



HIGHER EDUCATION DEPARTMENT

POLICY NOTE 2011-2012

DEMAND NO. 20

**P. PALANIAPPAN
MINISTER FOR HIGHER EDUCATION**

©
Government of Tamil Nadu
2011



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Nothing is sweeter, than watery gruel
if obtained by ones own toil

(Thirukkural - 1065)

“Give a man a fish; you have fed him for today. Teach a man to fish; and you have fed him for a lifetime”—Old Chinese Proverb.

INTRODUCTION

Education especially Higher Education builds capacity in our people. It enables people not merely to subsist, but also provides the basis for a high quality of life. This is the aim of the modern Human Resources Development Index based approach of rating nations. It is an important underpinning of the Millennium Development Goals.

The vision of the Government of Tamil Nadu in the realm of Higher Education is to make institutions of higher education emerge

as centres of innovation, excellence and development. The major focus is on Quality. The mission is to provide world class quality education, while opening the portals of higher education to students from rural and backward areas and marginalized families. The aim is to develop, recognize and enhance talent and skills in our youth, to equip and enable them to meet the emerging challenges and demands of the century. The emphasis is also on inclusion in higher education.

The Mission Statement of the department

“To promote Human Resources Development through self-actualised Institutions; producing high quality ethical professionals in sufficient number to make this State and Country prosperous; and to make Tamil Nadu a global hub for University Education”.

This vision translates into the following objectives:-

- ❖ To provide and improve the quality of Higher Education in

Arts & Science and in Technical Education

- ❖ To achieve Higher Education Gross Enrolment Ratio of 25% by 2025.
- ❖ To provide infrastructure facilities for the development of Colleges
- ❖ To impart education by World Class pedagogy.
- ❖ To implement E-Governance in the Administration.
- ❖ To facilitate institution-industry linkage for inculcating entrepreneurial culture and encouraging Research and Development.
- ❖ To promote inclusive Socio-Economic Development of the State by offering Higher Education to the students who belong to weaker sections of society.
- ❖ To popularise Science & Technology among people

- ❖ To produce degree holders of international quality for a global job market.

1.2 The Government has chalked out a 12 point programme to revitalise Higher Education on the following lines: -

- I. To grant autonomy to Higher Education institutions to choose their courses and syllabus to meet the global Human Resource demand;

- II. To revitalise and reorganise the State Level Accreditation institution with international standards to rate Universities and Colleges;

- III. To streamline the appointment of Vice-Chancellors. An independent selection committee comprising of eminent academicians will select the Vice-Chancellors based on their academic record, administrative experience and research contributions made by the applicants;

- IV. The senate, syndicate and academic council will work towards achieving higher academic rating. Mid-term progress review and accountability on the performance will be made, including that of the Vice-Chancellors;

- V. Universities and Colleges will be judged based on their performance in the area of curriculum, courses to keep abreast of the latest world trends in pedagogy, research, infrastructure including IT infrastructure, proper, efficient and transparent administration and management based on e-governance;

- VI. To introduce seniority cum performance based promotion to attract and retain world class talent to make the administration smart and transparent to the Universities and Institutions, in order to concentrate on academic and on Research & Development activities;

This will be done by means of all or some of the following measures as the situation demands: -

- 1) Performance appraisal of teachers may be initiated based on Memoranda of Understanding (MOUs) with each faculty member. Objective parameters with adequate weightage for research work based on quantifiable parameters would be built in. Student and Peer group appraisal should be weighted more than superior's appraisal as in USA etc. Outcome of performance appraisal should be used by the system for the purpose of merit-based promotions, other incentives and awards. The institutions should adopt objective and transparent procedure for promotions. This should be ensured by sending observers on behalf of the statutory bodies. They would serve in the selection committees.

- 2) Points can be allocated to teaching, learning and evaluation activities,

which include tutorials, lectures and practical; research activities and co-curricular activities, professional development related activities, campus development, institutional governance and consultancy projects.

- 3) An "Internal Quality Assessment Cell" will maintain an annual database for individual and institutional performances.
- 4) Based on their rating by the accrediting bodies, private institutions can charge their fees. Government institutions shall levy fees at a nominal and subsidized rate.
- 5) In the USA, there are "For Profit" higher education institutions. There are private universities with a reputation for excellence like the George Washington University. The XII Plan discussion features giving an opportunity to such education providers. This opportunity can be

explored at least for vocational and professional education.

- 6) Students from economically weaker sections will have to be charged at lower rates.
- 7) To enable Distance Education courses run by Universities to adopt IT based e-governance and cloud computing;
- 8) Merger of Anna Institutes of Technology with Anna University to restore its past glory and credibility, lost due to decentralization;
- 9) Research and Development will be the main focus of Anna University, Chennai to enable its students to compete in the world market. Anna University will emerge as a centre of excellence; there would be emphasis on nano-technology, molecular biology etc which are the latest fields. Industry-Institution collaboration is to be strengthened.

- 10) Anna University will be the leader and prescribe syllabi and curricula for all Engineering and Technology programmes in Tamil Nadu;

- 11) Centres of Excellence in Research and Development will be created in at least 10 important and specific areas chosen by an expert committee. Joint ventures and Memoranda of Understanding with world class universities and premier institutions across the world would be encouraged. Research scholars and the best performing students across the nation would be encouraged to take up research partnering with premier World Institutions and their study will be sponsored by the Government. These research scholars after obtaining their Ph.D will have to serve the Institutions / Industries in Tamil Nadu for at least six years. It is expected that at least a sizeable number of Ph.D. students would be produced in the succeeding years through this scheme.

