5 constituent colleges are functioning in Mettur, Pennagaram, Harur, Pappireddipatti Edappadi. A Postgraduate Extension Centre is functioning in Dharmapuri. In the academic year 2016-17, 26 departments are functioning in the University campus. Through these departments 33 Postgraduate Programmes, 26 Research Programmes, 14 Certificate Programmes and 6 PG Diploma Programmes are offered.

#### 4.8.2 Uni ue Achievements

- To enhance the infrastructure, buildings are being constructed amounting to Rs.1575 lakhs with an area of 8540 square meters.
- B.Voc. Programmes are offered.
- Four departments have obtained UGC SAP status.
- Many departments have received DST, FIST status.
- Centralised Computer Centre with internet facility is functioning within the campus.
- Smart Class rooms are established in each department.
- Socio Economic Development Programme (SEDP) was implemented in Dharmapuri District.
- Programmes for the improvement of status of tribal women conducted through Women's Study Centre.
- Coaching classes are regularly conducted to train students to appear for NET/SET and Civil Service Examinations.

- NAAC has awarded "A" grade to Periyar University,
- Periyar University is ranked 47<sup>th</sup> among 722 Indian Universities and 7<sup>th</sup> among 52 Universities in Tamil Nadu and 2<sup>nd</sup> among Arts and Science Universities within Tamil Nadu by MHRD – NIRF.

#### 4.9 Thiruvalluvar University

4.9.1 Thiruvalluvar University was established in October, 2002 in vellore in the name of World Renowned celestial poet Thiruvalluvar who wrote Thirukkural, a classical couplet that is translated into many languages across the world. The colleges affiliated to Thiruvalluvar University offering Under Graduate Courses and Post Graduate Courses in four districts viz., Cuddalore, Thiruvannamalai, Villupuram and Vellore

4.9.2 The Government of Tamil Nadu had transferred 112.68 acres of land at Vinnamballi and Serkkadu Villages in Katpadi Taluk, Vellore District to Thiruvalluvar University and sanctioned Rs.16.70 crores for the construction of new buildings, namely, Administrative Block, Academic Block, Library Block and Computer Block.

### University Affiliated Colleges:

Government Colleges	10	
Government Aided Colleges	9	
University Constituent Colleges	6	

Self Finance Colleges	86	
Oriental Colleges	2	
Research Institutes (CMC & RUSA)	2	
PG Extension Centre	1	
PG Management Stand Alone Institution	1	

Thiruvalluvar University has 28 women colleges, 86 Co-ed colleges and 3 Men colleges.

### Student's strength in affiliated colleges

Year	UG	PG	M.Phil	Ph.D
First Year	51713	8092	1651	173
Second Year	33843	5206	-	-
Third Year	30335	-	-	-
TOTAL	115891	13298	1651	173

4.9.3 The Thiruvalluvar University has seven departments viz. Zoology, Economics, Chemistry, Tamil, English, Mathematics and Bio-technology

#### 4.9.4 Specific Achievement of the University

Automation is introduced in examination system. Registration of students' particulars, CIA marks, application for the end semester examinations and Hall tickets for examinations are executed online. Valuation of answer sheets and Publication of results are also done online. The pre-printed valued answer sheets neither bear student's name nor student's registration number. They are with bar codes and are scanned electronically. The semester examination results are sent directly to the affiliated colleges through email. Also, all the communications are done through email sparing printed papers. This helps to establish procedure Management and Eco Friendly Administration in a very effective manner. This is the unique method followed proof fool only Thiruvalluvar University. Electronic transfer of examination fees from affiliated colleges has been introduced in the university so as to enable crediting the fees easily and on time.

### 4.10 Tamil Nadu Open University

- 4.10.1 Government of Tamil Nadu established the Tamil Nadu Open University in 2002. The Tamil Nadu Open University is the 10<sup>th</sup> Open University in the country. The University is functioning with the motto of 'extending education to anyone, anytime, anywhere'. The main objective of the University is to provide quality Higher Education through open and distance mode to all people in the society who are deprived of an opportunity to access Higher Education.
- 4.10.2 The growth of the University during the past 14 years has phenomenal. The University has a cumulative strength of 5,29,263 in 113 student Programmes of study across various disciplines and skills at different levels from Certificate to Post-Graduation. Education is imparted through 13 academic Schools, 5 support Divisions, 1 media Centre and a robust network of 607 Learner Support and Service Centres across the State.
- 4.10.3 The Tamil Nadu Open University is the first University in the State to have

introduced the credit-based system and selflearning materials in print as early as 2003. University offers round-the-year admission examination schedules conveniently with arranged on week-ends. The effective assessment provision continuous sufficiently addressed the issue of quantity in form of increasing higher education access. The University has been harnessing the advancements in ICT to continuously improve quality. The University has digitalized learner support systems including admission. examination. materials distribution, academic counselling, etc. Thus far, 1,71,430 students have passed out of the university and the current enrolment at 29,351 With the sanctioned teaching staff strength of 65 and non-teaching staff strength of 77, the University has been ably addressing the learning needs of all the students.

4.10.4 The University is one of the 5, among the 15 Open Universities in the country, to have been accorded the recognition under section 12B of the University Grants Commission (UGC). It is also one of the very few Universities in the

country to have received the approval of the UGC for offering all its academic Programmes through the distance mode.

#### 4.10.5 Uni ue Achievements

- Having signed an MOU with the National Skill Development Council (NSDC), the University is the only institution in the State which has made all its vocational programmes compliant with the NVEQF (National Vocation Educational Qualification Network).
- It is the only University in the State offering Special Education Programmes in 3 specializations of hearing impaired, mentally retarded and visually challenged in the distance learning mode.
- It has established linkages with such international institutions as the Commonwealth of Learning (COL); Asian Association of Open Universities (AAOU) and International Council for Distance and Open Learning (ICDE).