12) Ph.D. thesis are to be transparently evaluated with external examiners whose credentials inspire confidence and respect in academia.

1.3 The policy of the Government will certainly promote transparency and accountability of the educational system towards its primary stakeholder's viz. teachers, parents, children and the general public. Especially, the youth would be uplifted by promoting social cohesion, economic growth and employment opportunities in and outside the country.

To ensure graduates and post-graduates of world class quality for a global job market, the following initiatives are proposed :-

a) To internationalize the quality of education in a globalized world, Dual degrees in collaboration with Foreign Universities on the model of TNAU with Cornell University, USA, MOUs can be initiated.

Opportunities for exchange with foreign students will be created.

- b) To attract Person of Indian Origin [PIOs] from foreign university and research labs at various levels right from senior research associates to chair professors on the model of CSIR, IITs and IIMs.
- c) Foreign faculty to be appointed on contract basis for self-financing courses with syllabus on par with leading international universities like MIT, Princeton, Oxford, Cambridge, London School of Economics, etc.
- d) Collaborative programs with leading research institutions viz., Institute of Mathematical Sciences, Chennai; National Institute of Ocean Technology, Chennai (Environmental Studies, Bio-technology, Electronics, etc.); Structural Engineering Research Centre, Chennai; Archeological / Zoological / Geological Survey of India; Indian Institute of Technology, Madras; etc., are to

be conducted in order to enable the students to undertake Project Work in these research organizations in order to enable them to have hands-on experience on modern research and to enhance their competitive skills.

- e) Applied Research, product development and productionisation are areas in which India is perceived to lag behind advanced economics. Industry-University Collaboration, close interaction, visiting faculty from industry constituting about fifty percent of the faculty of courses with a reverse traffic of academics serving industry on sabbatical are important for a frog in the well mentality to be replaced by a robust outward looking attitude. The ancient Tamils said, "All Places are our own; all people are our relatives". Let the winds blow from all directions.
- f) To equip some Laboratories in Colleges and Universities to at least near world standards –

Automated HPLC with column, PDA, RF, Fluorescence, UV-vis detector Gas Chromatograph [GC] column, PCR [Polymerase Chain Reaction] machine, Ultra-violet visible spectro-photometer, Ultra centrifuge, etc.; some other equipment contemplated include:

1. NMR (Nuclear Magnetic Resonance) (online)
2. HPLC (High pressure liquid Chromatograph (Photo Diode array PPA Detector. RF- Fluorescence Detector.
3. LC-MS(Liquid Chromatograph-Mass Spectrograph(APC,mode,ESI, MALDI)
4. FTIR (Fourier transform Infra Red) Raman Spectroscope
5. Lyophiliser
6. Integrated coupled plasma spectrometer
7. Electron Microscope (EM/ SEM (Scanning Electron Microscope)

- g) To encourage the gifted students with prodigious talents, age should not be a bar for acquiring UG, PG and Ph.D., Degree in Professional, Arts and Science disciplines. Rigid rules on minimum age would be relaxable with a standard mechanism provided for that purpose. There are several documented instances in India of such relaxation.
- h) To facilitate the students to learn foreign languages, regular classes will be arranged in English, German, Chinese and French. Collaborative programs with institutions such as British Council, Goethe Institute (Max Mueller Bhavan), Chinese Language School , Alliance Francaise (French) etc. will be conducted.
- i) To facilitate the students to learn other Indian languages such as Sanskrit, Telugu, Hindi, Kannada, Malayalam, Bengali, Punjabi etc., appropriate institutions will be approached.

- j) **Public – Private Partnerships:** Regulators will be appointed to ensure the Quality of private providers. To ensure that growth is not stifled, transparent laws will be formulated. This would avoid a case-to-case approach and to promote a society where the Rule of Law prevails. Some progress has already been made in this direction.
- k) Granting of Associate degrees will be facilitated in community colleges to develop and formalise the skills acquired in job oriented practical training (Vocational job oriented courses).
- l) Financial aid to poor students like the educational loans from banks, Interest Subsidy Scheme are very important to ensure that bright youngsters from poor families are not denied quality education, which they deserve on merit.

m) **Laptops Scheme**

The Government of India have developed a pilot scheme for use of Information and Communications Technology (ICT) for the use of school and college students. Tamil Nadu is far ahead of other states by virtue of its laptop distribution programme.

This is a world leader vision that is ahead of all other nations. It is bound to be a referral programme as the Nutritious Noon Meal Programme of Hon'ble late Chief Minister Dr. M.G.R. has become. A generation of Computer literate students from the poorest of the poor families will result. They will access world knowledge available on the Internet. They will break the vicious cycle of knowledge deprivation resulting in a macro-economic under employment equilibrium and relative poverty. India and Tamil Nadu will participate in the world knowledge explosion as an equal partner if not a leader.

This programme is not entertainment oriented but a huge quantum jump investment in human resources. The return on investment (ROI) will be many times that in normal economic activity like industry. Only time will tell.

This year distribution of about 3,70,000 number of laptops to an equal number of students in the higher education sector alone is envisaged as a starter. It will cover the target student population envisaged in a phased manner in the short run itself.