- Through an MoU with the Tamil Nadu Agricultural University, the TNOU has commenced student admission for offering 16 agriculture-related Programmes at a distance through the Krishi Vigyan Kendra of the TNAU, aiming to cover 4,000 unemployed youth during 2016-2017.
- The University has facilitated gainful employment for more than 5,000 vocational education students in about 600 industries.
- Ms. Indra, a differently-abled student of TNOU B.Ed. Special Education was awarded the prestigious Malala Award 2014 (Best Women Achiever with Disability) by the Society for Rights of all Women with Disabilities.
- 4.10.6 The University has introduced the following new Programmes during the academic year 2016-2017:

#### **Diploma Programmes**

- 1. Data Science and Big Data Analytics
- 2. Cloud Computing

- 3. Film Acting
- 4. Drama and Theatre Acting
- 5. TV Acting
- 6. Wildlife Tourism

#### **Vocational Diploma Programmes**

- Desktop Publishing (DTP)
- 2 Computer Application
- 3 Computer Hardware Servicing
- 4 Agricultural Marketing and Management
- Bio-Fertilizer and Bio-Control Agents Production Technology
- 6 Commercial Cultivation of Flowers
- 7 Integrated Farming Systems
- 8 Mushroom Production
- 9 Nursery Technologies
- 10 Organic Farming

- 11 Kitchen and Terrace Garden Management
- Medicinal and Aromatic PlantsProduction Technology
- 13 Seed Production of Agricultural Crops and Supply Chain Management
- 14 Welding Technology
- 15 Industrial Fitter
- 16 Design Thinking

#### **Post Graduate Programmes**

- 1. M.A. (Linguistics)
- 2. M.A. (Translation Studies)

# 4.11 Tamil Nadu Teachers Education University

4.11.1 Tamil Nadu Teachers Education University, the first of its kind in India, was established for promoting excellence in Teacher Education. In the present scenario of rapid economic growth, international competitiveness and rising expectation of youth, the Teacher Education University is endeavoring to prepare teachers of unique potential. The University has a total of 724 Colleges of Education under its jurisdiction as detailed below:

Government Colleges of	7
Education	
Government Aided Colleges	14
of Education	
Self-Financing Colleges of	703
Education	
Total Colleges of Education	724

4.11.2 The objectives of the University are to monitor the establishment and functioning of colleges of education in accordance with the norms and standards prescribed by National Council for Teacher

Education and Government of Tamil Nadu. The objectives include providing of quality education, monitoring Teacher Education Institutions as approved by National Council for Teacher Education at all levels in the State, developing research facilities in Teacher Education, identifying and designing innovative courses in Teacher Education, conducting organizing and seminars, symposia in workshops and promoting Teacher Education with a view to offering programs in the latest field and developing of the extension activities.

## 4.11.3 Major Achievements in the past 5 years

- The University has obtained sanction for establishment of 10 Departments of Study and Research with Faculty strength of one Professor, two Associate Professors and four Assistant Professors for each department and presently the following six Departments are functioning viz.
  - (i) Pedagogical Sciences
  - (ii) Value Education

- (iii) Educational Psychology
- (iv) Educational Technology
- (v) Curriculum Planning and Evaluation
- (vi) Educational Planning and Administration
- The University conducted two international Conferences in the last 5 years.
- Hon'ble Chief Minister The of Tamil Nadu has accorded approval for allotment of 10 acres of land KarapakkamVillage, Sholinganallur Taluk, Kancheepuram District and for construction of various buildings for the University. The construction of buildings has been completed and the university is functioning in its its inauguration campus after Hon'ble Chief Minister in February 2016.
- Permission has been granted to offer D.Litt programme at this University.
- The Ph.D students are paid Scholarship from the University funds.

- The Boards of Studies for B.Ed / M.Ed / M.Phil have been reconstituted.
- The Syllabi and Regulations for twoyear B.Ed and M.Ed Degree Programmes have been framed based on new Regulations of NCTE, 2014.
- Regulations for Ph.D Programme have been revised.
- Launching of on-line International journal "Educational Innovations and Practices" was approved by the Syndicate on 18.02.2015.
- A Workshop on "Test Designing & Item Writing" has been jointly conducted by the National Testing Service – India, Central Institute of Indian Language, Mysore and Tamil Nadu Teachers Education University in February 2015.
- The University has organised a Round Table Conference-cum-Workshop on Curriculum Framework conducted by NCTE and Tamil Nadu Teachers Education University on 08.02.2015 and 09.02.2015.
- One International Conference on "Knowledge Exchange Path

- Collaboration among Universities, Industries, Educational Institutions and Society: Bridging the Outcome-Impact Gap" was conducted in April 2015.
- PG Diploma in Value Education and Spirituality has been introduced as approved by the Academic Council on 19.06.2015 and the Syndicate on 22.07.2015.
- The University has granted fresh affiliation to 33 new B.Ed Colleges of Education, 4 M.Ed Colleges of Education and 5 M.Phil Colleges of Education.

Students strength of the university and affiliated colleges

In the Affiliated Colleges of Education			University Departments	
B.Ed	M.Ed	M.Phil	Ph.D	Ph.D
52376	4346	180	16	29

#### 4.12 Annamalai University

Annamalai University is one of the largest unitary, teaching and residential in Southern Asia universities Since inception in 1929, in Chidambaram, Cuddalore district, it has aimed at imparting education in all fields of knowledge to students from across the country and abroad. One of the most significant developments has been repealing of the Annamalai University Act, 1929 which has been replaced by University Act, 2013 Annamalai after obtaining the assent of His Excellency, the President of India. Subsequently several significant steps have been taken to protect interests of students, teachers and supporting staff and to ensure that the University is properly administrated and managed in fulfillment of the purpose for which it was established. This has resulted in the accreditation of the University with 'A' Grade status by NAAC during the year 2014. Taking into consideration the severe financial crisis the of university, of Tamil Nadu government sanctioned Rs.600.87 crore from 2013 towards meeting

the expenses of the university. The government also sanctioned Rs. 3.45 crore towards tuition fee concession to 1942 first generation graduate students of the university during 2014-2015. For the academic year 2015-2016, Rs.5.56 crore sanctioned towards tuition fee concession to 2875 first generation graduate students of the university.