- n) **Higher Education Survey** - To gather data for planning purposes, a survey has been planned by the Government of India. We have identified the Department of Economics & Statistics, Department of Technical Education & Department of Collegiate Education as possible nodal departments for data gathering. Accurate Data gathering for

planning through Real Time or Quick Time surveys will be done.

o) Indian Institute of Information Technology

One new Indian Institute of Information Technology (IIIT) in Srirangam Constituency, Trichy District is proposed as stated in the budget.

p) All the distance education courses run by Universities have to adopt IT based E-Governance as stated above. Enrolment and exit from courses has to be automated, digitalized and implemented. IT may adopt cloud computing for access cost reduction, scalability and inter-operability with security from hacking.

q) Information and Communication Technology would be integrated effectively in all aspects – access, pedagogy and governance by networking all Distance Education institutions to meet the technological demands of the system. A Technical Advisory

Body with representatives from the IT Sector, telecom, space and industry can be constituted to provide guidelines, set metadata standards, monitor interoperability, ensure flexibility and track the latest developments in application.

- r) The Tamil Nadu Skill Development Mission body under Labour & Employment Department will bring employability among the graduates from Arts, Science, Engineering and Diploma professions and ITI and other skilled workers. The aim of this Mission is to empower all the students from the school drop out to graduates to become employable globally. The existing Skill Development Mission functioning under the employment department will dovetail its schemes and synergise its capacity with this Mission.
- s) The Mission will train the students and dropouts in world class Global Skills with necessary tools,

techniques, methods, procedures, processes, business etiquette, manners, communication skills, spoken English etc., and prepare the students to take up value added jobs in the Service sectors such as Construction, transportation, tourism, facility management, event management, Manufacturing, Aircraft Maintenance and service, shipping and servicing, financial management, accounting and other global skills necessary in all the sectors of the economy. This will create a Virtual Skill Development Network which will connect all the institutions across the State. They will imbibe the necessary skills using High Definition Virtual Tele-presence, augmented Virtual Reality technologies in all the disciplines and also provide the finishing school on a common platform to learn, equip and prepare them and get empowered.

- t) The entry to the Skill Development Mission network will be digital and

a Global Certificate will be issued in associations with the Global World Class Skill Certification associations such as City and Guilds. All the Skill Development, Placement and Training activities could be brought under one umbrella of the Tamil Nadu Skill Development Mission under the Labour and Employment Department.

1.4. It will be vested with the following responsibilities: -

- The courses offered will focus on up-skilling, re-skilling and new skilling, with industry collaboration in deciding, designing and defining the courses;
- Identify skills gaps, develop and implement skills development trainings;
- Identify training needs and to organize training programmes; and

- Strengthen the training capabilities of research stations and educational institutions and take follow-up action.

1.5 The Tamil Nadu Skill Development Mission will provide demand-oriented training as against supply-oriented training, thereby the scope of the training programmes can be expanded by catering to the training needs of the State Departments and Manufacturing sectors.

1.6 The affiliating University of the colleges, as a part of discharging its social responsibilities, will also extend its technological support to the less privileged sections of the Society by conducting training programmes for the unemployed youth on a no-profit basis. Offering stipendiary training programmes with varying durations on job-oriented topics for candidates with basic qualifications will be explored.

1.7 Skills selected for improvement could be from Communication Skills, Technological Skills, Demonstration Skills, Organisational Skills, Training Skills and Diagnostic skills. Attention will also be given for attitudinal development.

1.8 Resource persons will be pooled from Government Educational Institutions, Universities, Industrial sectors and other reputed private trainers. Optimum theoretical and practical / field mix will be followed in Training Programmes to relate them to the needs and problems of the participants. Maximum stress will be laid on field visits, case studies, group discussions and audio-visual teaching so as to make the programmes participatory, interactive and experiential in the best traditions of the PRA and the Participatory family of methods approach.

1.9. The Mission will follow a system approach to training, based on training needs assessment. Evaluation of needs will be undertaken even during the course of a training activity and possible modifications brought into the programme. Terminal evaluation of the participants will be done and this feedback will help to improve future training activities. An eminent faculty will be brought live via Video Conference to highlight the finer nuances of pronunciation, intonation and body-language to impart Communication and other Skills.

1.10. National Vocational Qualification Certificates (NVQCs)

The National Vocational Qualification Certificates (NVQCs) can also be conducted through the Tamil Nadu Skill Development Mission. National Vocational Qualification Certificates (NVQCs) are work based awards in England, Wales and Northern Ireland that are achieved through assessment and training. To achieve an NVQ, candidates must prove that they have the ability (competence) to carry out their job to the required standard. NVQs are based on National Occupational Standards that describe the 'competencies' expected in any given job role. For example someone working in an administrative office role may take an NVQ in Business and Administration. There are five levels of NVQ ranging from Level 1, which focuses on basic work activities, to Level 5 for senior management. Blue collar workers like electricians, plumbers etc., are allowed to practice only if they have the certificates. This will avoid the kind of problems due to collateral damage by poorly trained technicians. It will also avert accidents that we are often confronted with in our daily lives.

1.11. Heritage Preservation

Conservation and restoration of Heritage buildings housing universities and colleges will be given a fillip. The services of retired Archaeological Survey of India personnel will be used by the Construction Wing of the technical education department and other agencies involved in building maintenance will be used for this purpose.

1.12. Translating the Vision into Reality

1. A record number of eleven Arts and Science colleges have been opened by the Hon'ble Chief Minister in a very short time this year. This number appears to be a first. The colleges have been opened in areas where the reach of higher education is less than elsewhere. One of them has been opened in Srirangam Constituency in fulfilment of her election promise by the Hon'ble Chief Minister. The others have been opened at Nemmeli (Kanchipuram District), Nagalapuram (Tutucorin District), Harur (Dharmapuri District), Kallakurichi

(Villupuram District), Sattur (Virudhunagar District), Vedaranyam (Nagapattinam District), Tiruppattur (Vellore District), Thiruthuraiipoondi (Thiruvarur District), Papireddipatti (Dharmapuri District) and Nannilam (Thiruvarur District).