- 4.12.2 In the past 87 years the University has grown into a premier institution of higher learning and research. The University today is functioning in an area spread over an extensive campus of more than 800 acres and has 10 faculty comprising 49 departments of study.
- 4.12.3 The Rajah Muthiah Institute of Health Sciences, comprising the Rajah Muthiah Medical College, the Rajah Muthiah Dental College and the Rani Meyyammai College of Nursing offers various UG and PG Programmes, besides offering medical facilities to the rural population through its modern 1260-bed hospital. The Chief Minister Comprehensive Health Insurance Scheme (CMCHIS) was implemented for the University

in 2012 and so far, 4218 patients have been treated under this scheme for which the University has received a sum of Rs.3,26,04,461/-. Dr.Muthulakshmi Reddy Maternity Benefit Scheme was implemented in 2016 and so far, 1178 patients have been benefitted at rate of Rs.12,000/- per head to the total amount of Rs.1,41,36,000/-.

- 4.12.4 The University, has 26,417 students (Boys: 15453 & Girls: 10964) in total pursuing various on-campus programmes of study in ten different Faculties viz. Arts, Science, Marine Sciences, Indian Languages, Education, Engineering and Technology, Agriculture, Fine Arts, Medicine and Dentistry more than 10,000 of them and accommodated in its 19 hostels which are acclaimed to be the biggest in the country. number of 443 students Α total 27 foreign countries are on the rolls of the University.
- 4.12.5 The Directorate of Distance Education established in 1979 offers different programmes of study. A total of 2,39,300

students studied through the Directorate of Distance Education during the year 2015-16.

### 4.12.6Activities/Schemes undertaken during the year 2015-16

- (i) The University received UGC SAP and DST FIST status for Pharmacy, Manufacturing Engineering, Biochemistry, Sociology, Marine Biology, Education and Electrical Engineering **Departments** during the academic year 2015-2016, and got a sanction of Rs.9.24 crores towards the development of departments.
- (ii) The University has instituted Dr. Ambedkar Chair with the grant Rs.35 lakhs per year from the Dr. Ambedkar Foundation (Ministry for Social Justice and Empowerment) to focus Human Rights and Indian on Diaspora.
- (iii) The University has introduced online facilities for submission of applications for admission to all programmes of study,

- payment of fees, issuing of hall tickets, etc.
- (iv) Under RUSA Scheme for the development of infrastructure facilities, the University received Rs. 10 crore during the academic year 2016-2017 out of the total sanctioned amount of Rs.20 crore.
- (v) The University received Rs.14.63 crores from various funding agencies during 2015-2016 towards undertaking Research and Consultancy and organizing National and International conferences and workshops.

#### 4.13 Anna University

- 4.13.1. Anna University was established on 4<sup>th</sup> September, 1978 as a unitary type University by integrating four well known technical institutions in the city of Madras namely, College of Engineering, Guindy (CEG-1794); Alagappa College of Technology (ACT-1944); Madras Institute of Technology (MIT-1949); and School of Architecture and Planning (SAP-1957). During the year 2001, Anna University had been converted to affiliating type of University by bringing all Engineering Colleges in the State of Tamil Nadu under its control and it was reconverted to unitary type in 2010. During 2012, it was again converted as an affiliating type of University, by bringing all engineering under one umbrella to colleges ensure uniform quality in engineering education in Tamil Nadu as per the noble vision of Hon'ble Chief Minister.
- 4.13.2 In addition to the above four campuses, presently, Anna University has 13 Constituent Colleges, 4 Regional Campuses at Trichirappalli, Tirunelveli, Madurai and

and 614 affiliated colleges Coimbatore including central institution, management Colleges and MCA Colleges. Anna University offers 29 UG and 79 PG Programmes with about 20000 students on roll in the University Departments, and 41 UG and programmes are being offered in Affiliated Institutions with about 8.5 lakhs students on roll. Anna University can be proud of having 12804 Ph.D. scholars on roll, in which, about 38 % of the total students are girls.

4.13.3 Anna University is re-accredited by NAAC with a CGPA of 3.46 on a four point scale at "A" grade valid for a period of five years from 2014. In World University Ranking Anna University is ranked 293 as per QS (Quacquarelli Symonds) in the Faculty of Engineering and Technology in the year 2015 and is among the top ten institutions in India. The University stands second in India in the 'h' index citations, based on the research papers published by its faculty members and research scholars. the In subjects of Mechanical, Aeronautical and Manufacturing Engineering, Anna University is ranked

between 151 and 200 in the global level and 7 in the national level.

## 4.13.4. Important Achievements of Anna University during the past 5 years

- In consonance with the Hon'ble Chief Minister's vision, the University has revised the Curricula and Syllabi for the programmes offered at University Departments from 2015-16 with Choice Based Credit System (CBCS). For affiliated engineering Colleges the Curricula and Syllabi were revised during 2013-14.
- Anna University successfully conducts UG & PG Engineering admissions under Single Window Counselling every year.
- 1226 Research Scholars received their Ph.D degree in the 36<sup>th</sup> Convocation held in 2016.
- The Anna University has signed 41 MoUs with Foreign Universities / Institutions and 26 MoUs with Institutions/Industries at National Level.

- The University Faculty have contributed significantly to Research and Technology Development through
  - ➤ 277 sponsored research projects of value Rs.84.41 crore
  - ➤ 4074 consultancy services worth Rs.104.4 crore
  - > 7406 testing works earning Rs.2.77 crore
- From the year 2011-2016, 5536 papers have been published in the International Journals and 398 papers have been published in National Journals. 206 Books have also been published.
- Anna University has filed 344 inventions for patents and has obtained 16 patents, out of which 4 are national and 12 are International patents.