2. Follow up action on the merger of the Anna Universities of technology at Chennai, Tiruchi, Madurai, Coimbatore and Tirunelveli already announced in the Governor's address will be taken.
3. A Writ Petition was filed in the Madras High Court against the AICTE norms, which increased the minimum eligibility marks for admission to B.E. / B. Tech courses. A stay was granted for 2011-2012. This has enabled many students from the weaker sections of society and rural areas to get admission. Subsequent to our writ, AICTE themselves have reduced the minimum eligibility criteria marks and changed their own norms, though not fully.
4. Fees for professional courses like BE, B.tech and P.G. courses like MBA, MCA

by the Hon'ble Justice (Retd.) N V Balasubramanian Committee was fixed at the same level as last year.

5. We have Re-Introduced Transparency in transfers of teaching staff of colleges under the control of DCE as it prevailed in 2004-2006.
6. We have also imparted transparency in transfers of teaching staff of colleges under the control of DTE.
7. Transparency in transfers of non-teaching staff of colleges under the control of DCE and DTE is being implemented for the first time.
8. The Committee under the Tamil Nadu Educational Institutions (Prohibition of collection of capitation fees) Act, 1992 to enquire into complaints of collection of capitation fee and charging excess tuition fee higher than that prescribed by the Committee on Fixation of Fee on Self Financing Professional colleges has been reconstituted with academicians of excellence.
9. We have introduced transparency in appointments of all teaching posts by

insisting on advertisements and display on Web Site.

10. The Inter-se-Seniority list of the Assistant Professors working in the Government Arts and Science Colleges and B.Ed Colleges hanging fire was tackled on a war-footing based on the Supreme Court judgment using a heuristic algorithm. This approach is also a first. It was transparently put on the Web Site.
11. The Committee to oversee the admission made by the consortium of self financing professional, Arts and Science colleges is now headed by Justice Abdul Hadi (Retired).
12. A committee under Hon'ble Justice (Retd.) N V Balasubramanian has been constituted to fix the fees for teacher training courses. This will prevent collection of exorbitant fees. This will benefit students of poor and middle class families.
13. The Universities have been instructed to deposit their funds in Government financial undertakings like Tamil Nadu Power Finance and

Infrastructure Development Corporation Limited, Tamil Nadu Transport Development Finance Corporation Limited, etc. to ensure more returns on their investments by way of higher rates of interest. This will also help avoid allegations while choosing banks.

14. A new engineering college will be started at Bodinayakkanur in Theni district as already announced in the budget.
15. An Indian Institute of Information Technology at Tiruchi has already been announced in the budget.
16. The children of Sri Lankan refugees in Tamil Nadu have permitted to have counselling along with the Open Competition candidates belonging to Tamil Nadu for 1 year B.E./B.Tech. This year this facility has been further enlarged and extended. From this academic year 2011-12, the students in the above category have been permitted for admission to Lateral Entry for B.E./B.Tech. and for Post

Graduate courses viz. MBA / MCA/
M.E./M.Tech.

17. Tuition fee concession was granted to the first Graduate learners who have been selected for professional courses through Single Window Counselling in Tamil Nadu from the year 2010-2011. The above said scheme has been extended to the eligible wards of Sri Lankan refugees living in the camps in Tamil Nadu.

1.13. Opening the windows to the world

The following schemes already announced in the budget will also be implemented as part of the effort to take university level education to a higher level equilibrium.

1. To establish smart classrooms with Video Conference facilities in 10 Universities (*@Rs. 20 Lakhs per University*) amounting to Rs. 2.00 Crores.
2. To establish Language Laboratories to enable the students to become proficient in Foreign Languages, viz., English, French, German and Chinese

in 10 Universities (*@Rs. 15 Lakhs per University*) amounting to Rs. 1.50 Crores.

3. To establish Entrepreneurship cum Skill Development centres in 10 Universities to train students for profitable self employment / gainful employment (*@ Rs. 20 Lakhs per University*) amounting to Rs. 2.00 Crores.
4. To invite renowned Professors from Foreign Universities to train the Faculty / Students / Research scholars. An expenditure of Rs 10 Lakhs per University for 10 Universities to avail the services of 10 Foreign Professors is proposed. The cost for visit of 15 days will be Rs. 1.00 Lakh. The host University shall take care of local hospitality and accommodation with their existing infrastructure. The total expenditure amounts to Rs. 1.00 Crore.
5. To establish a Curriculum Development Cell in 10 Universities to enrich our existing curriculum to International standards through cross pollination of ideas from distinguished Professors /

Experts of International repute from other countries. Expenditure will be incurred @ Rs. 1.00 Crore per University for 10 Universities amounting to Rs. 10.00 Crores.

6. The Universities have also been instructed to improve the process of evaluation of Ph.D. Thesis of research scholars by appointing examiners with impeccable academic credentials. They have been advised to follow the pattern adopted in IITs, IIMs and renowned universities in the country like The Jawaharlal Nehru University, Delhi University, etc. The leading species of the large genus are Madurai Kamaraj University and Mother Teresa University.

Conclusion:

The ancient Tamils were in the forefront of global trade and knowledge. They were world leaders in science and technology. The Roman artefacts at Arikamedu attest to this. Similarly Roman coins have been recovered from the river bed of the Noyyal and Cauvery at Perur and

Karur respectively. *Periplus of the Erythraean Sea* (Greek for Red Sea) describes in great detail our ports and articles of trade. The naval power of the Pallavas and Imperial Cholas which conquered Sri Vijaya identified as the present Malayan archipelago. Knowledge of air power is reflected in the descriptions of *Vimanas* using mercury driven engines in Mayamata, Manasara, Samarangana Sutradhara etc. This shows knowledge of aircraft.

The Tamil Siddhas like Karuvur Thevar probably used teleportation as described in Tamil literature. There are unsubstantiated claims that he travelled as far away as present Kandahar (*Gandhara*). Similarly, Siddha Roma Rishi is claimed to have travelled to Rome; Siddha Poonaikannar to Egypt etc. The medicine practised then like the use of mercury by Pulippani Siddhar is now being researched by science in USA and Europe after having been lampooned in the last century as superstition. Mercury in *siddha* medicine is claimed to cure HIV/AIDS etc. Research is on-going. Similarly, *Thanga-Bhasma* (fine iterations of gold in the form of ash) used traditionally in Siddha medicine now reappears in the field of nano- medicine.

We were once creators of knowledge. Nagarjuna went from Kancheepuram to become the most famous Vice – Chancellor of arguably the best university of the world in its time, Nalanda. We became users of knowledge by way of foreign collaboration agreements to produce various products invented or at least designed abroad in the recent past. The time has arrived for us to become generators of knowledge once again. This knowledge revolution in an inclusive manner underpins the modern global superpower. We shall endeavour to recapture our past glory instead of merely talking about it. We shall strive to succeed and never give up.

Tamasoma Jotir Gamaya – From darkness let us go to light – enlightenment.

Lux et Veritas ex Tenebris – From darkness to Light and Truth

Darkness is engulfed everywhere, but remember that learning alone could lead you to light!

(Aranericharam – 194)

FINANCIAL OUTLAY

Under Demand No.20 - Higher Education, the total outlay is Rs. 2187.18 crores, of which Rs. 450.26 crores are for Plan Schemes and Rs. 1736.92 crores are for Non- Plan schemes.

BUDGET ESTIMATE 2011 – 2012

HEAD OF ACCOUNT		PLAN	NON-PLAN	TOTAL
(Rupees in lakhs)				
2059	Public Works Maintenance and Repairs	-	2526.71	2526.71
2202	General Education University and Higher Education	1762.21	143462.00	145224.21
2203	Technical Education	38892.08	26670.08	65562.16
2204	Sports and Youth Services	1295.90	-	1295.90
2205 104	Arts and Culture Archives	41.80	610.93	652.73
2235	Social Security and Welfare	-	29.96	29.96
2251	Secretariat – Social Services	-	352.57	352.57
3425	Other Scientific Research	568.37	--	568.37
3454	Census Surveys and Statistics Gazetteer and Statistical Memoirs	-	40.01	40.01
4202	Capital outlay on Education, Sports, Arts and Culture	2465.42	0.01	2465.43
7610	Loans to Government Servants Etc.		0.01	0.01
Total		45025.78	173692.28	218718.06

PART-II SCHEMES FOR THE YEAR 2011-2012

(Rs. in lakhs)

Sl No	Description of the scheme	Ultimate Cost	Cost in 2011- 2012
Collegiate Education			
1	Purchase of Computers and accessories in 23 Government Arts and Science Colleges.	319.90	319.90
2	Purchase of Computers and accessories in O/o. the Director of Collegiate Education and 6 Regional Offices.	19.60	19.60
Technical Education			
3	Construction of 20 additional class rooms in 5 Government Engineering Colleges.	150.00	150.00
4	Construction of 8 Laboratories for Mechanical Engineering branch at Govt. College of Engineering Bargur,	48.00	48.00
5	Construction of 20 additional class rooms in 8 Government Polytechnic Colleges.	150.00	150.00

6	Purchase of 3 Jeeps for the use of Executive Engineers, Technical Education Division, Trichy, Tanjavur and Chennai.	16.50	16.50
7	Purchase of 1 No. of Printer cum copier for Directorate of Technical Education, Chennai,	1.00	1.00
Tamil Nadu Archives			
8	Purchase of storage cabinets for Microfilm Unit at Tamil Nadu Archives.	5.00	5.00
9	Purchase of Heavy Duty Invertors for use at Tamil Nadu Archives during Load shedding and related accessories.	2.00	2.00
10	Purchase of server, web based retrieval, A.C. and other related accessories to Tamil Nadu Archives.	23.00	23.00
11	Digital Scanning and Microfilming (together with related accessories) of Government of India and Fort St. George Gazettes.	10.00	10.00

2. COLLEGIATE EDUCATION

2.1 The Directorate of Collegiate Education was formed in the year 1965 with a view to administer the Department of Collegiate Education exclusively by bifurcating the erstwhile Directorate of Public Instruction into Directorate of School Education and Directorate of Collegiate Education with a view to improve the standards in the field of Higher Education. New courses such as MCA / MBA / M.Sc. (I.T.) in addition to the conventional courses have been added during the past 12 years. This will enable students to have better employment opportunities. 1318 Colleges (62 Government Colleges, 7 Government Colleges of Education, 162 Government Aided Colleges, 24 University Constituent Colleges and 1063 Self Financing Colleges) are functioning under the administrative control of the Directorate of Collegiate Education.