Grants received from the Funding agencies of Central Government by Anna University are given below:

Departments	Grant received (Rupees in Crore)
Department of Science& Technology, MHRD, DBT- BIRAC, National Innovation Council, Ministry of Science and Technology through Technology Development Program	29.14
University Grants Commission- Special Assistance Program & XII Plan Grants, Department of Science & Technology – Funds for Improvement of Science and Technology( FIST) and PURSE Program	54.12

- Nearly 16,563 students and 1295 staff members and their families of Anna University have benefited through Medical Insurance Scheme.
- Anna University occupying the 1<sup>st</sup> place in Tamilnadu and 7th place in Country for access of E-Journal which are provided by UGC –INFLIBNET and has received awards from IEEE, ASME, ASCE and SPRINGER for the highest number of e-journals usage.

- Under National Knowledge Network, the University is provided with 1 Gbps band each at Main Campus and MIT Campus.
- 8523 students of University departments of Anna University and 5015 students of affiliated colleges have got placements.
- Under the students exchange Programme, 58 international students and 183 students of Anna University have studied in Anna University and foreign Universities respectively.
- Two solar PV systems have been successfully implemented in the University for water pumping (4 kw) and power generation (10 kw).
- An administrative block and an UG Women student Hostel block at MIT campus and Hostels for men and women at main campus of the University worth Rs.38.00 crores were inaugurated by Hon'ble Chief Minister of Tamil Nadu. The University also utilized more than Rs.210 crores towards construction of Classroom Buildings and maintenance at its main campus and Constituent Engineering Colleges.

- ➤ Centre for Faculty Development in Anna University has organized a 10 day training programme to train the faculty to conduct Bridge Course in Mathematics, Physics and English. About 1,200 faculty members from 341 Engineering colleges in Tamil Nadu have participated.
- UGC has awarded the prestigious status of 'University with Potential for Excellence' to Anna University.
- Mass screening gadget for ophthalmic lesions technology developed by NHHID was transferred to M/s TMI Systems, Bangalore and the Leptospirosis kit technology was transferred to M/s.Genomix Molecular Diagnostics Pvt. Ltd., Bangalore. These transfers will earn revenue to the University.
- Further, as per the announcement made by the Hon'ble Chief Minister of Tamil Nadu under Rule 110 of Tamil Nadu Legislative Assembly Rules to grant Rs.20.00 Crores towards design and development of Unmanned Aerial Vehicle (UAV) to make use of it during natural calamities and to keep a check on security threats and

dangers, the Government have sanctioned a sum of Rs.9.72 Crores as first instalment in the financial year 2015-16 to Anna University.

- Anna University deployed Unmanned Aerial Vehicle (UAV) and played a major role along with Chennai city police in the rescue operations in the flood affected areas of the city in 2015.
- During 2015-16, Anna University secured 24 medals in All India Inter University Tournaments.

#### UNIVERSITIES

### NUMBER OF STUDENTS STUDYING IN THE UNIVERSITY CAMPUS DURING THE YEAR 2015-16

SI. No.	Name of the University	Students Strength	
		Male	Female
1	University of Madras, Chennai.	664	834
2	Madurai Kamaraj University, Madurai.	513	504
3	Bharathiar University, Coimbatore.	522	943
4	Bharathidasan University, Tiruchirappalli.	36,245	39,400
5	Mother Teresa Women's University, Kodaikanal.	-	1,371
6	Alagappa University, Karaikudi.	1,039	2,386
7	Manonmaniam Sundaranar University, Tirunelveli.	343	676
8	Periyar University, Salem.	523	921
9	Thiruvalluvar University, Vellore.	152	200
10	Tamil Nadu Open University, Chennai.	-	-
11	Tamil Nadu Teachers' Education University, Chennai.	18	9
12	Annamalai University, Annamalai Nagar.	15,453	10,964
13	Anna University, Chennai.	8,768	6,727
TOTAL		64,240	64,935
GRAND TOTAL		1,29,175	

#### UNIVERSITIES

### NUMBER OF STUDENTS STUDYING IN THE DISTANCE EDUCATION DURING THE YEAR 2015-16

SI. No	Name of the University	Students Strength	
		Male	Female
1	University of Madras, Chennai.	14,677	19,391
2	Madurai Kamaraj University, Madurai.	15,498	13,654
3	Bharathiar University, Coimbatore.	14,861	16,411
4	Bharathidasan University, Tiruchirappalli.	11,330	17,909
5	Mother Teresa Women's University, Kodaikanal.	-	1,203
6	Alagappa University, Karaikudi.	41,552	46,954
7	Manonmaniam Sundaranar University, Tirunelveli.	8,993	13,124
8	Periyar University, Salem.	13,832	11,448
9	Thiruvalluvar University, Vellore.	187	460
10	Tamil Nadu Open University, Chennai.	5,213	6,425
11	Tamil Nadu Teachers' Education University, Chennai.	-	-
12	Annamalai University, Annamalai Nagar.	1,02,677	1,36,640
13	Anna University, Chennai.	1,982	1,761
TOTAL		2,30,802	2,85,380
GRAND TOTAL		5,16,182	

### 5. Tamil Nadu Archives

- 5.1 Tamil Nadu Archives, located in the heart of the city of Chennai at Egmore plays an indispensable role in the day to day administration of the Government of Tamil Nadu as the custodian of public records. This Archives was established in the year 1909, which has been functioning well for more than 100 years.
- 5.2 Tamil Nadu Archives houses the records of various departments of the Secretariat, Erstwhile Board of Revenue, few Heads of Departments' records, Collectorate records and District Courts Records prior to 1857 A.D. Records in Dutch, Danish and Persian languages are also housed in the Archives.
- 5.3 Many authors, historians and researchers from Universities and colleges, both Indian and foreign, are visiting Tamil Nadu Archives for their research. The Tamil Nadu Archives Library has good collection of rare books and is also a rich treasure trove of knowledge to the scholars. The Gazetteer section of Tamil Nadu Archives has been

engaged in the work of publishing District Gazetteers for various districts.