Starting of New Arts and Science Colleges

2.2 A record number of eleven co-educational University constituent Arts and

Science Colleges have been opened by the Hon'ble Chief Minister in a very short time this year. The colleges have been opened in areas where the reach of higher education is less than elsewhere. One of them has been opened in Srirangam Constituency (Trichy District) in fulfillment of the election promise of the Hon'ble Chief Minister. Other colleges are opened at Nemmeli (Kanchipuram District), Nagalapuram (Tutucorin District), Harur (Dharmapuri District), Kallakurichi (Villupuram District), Sattur (Virudhunagar District), Vedaranyam (Nagapattinam District), Tiruppattur (Vellore District), Thiruthuraiipoondi (Thiruvarur District), Papireddipatti (Dharmapuri District) and Nannilam (Thiruvarur District).

New Courses in Government Colleges

2.3 Taking into consideration the considerable increase in enrolment ratio in Government Colleges, Government will start new courses according to feasibility and demand.

Free Education

2.4 Free Education has been provided in all Government and Government Aided Colleges up to Post Graduate Level. 4,46,502 students in U.G. courses and 13,293 students in P.G. courses have been benefited under this scheme. The students belonging to all communities are eligible for exemption of tuition fees.

Free Bus Pass

2.5 A scheme to provide Free Bus passes to all the students of Government Colleges is in operation. Nearly 1,50,034 students have benefited under this scheme.

Shift System

2.6 Shift System in Government Arts and Science Colleges is in vogue.

B.Ed. Admissions through Counselling

2.7 Admission to B.Ed courses are being made through Single Window System in Government and Government Aided

Colleges. This system, ensures transparency and has been acclaimed by all.

Choice- Based Credit System.

2.8 Choice-Based Credit System in Government /Aided / Self-financing Arts and Science Colleges is in operation.

Implementation of English Language Fellow Programme in Arts and Science Colleges.

2.9 The objective of this programme is to enhance English teaching, by providing the teachers with the latest techniques and the students with communication skills that are required to compete in the global market. 20 English Lecturers from various Government Colleges were trained as Master Trainers. These Lecturers have conducted Zonal Workshops in Four Zones namely Cuddalore, Coimbatore, Madurai and Chennai along with English Language Fellow deputed by the U.S. Cultural Affairs Department.

Project Genesis Training Programme

2.10 Project Genesis Training Programme is being implemented in association with Infosys BPO. Mysore to train College Teachers, in order to equip the students pursuing Higher Education with necessary communication and soft skills. 170 lecturers have been trained. 104 students placed in Infosys and other MNCs.

Differently abled students exempted from payment of fees

2.11 Differently abled students studying in Government, Government Aided Arts and Science Colleges, Engineering colleges, Polytechnics and Universities, are exempted from payment of tuition fees.

Studying / Diploma / Certificate Course along with the Degree Course

2.12 For the welfare of the student community and to enable them to fare well in the job market, a scheme to study a Diploma / Certificate Course in Polytechnics along with the degree course is in operation in Government Arts and Science Colleges. The students studying in Government

Colleges can join a Diploma or Certificate Course in the nearby Polytechnics.

National Service Scheme (N.S.S)

2.13 National Service Scheme is being implemented in Tamil Nadu since its inception i.e. September, 1969. At present, National Service Scheme is functioning with 3,70,018 student volunteers' strength in Tamil Nadu in various educational institutions. Expenditure for the Scheme is shared between Central and State Governments in the ratio 7: 5. The Scheme is successfully implemented in Universities, Colleges, Technical Institutions, ITIs, Teacher Training Schools and in Higher Secondary Schools.

2.14 Activities aiming at the blossoming of the students as responsible citizens are organized through NSS Programme, viz. Leadership Motivation, Yoga and Meditation, Career Guidance and Counselling, Soft Skills Development, Disaster Management, First-Aid Training, Environment Enrichment Programmes, Road Safety and Safe Driving, keeping School Dropouts to continue their education, Blood

donation, Blood grouping, maintaining Blood Donor's Directory AIDS awareness programme and conduct of health camps including leprosy, eye, dental, breast cancer eradication, cardiac care, mother-child care are conducted continuously.

2.15 During Special Camping programme, students work with local youth in the adopted villages and create permanent assets by providing public utility services, construction of toilets, water storages, Community halls, compound walls, developing play grounds, road formation works, health camps etc. NSS volunteers donated 79,200 units of blood, planted around 4,87,500 saplings. Approximately 95,000 illiterates have been made literate.

Empowerment of Women

2.16 Free coaching is given exclusively for women students appearing for IAS / IPS Examination at two centres - one at Queen Mary's College, Chennai and the other at Arulmigu Meenakshi Government College for Women, Madurai. They have been established by the Government to give free coaching to women students. In each centre,

60 women students are given free coaching for appearing in IAS/IPS Examinations.

Stipend for Tamil medium students

2.17 The scheme of stipend to students studying in Tamil Medium was introduced from the year 1971-72 and Rs.400/- is given as stipend to each student studying in Tamil Medium. More than 33495 students have been benefited under this scheme.

Special coaching to SC/ST and MBC Students

2.18 The students studying in Government Colleges particularly in rural areas belonging to SC/ST and MBC communities face some initial difficulties in English, Maths and Science Subjects. Special coaching is given to these students to make them fully conversant with these subjects. About 4400 students benefited under this scheme.