5.4 The Government have sanctioned Project of improving the web access to the digitized records of the Tamil Nadu Archives under Tamil Nadu Innovation Initiatives Fund. The Project is being implemented over two years i.e.2015-16 and 2016-17. A sum of Rs.30 lakhs has been sanctioned for the year 2015–16 and the allocation for the year 2016–17 is Rs.37 lakhs.

## 6. Tamil Nadu State Council for Higher Education

6.1 The Tamil Nadu State Council for Higher Education (TANSCHE) was established in the year 1992 for the promotion of higher education at the State level and coordination with those of the University Grants Commission.

### **6.2 ACHIEVEMENTS**

- Introduction and implementation of 'Study Abroad Programme' Beneficiaries

   74 students, 15 faculty members – 3 years.
- Establishment of 'University Business Collaboration Centre' in 6 Universities.
- 'Special Care of Slow Learners in order to Prevent College Dropouts' implemented in 24 colleges.
- Creation of 'Soft Skill Centre' in 30 Government Arts and Science Colleges.
- 'International Relations Centre' to connect State Universities with international institutions.
- Networked Digital Library System.

- 'Online Authentication' of Certificates has been implemented.
- Establishment of 3 Centers of Excellence.
- Preparation of State Higher Education Plan for 'Rashtriya Uchchatar Shisksha Abhiyan' Scheme.
- Constitution of 'State Integrated Boards of Studies'.
- Introduction of 'Minor Research Project' for teachers and 'Student Mini Project' for PG students.
- Publication of 2 journals bi-annually.
- Organizing training for Senior Administrative Staff.
- Coordination of meetings among various educational bodies.
- Partial financial assistance for seminars/workshops/ conferences.

## 6.3 ACTIVITIES/SCHEMES DURING THE YEAR 2015-2016

 24 students and 5 faculty members were sent to U.K under 'Study Abroad Programme'.

- Training conducted in 30 Government Arts and Science Colleges through Soft Skill Centres benefitting 16,394.
- Scheme of 'Special Care for Slow Learners' have been implemented in 6 Government Arts and Science Colleges and 18 University Constituent Colleges to prevent drop-outs.
- University-Business Collaboration
   Centres were established in 6 state
   Universities.
- Tamil Nadu State Council for Higher Education has been publishing two journals twice a year on Modern Sciences and Humanities and Social Sciences.
- Under the Financial Assistance Scheme for Universities and Colleges to conduct Seminars / Workshops 15 institutions have received the Financial Assistance in this year.
- The Tamil Nadu State Council for Higher Education has published 52 PG and 3 UG textbooks in Tamil for the benefit of Arts and Science Colleges students with financial support from MHRD.

- The International Relations Centre of Tamil Nadu State Council for Higher Education has been in touch with various Consulates and getting proposals from them and coordinates with State Universities.
- The Government of Tamil Nadu have sanctioned the project of Networked Digital Library System. The Physical infrastructure is to be in Anna University and Tamil Nadu Open University. This initiative would help put the free laptops given to students to optimal use.
- Tamil Nadu State Council for Higher Education has been entrusted with the responsibility of identifying potential Centres of Excellence from the State Kamaraj Universities. Madurai University, University of Madras and Anna University have been identified for the establishment of Centres Excellence in Nanotechnology, Sciences and Construction Management respectively.

## 7. State Project Directorate of Rashtriya Uchchatar Shiksha Abhiyan (RUSA)

- 7.1 Rashtriya Uchchatar Shiksha Abhiyan (RUSA) is a significant strategic scheme in central funding mapped by the Planning Commission in the Twelfth Five Year Plan.
- 7.2 An amount of Rs.5 crore has been received by the State which was effectively utilized for preparation of the State Plan, for establishment of the Project Directorate and the Technical Support Group (TSG). The Department prepared an exhaustive and intensive State Plan under different components as outlined in the RUSA draft guidelines.
- 7.3 The State Project Director presented its Plan at the Plan Approval Board of RUSA and the Government was sanctioned Rs.200 crore for the ten State Universities with NAAC accreditation and Rs.8 crore for two existing Government Colleges to be upgraded to Model Degree Colleges under component 5. Apart from this, 44 Government Arts & Science Colleges and 21 university constituent model colleges were sanctioned Rs.2 crore each, totalling Rs.130 crore.

- 7.4 The funds have been utilized for producing an intelligent human resource pool equipped to address customized equity interventions, quality improvement and skill development programmes as well as faculty improvement programmes. By improving the physical infrastructure, providing more girls hostels in Government institutions, converting existing buildings into disabled friendly and upgrading model degree colleges, technical institutions and arts and science colleges a holistic growth would be achieved, thereby making Tamil Nadu a higher education hub.
- 7.5 The Plan Approval Board establishment approved the Ωf Government Engineering Colleges, one Namakkal District and the other in Thiruvallur District at the 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 a grant of Rs.13.3 crore for Vocational Education and Rs.15 crore for Research and Innovation. In total Rs. 423.3 crore is sanctioned for the State and Tamil Nadu tops the charts as the maximum benefitted State.

### 8. Science City

- 8.1 Science City was established with the prime objective of sensitizing, popularizing and propagating science among the masses. The geographic area earmarked as Science City is an unique agglomeration of more than premier educational and institutions. The institutions situated within the Science City area can be considered as a repository of quality and technical manpower. Utilizing this unique knowledge storehouse, City has been organising several Science important and unique programmes pertaining science and technology. Science City organizes a wide range of programmes starting from basic science to advanced areas or the so called frontier areas of science and technology.
- 8.2 The activities of Science City include organizing programmes such as Popular lectures on topics of current importance, seminars, summer training programmes in basic sciences, workshops, entrepreneurship development programmes, science for differently abled, Chennai science festival,

science and technology for the rural poor, Tamil Nadu Lifetime and Young Women scientists awards for women, Children's Science Academy Award for school students etc. Through its wide range of quality programmes Science City has been able to create the desired impact amongst college / university students. The highly qualified resource personal and the unique content of the programmes ensure extensive students participation from various colleges / universities.

#### 8.3 Chennai Science Festival

The Chennai Science Festival is unique and novel mega event being organized by the Science City for the past 9 years. The Science Festival comprises of an array of science events such as a science mega exhibition, popular lectures, panel discussions, puppetry, folk plays for the awareness of science public and based competitions (Oratorical, essay, drawing and quiz) for school and college students and science based entertainment.

### 8.4 Nanoscience and Nanotechnology

Science City has been organizing several seminars and workshops for the past 8 years the of area nanoscience and nanotechnology. This programme is organized for the benefit of college students to keep them informed about the applications of Nanoscience and Nanotechnology and the developments across the world. On these lines Science City also organize a Seminar titled Nano Revelation which comprises of a series of 11 Seminars starting from the basics advanced areas of Nanoscience and Nanotechnology. Experts from leading institutes across the nation address students.

## 8.5 Summer Training Programmes in Basic Sciences

Science City has been organizing the Summer Training Programme in Basic Sciences viz., Physics, Chemistry, Biology and Mathematics for the past several years. This is 3 week programme organized for the benefit of post graduate students in respective subject in which 75% of the students are from

rural areas and care is taken to structure the content of the programme from basic aspects to the current scenario in each discipline. Thirty students from all over the State are chosen for this programme.

## 8.6 Workshop on basic and molecular techni ues in Microbiology

This programme is organized for the οf students in microbiology, biochemistry biotechnology. and programme will help the students to better equip themselves in this area of science by providing them the required insight into the area of laboratory microbiology. Hands-on training on laboratory techniques will ensure that the students are nurtured to competent enough to face the competitive world. The hands-on workshop was organized in 6 modules covering the following laboratory techniques Microscopy and microbial staining Media procedures, preparation sterilization procedures, Medical Microbiology, Serological techniques, Molecular techniques and Bioinformatics.

## 8.7 Installing Photovoltaic Solar Panel to Harness Solar Energy

Sensing the power scenario Science City has installed a 10 Kw Grid Type Roof Top Solar Photovoltaic System to generate electricity by harnessing the abundant sunlight available.

## 8.8 A ards - Tamil Nadu Lifetime Achievement A ard

Science City has been recognizing the outstanding research contribution of women Scientists above the age of 60 with the Tamil Nadu Lifetime Achievement Award. The award comprises cash prize and a brass citation. This award has been renamed as Tamil Nadu Lifetime Award which enables both men and women scientists to apply for the same.

## 8.9 Tamil Nadu Young Women Scientist A ard

Science City has been bestowing on women scientists below the age of 40 with Tamil Nadu Young Women Scientists Award for the past 14 years. The outstanding research work of women scientists from various universities and colleges are

recognized. The award comprises cash prize and a brass citation.

This award has been renamed as Tamil Nadu Young Scientist Award which enables both men and women scientist to apply for the same.

### 8.10 Children Science Academy A ard

Considering the need to motivate young minds to take up science as a career, Science City has been recognizing the research work of school students from across the state with the coveted Children's Science Academy Award. The award was given to students with innovative ideas. The award carries a cash prize and a certificate. As a part of the award the students were invited to the Science City to attend a Science Camp during the summer vacation.

## 8.11 Science for the Socio economic upliftment of Rural Poor

In this workshop, farmers engaged in dairy, sheep, goat, pig, duck, quail and rabbit farming were trained on scientific methods of farming as it is considered to be a more lucrative rural based activity. The farmers were made aware of more scientific and cost effective methods of rearing the farm animals from the production point to marketing. Science City has been organizing three day workshops in the above areas.

### 8.12 Science for the Differently Abled

Science City organized seminars for different sections of the differently abled viz., hearing challenged, speech challenged, visually challenged and ortho challenged. The participants were exposed to various basic aspects of science. These programmes were organized to inculcate a scientific temper among this section of students.

Apart from the aforesaid activities, Science City has been organizing several other workshops/seminars such as Information Technology, Communication Technology, Biotechnology and so on based on the needs of the student community.

## 9. Tamil Nadu Science and Technology Centre

9.1 Tamil Nadu Science and Technology Centre was established by the Government of Tamil Nadu in 1983, as an autonomous body, under the Chairmanship of Hon'ble Minister for Higher Education, with the main objective of popularising Science and Technology among the people in general and students in Nadu particular. Tamil Science Technology Centre prides itself on making science an inspiring and exciting experience for people of all ages. At Periyar Science and Technology Centre, Chennai, the B.M. Birla Planetarium and the interactive exhibits housed in the galleries of: Periyar, Transport, Information Technology, Ramanujan Mathematics Gallery, Indian Space Research Gallery Life sciences, Ocean, Electronics and Communication, Fun Mirrors, Dr. Solomon Victor Heart Museum, 3D Science Theatre, Science Parks, Evolution Park and State Level Non-conventional Energy Park and Planetarium cover a wide range of topics related to astronomy, science, technology and mathematics.

- 9.2 Tamil Nadu Science and Technology Centre has also 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 were also established.
- 9.3 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, 71,320 INSPIRE Awards and Rs.5,000/- each were distributed to the students of Tamil Nadu.
- 9.4 A Science Exhibition on wheels, and a Mathematics Exhibition on wheels were developed to reach the remotest parts of the Tamil Nadu State.
- 9.5 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 Evaluation and Motivation Contests, spend-a-day in Science Centre activities and outreach activities for school students, teachers and for everyone.

## 9.6 Major Achievements during the past Five Years

- A Regional Science Centre was established in Coimbatore at a cost of Rs.850 lakhs.
- In Periyar Science and Technology Centre, Chennai:
  - Ramanujan Maths Gallery was established at a cost of Rs.40 lakhs for removing Phobia on Mathematics among the students.
  - To create awareness among the public a Non-conventional Energy Park at a cost of Rs.140 lakhs was established.
  - A Space Gallery was established at a cost of Rs.50 lakhs.
  - An Evolution Park was established at a cost of Rs.45 lakhs.