Tamil Nadu Agricultural Labourers-Farmers (Social Security and Welfare) Scheme, 2006

2.19 This scheme is for the upliftment of the Agricultural Labourers, Farmers and Registered Tenants and their dependants in social, educational and economic status.

2.20 A sum of Rs. 8 crores and an additional Rs. 1 crore under SCP have been provided to improve the educational status of the children of Agricultural Labourers and Farmers in all Arts and Science Colleges as detailed below: -

SI No	Details of course	Day scholar		Hostler	
		Boys Rs.	Girls Rs.	Boys Rs.	Girls Rs.
1.	UG Degree course (per year)	1750	2250	2000	2500
2	PG Degree course (per year)	2250	2750	3250	3750

Stipend to Research (Ph.D.) Scholars

2.21 "Stipend to Research Students" scheme is being implemented by the Government of Tamil Nadu since the year 1998-1999 to grant stipend to 30 Research scholars in Government and Government Aided Colleges for doing research. From the year 2000-2001, the number has been increased from 30 to 45 with a reservation of 30% for women candidates. The High Level committee appointed by the Government will select research scholars every year for the grant of stipend.

Job Fair

2.22 A Placement Cell has been established in the Directorate of Collegiate Education for the benefit of the students. Through this cell Job Fairs have been conducted in various Centres viz. Government Arts College for Men, Nandanam, Chennai, Dr. Ambedkar Government Arts College, Vyasarpadi, Chennai, Arignar Anna Government Arts College, Villupuram, Periyar E.V.R. College, Tiruchirappalli, Chikkanna Government Arts College, Tirupur and Sri Meenakshi Government College for Women, Madurai and brought many leading Companies to recruit students for various posts.

3. TECHNICAL EDUCATION

3.1 The Directorate of Technical Education was established on 14th October, 1957 with the objective of coordinating the development of Technical Education in the State of Tamil Nadu. The Government of Tamil Nadu has taken efforts to formulate new policies and promote developments in the field of Technical Education both in Degree and Diploma level for the welfare of poor and rural students. As on 2010-2011, out of 491 Engineering Colleges, there are 6 Government Engineering Colleges, 3 Government-Aided Engineering Colleges, 18 Constituent Colleges of Anna Universities, and 464 Self-Financing Engineering Colleges. Besides this, there are 30 Government Polytechnic Colleges, 34 Government-Aided Polytechnic Colleges, 3 Affiliated Polytechnic Colleges and 365 Self-financing Polytechnic Colleges are functioning in Tamil Nadu.

In the Budget Speech it is stated that the Hon'ble Chief Minister has ordered to start a new Government Engineering College at Bodinayakanur in Theni District. An Indian Institute of Information Technology

(IIIT) has been proposed in Srirangam in Tiruchirapalli District.

Central Assistance

3.2 7 New Government Polytechnic Colleges in Dharmapuri, Karur, Perambalur, Theni, Thiruvarur, Thiruvannamalai and Villupuram have been started under the Central Assistance Scheme. Besides this, one Government Polytechnic College at Madurai District has also been started.

3.3 19 Government and 5 Government Aided Polytechnic Colleges have been selected for the construction of Women's Hostel at an outlay of Rs. 1.00 Crore per Polytechnic College. 20 Government Polytechnic Colleges have also been selected for the Upgradation of Infrastructural Facilities at a cost outlay of Rs. 2.00 Crores per Polytechnic College.

Free Text Books

3.4 Free Text Books (Maths, Physics and Chemistry) are issued to First year students who are pursuing their Diploma Programmes in Government Polytechnic

Colleges . Free Text Books for English will be issued from this year to the students studying in first year diploma.

Shift system in Government Polytechnic Colleges

3.5 Shift system has been introduced in 14 Government Polytechnic Colleges with an additional sanctioned intake of 3420. This system has been introduced with the objective of providing diploma education to meritorious poor students hailing from rural areas.

First Graduation Concession

3.6 Tuition fees has been exempted for the First Graduate students in a family admitted through Single Window Counselling in Government, Government Aided, Anna University Constituent and Self-financing Engineering colleges. This has been extended for Lateral entry students also. During the last year, 68,411 students in First year B.E. programmes and 10,493 students admitted in Second year B.E. programmes through Lateral entry have been benefited under this scheme. A sum

of Rs. 280 Crores has been provided during 2011-2012 for implementing the scheme.

Constituent Engineering Colleges of Anna University

3.7 12 Anna University Constituent Engineering Colleges are functioning in Tindivanam, Villupuram, Panruti, Thirukuvalai, Ramanathapuram, Ariyalur, Thanjavur, Dindigul, Thoothukudi, Nagercoil, Tiruvannamalai and Kanchipuram.

Waiver of Tuition fees and Free Bus Pass to the Polytechnic College Students

3.8 Waiver of tuition fees for all the students studying in Government Polytechnic Colleges is in operation. Free bus passes are issued to all the students of Government Polytechnic Colleges.

Add-on Job-oriented Technical Courses.

3.9 For the benefit of students studying in Arts and Science Colleges, Add-on Technical Courses have been introduced, thereby the students are provided with an opportunity to undergo additional Job-

Oriented, Technical and Short-Term Course in Polytechnic Colleges / Industrial Training Institutes / Related Industries during holidays and evening hours along with their regular Degree Courses. Under this scheme, 54 Polytechnic Colleges have established contact with Principals of 62 Government Arts and Science Colleges for conducting the "Add-on Technical Courses in 51 disciplines." This has helped students to secure job opportunities on completion on the degree courses. As on June 2011, 1654 students have successfully completed the courses.