- In order to provide information on scientific theme in a mindboggling way, 3D immersive Projection movies are required. A 3D Science Theatre was developed at a cost of Rs.23 Lakhs (Rupees twenty three lakhs only) at District Science Centre, Vellore and inaugurated on 14.02.2016 by the Hon'ble Chief Minister of Tamil Nadu.
- To make the Planetarium shows enjoyable with immersive effects and also to convey the astronomical concepts effectively, the B. M. Birla Planetarium will be modernized State-of the-art introducing the technology **Digital Planetarium System** at Periyar Science Technology Centre at an estimated cost of Rs.10 crores (Rupees Ten crores only)
- To create interest in learning evolution of life among the students an Evolution Park was established at an estimated cost of Rs.70.00 lakhs

# (Rupees Seventy lakhs only) in **Anna Science Centre-Planetarium, Tiruchirappalli.**

- To dispel the misconceptions and to eradicate unfounded fear about the nuclear power, a Hall of Nuclear
   Po er depicting the constructive uses of Nuclear Power for the society is established at an estimated cost of Rs.240 lakhs (Rupees Two hundred and forty lakhs only) at Periyar Science and Technology Centre, Chennai with the financial assistance of Nuclear power Corporation of India Limited.
- To make the public aware of technological developments taking place in our Defence Forces, a "Gallery on Defence Research and Development" was established at an estimated cost of Rs.100 lakhs (Rupees one hundred lakhs only) in Periyar Science and Technology Centre, Chennai.
- To make the students understand the developments in science and technology and usage of latest instruments and to

- enable them to become innovators, an Innovation Hub was established in Chennai at a cost of Rs.100 lakhs.
- For the benefit of the students and public in all parts of Tamil Nadu four Portable Planetariums are being established at an estimated cost of Rs.40.00 lakhs (Rupees Forty lakhs only).
- A Science Centre provides an experiment based learning ambience.
   Science Centres will be established at Dharmapuri, Kanyakumari and Thoothukudi districts.

## 10. Tamil Nadu State Council for Science and Technology

10.1 Tamil Nadu State Council for Science and Technology was formed by Government of Tamil Nadu as an autonomous apex body in the year 1984 with a view to aid development of Scientific Research in order to develop Science and Technology sector of our State. To fulfill this mandate, the Council is implementing several schemes related to research and development, extension and field oriented programmes.

10.2 During the last five years a sum of Rs.1009 lakhs have been allocated to the Council and action was taken to conduct a total of 2181 programmes under 16 Science and Technology schemes.

### 10.3 STUDENT PRO ECTS SCHEME

This scheme enables utilization of tremendous student talent available in the State for the development of Science and Technology. Under this scheme, final year students of UG/PG in Engineering and PG Students of Sciences / Medicine/ Agriculture/

Veterinary Sciences are provided with a maximum grant of Rs.10000/- for carrying out research projects which are socially relevant and useful to our State. Under this scheme, during the last 5 years, action was taken to implement 1124 student projects at the cost of Rs.90.92 lakhs.

#### 10.4 SCIENCE AND TECHNOLOGY PRO ECTS

Research projects in sectors such as Agricultural Sciences, Biological Sciences, Environmental Sciences, Engineering Medical Sciences, Technology, **Physical** Sciences, Social Sciences and Veterinary Sciences are being supported through this scheme to contribute to the development of our state. The financial assistance is provided to scientists and researchers for carrying out R&D work having social relevance usefulness to our State. Under this scheme. during the last 5 years, action was taken to implement 66 projects at the cost of Rs. 158.15 lakhs.

## 10.5 YOUNG STUDENT SCIENTIST PROGRAMME

Motivation is given through this programme to Young students of our State to take up science and research as their carrier in future, by giving exposure to various aspects of science and technology. In the month of May, selected students studying in IX std., from various districts are housed in a reputed college / university and trained for a period of 15 days with research facilities and resource persons. Under this scheme, during the last 5 years, action was taken to implement 60 programmes at the cost of Rs. 117.10 lakhs.

### 10.6 YOUNG SCIENTISTS FELLOWSHIP SCHEME

This programme enables research skill up-gradation of our scientist and researchers. 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 takeup training/learn sophisticated instrumentation techniques or modern

research methodologies or do collaborative research work with senior scientists in the host Research Centers such as CSIR laboratories, IIT / Universities within India. They are provided with a fellowship of Rs.10,000/- per month for a period of 2 to 6 months in addition to their regular salaries by their parent institutions. Under this scheme, during the last 5 years, action was taken to support 90 young scientists at the cost of Rs. 13.45 lakhs.

## 10.7 PARTIAL ASSISTANCE FOR SEMINAR / SYMPOSIUM/WORK SHOP

Exchange of scientific knowledge and research ideas is being enabled by this programme by providing a platform for scientists, researchers and other section of the society related to science and research. Partial financial assistance is provided to educational and research institutions within the State of Tamil Nadu, to organize such seminars/ symposia/ workshops. Under this scheme, during the last 5 years, action was taken to implement 161 programmes at the cost of Rs. 43.39 lakhs.

## 10.8 POPULARISATION OF SCIENCE AND TECHNOLOGY

Universities, Colleges and Voluntary Organisations are supported to popularise and Technology among children, farmers and public by providing support to conduct Science financial Exhibitions, Training Programmes, Popular Lectures, on various aspects of Science and Technology. Under this scheme, during the last 5 years, action was taken implement 250 programmes at the cost of Rs. 43.29 lakhs.

## 10.9 TRAVEL GRANT FOR YOUNG SCIENTISTS

This scheme facilitates presentation of research ideas in National and Inter National forums by our researchers. 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. Under this scheme, during the last

5 years, action was taken to support 60 scientists at the cost of Rs.13.53 lakhs.

## 10.10 ASSISTANCE FOR SCIENCE TECHNOLOGY PUBLICATIONS

This programme enables science and technology publications in Tamil, so that science and technology is spread among children and the public and latest developments reach them. Financial assistance is also provided to scientists to bring out text books in Tamil for the use of students. Under this scheme, during the last 5 years, action was taken to support 12 publications at the cost of Rs.2.26 lakhs.

## 10.11 TAMIL NADU SCIENTISTS AWARD (TANSA)

Research and development contributions of our State Scientists and researchers is being encouraged and honored through TANSA. Those who have made significant contribution in their field of research through their skill / pioneering or outstanding, applied research work leading to S&T development in the State are presented with cash award of Rs.50,000/-and a citation. Awards are given

in 10 disciplines such as (i) Agricultural sciences (ii) Biological sciences (iii) Chemical sciences (iv) Engineering and Technology (v) Environmental sciences (vi) Medical sciences (vii) Mathematical sciences (viii) Physical sciences (ix) Social Sciences and (x) Veterinary Sciences. Under this scheme, during the last 5 years, action was taken to honour 50 scientists at the cost of Rs. 23.32 lakhs.

## 10.12 CREATION OF SCIENTIFIC AWARENESS

To create scientific awareness among the self help groups, farmers and students financial assistance is given to various institutions in our State. Under this scheme, during the last 5 years, action was taken to implement 50 programmes at the cost of Rs.32.05 lakhs.

## 10.13 UALITY IMPROVEMENT OF SCIENCE EDUCATION IN RURAL SCHOOLS

School Science Teachers who are handling the Science subjects of VI, VII and VIII standards are provided with inservice training to update their knowledge on the current syllabus and new areas. This programme is conducted for a period of five days in well established Arts and Science Colleges of our State. Under this scheme, during the last 5 years, action was taken to implement 50 programmes at the cost of Rs. 46.68 lakhs.

### 10.14 DISSEMINATION OF INNOVATIVE TECHNOLOGY

Innovative technologies useful in improving employment potential are disseminated by academics and scientists through training programmes and workshops. Under this scheme, during the last 5 years, action was taken to implement 80 programmes at the cost of Rs. 42.05 lakhs.

## 10.15 APPLICATION OF SCIENCE TECHNOLOGY IN RURAL AREAS

Selected rural areas of our State in selected districts are covered under this scheme where the benefits of science and technology techniques are imparted through educational and research institutions. Under this scheme, during the last 5 years, action

was taken to implement 50 programmes at the cost of Rs.56.10 lakhs.

## 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 (Polytechnics included). Under this scheme, during the last 5 years, action was taken to implement 50 programmes at the cost of Rs. 56.10 lakhs.

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

Research scholars of our State colleges are supported to takeup useful and application oriented research during their doctoral studies by bridging the gap in research funding. Proposals received from research students of various colleges are evaluated and selected students are provided with financial support to conduct their research studies. Under this scheme, during the last 4 years, action was

taken to implement 20 projects at the cost of Rs.60.00 lakhs.

# 10.18 IMPROVEMENT OF SCIENCE AND TECHNOLOGY INFRASTRUCTURE FACILITIES AT GOVERNMENT COLLEGES

Promoting both quality and quantity in Higher Educational sector is important so that trained and technical manpower is made available to the various sections of society. The S&T infrastructure facilities available in Government colleges have to be improved to make desirable impact in the area of research development. Therefore, financial support is provided to improve infrastructural facilities such as laboratory and instrument facilities in Government colleges of our state for research and development. Under this scheme, during the last 3 years, taken action was to improve S&T infrastructure in 8 Government Colleges at the cost of Rs. 45.00 lakhs.

### 11. Tamil Nadu State Council for Technical Education

11.1 Tamil Nadu State Council for Technical Education was established in the year 2010 by an Act of the Tamil Nadu State Legislative Assembly for co-ordination and determination of standards in colleges and scientific research in technical education and development of technical education in the State and to forward the developmental programmes of University and Colleges to University Grants Commission (UGC) and All India Council for Technical Education (AICTE).

## 11.2. ACTIVITIES UNDERTAKEN DURING THE LAST FIVE YEARS

- International Conference An on Accreditation on the lines the Washington Accord Abet and Imperatives was conducted on 18th and 19<sup>th</sup> May, 2011 at Breeze Hotel. Chennal in coordination with National Board of Accreditation.
- This Council Co-ordinated the conduct of special training programme in English

language (Bridge Course) at Anna University, Chennai, with the 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 co-ordination of the British Council on 26<sup>th</sup> July 2013.

- Original Educational The Resources available with the Tamil Nadu State for Council Technical Education, Chennai. on the following subjects Technical namely a) **English** b) Engineering Physics c) Mathematics d) Lecture on Trigonometry e) Limits and Continuity and f) Integral Calculus were copied and distributed to 500 Engineering Colleges at cost а Rs.1,00,050/- out of the Development fund account of the Council in July 2013.
- An International Seminar on "Present Trend of Hybrid Pedagogy in English Language Teaching " by Professors from Cambridge was organized during the

second week of November 2014 in active collaboration with the Anna University and the Officers of Technical Education Quality Improvement Programme (TEQIP) at Directorate of Technical Education in Chennai and a sum of Rs.1.10 lakh was spent out of the Development Fund Account of the Council.

With the approval of the Government, 3 batches of 60 teachers each were imparted training on Train - The -**Trainers Programmes** conducted by NASSCOM (National for Soft are Association Services Company) **Foundation** in Skills Integrated Product Development (FSIPD)" in active coordination with the Faculty Development Centre, Anna University, at Chennai, Tirunelveli and Nagercoil at cost of Rs.3,75,000/- from Development Fund of the Council.

### 12. Tamil Nadu State Urdu Academy

12.1 The Tamil Nadu State Urdu Academy was started on 21.07.2000. Hon'ble Minister for Higher Education is the Chairman of the Academy. In Tamil Nadu, Urdu Language is offered in 20 Colleges and Arabic language is offered in 5 Colleges.

#### 12.2 ACHIEVEMENTS

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

**K.P. Anbalagan**Minister for Higher Education