Engineering seats through Single Window Counselling

3.10 To enable the poor and meritorious students to join engineering professional courses at an affordable cost, 65% of the Engineering seats in Non-minority institutions and 50% seats in minority institutions are being allotted through Single Window Counselling System of Anna University, Chennai.

Training for Teaching And Non-Teaching Staff

3.11 Training programmes will be organized for the Teaching and Non-teaching staff members of the Engineering and Polytechnic Colleges at the National Institute of Technical Teachers' Training and Research (NITTTR), Chennai – 600 113. The training programmes will help the faculty to update their skills for the betterment of the teaching-learning process. 535 teachers and non-teaching staff have been trained.

Technical Education Quality Improvement Programme (TEQIP) I and II

3.12 The TEQIP Phase –I, a centrally coordinated state sector project was implemented from 2004-2009. 11 Government Institutions participated in this project. A sum of Rs.95,468 Crores was spent.

3.13 TEQIP Phase II, a Centrally Sponsored Scheme with the Central and State Government Share being in the ratio of 75 : 25 has a total outlay of Rs.2430 crores for Engineering Colleges. About 200

Engineering Institutions all over India will be competitively selected to improve the learning outcomes and employability of graduates and scaling-up research, development and innovations. Tamil Nadu has signed Memorandum of Understanding (MoU) with Ministry of Human Resource Development. Government and Government Aided Engineering Colleges from Tamil Nadu have been considered under this scheme. At present 3 Government Engineering Colleges are provisionally selected. The duration of the project is 4 years and the programme will commence from August 2011.

Tamil Nadu Agricultural Labourers – Farmers (Social Security and Welfare) Scheme, 2006.

3.14 The Tamil Nadu Agricultural Labourers Farmers (SSS) scheme is being implemented in the state. This scheme is for uplifting of social, educational and economic status of the Agricultural Labourers, Farmers and registered Tenants and their dependants. An assistance to the tune of Rs.640 lakhs has been provided to

31,916 students. The quantum of assistance under this scheme is as follows: -

Sl. No.	Category	Day Scholar		Hostler	
		Boys (Rs.)	Girls (Rs.)	Boys (Rs.)	Girls (Rs.)
1	Polytechnic	1250	1750	1450	1950
2	B.E./B.Tech/B.Arch	2250	2750	4250	4750
3	M.E./M.Tech. / MBA / MCA	4250	4750	6250	6750
4	M.Sc. (IT) & (C.S.) - 5 years	2250	2750	3250	3750

Chief Minister's Public Relief Fund

3.15 Very recently, a sum of Rs.22,25,000/- has been sanctioned at Rs.25,000/- each and 89 students hailing from poor families studying in professional courses (B.E./B.Tech.) are benefitted.

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. Alagappa University
6. Mother Teresa Women's University
7. Manonmaniam Sundaranar University
8. Periyar University
9. Thiruvalluvar University
10. Tamil Nadu Open University
11. Annamalai University
12. Tamil Nadu Physical Education and Sports University
13. Tamil Nadu Teachers Education University
14. Anna University, Chennai.
The five Anna Universities of Technology are under proposed merger.

UNIVERSITY OF MADRAS

4.1 The University of Madras was established on the model of London University on September 5, 1857 by an Act of the Legislative Council of India. It is one of the three Premier Universities, the other two being the University of Calcutta and Mumbai. Started as an examining body, research and teaching functions of the University were consolidated by the enactment of Madras University Act of 1923.

4.2 The University of Madras was the first to introduce the concept of autonomous colleges within the University system. The concept encouraged the colleges with the required academic and infrastructure strength to seek autonomous status. There are 178 colleges affiliated to University of Madras out of which 23 are autonomous colleges. Moreover, there are 68 teaching and research Departments with 17 disciplines in the University. Among others, Institute of Distance Education (IDE) has also been functioning in this University. Besides this, 25 other schemes / activities

are undertaken for the welfare of the student community.

4.3 Activities of the University: -

- ✓ Establishment of Language Laboratory in all four campuses.
- ✓ Release of University Commemorative Publications
- ✓ Establishment of Virtual University
- ✓ Awards for academic achievements of students
- ✓ Streamlining of administrative and academic activities
- ✓ Quality Improvement measures in teaching and research
- ✓ National and International seminars / Symposium and Workshops

- ✓ Enhanced Computer Networking
- ✓ Formation of Faculty Club.
- ✓ Establishment of e-Governance
- ✓ Introduction of Single Window admission procedure in Distance Education

4.4 Important activities / schemes proposed to be undertaken during 2011-2012

- To provide relevant and quality education
- To provide equity by establishing equal opportunity cell, financial safety net and Book Bank
- To establish Women's Hostel, Day care centre for Children and Centre for Women Studies.
- To provide regional balance
- Creating of University Centres at Hill Stations.
- To offer industrial internship programme, Career and counselling Cell to ensure relevance and value based education.
- To create community colleges.

4.5. A new co-educational university constituent arts and science college has been started at Nemmeli (Kancheepuram District) this year.

MADURAI KAMARAJ UNIVERSITY

4.6 Madurai Kamaraj University, a University with Potential for Excellence was established in 1966. Madurai Kamaraj University is one among the 9 Universities which has been recognized by UGC as University with Potential for Excellence among 471 Universities across the country. It has 75 Departments clustered into 18 Schools. The University has 77 affiliated colleges which comprise of 14 Aided which includes 2 Government Colleges, 21 Autonomous, 34 Self-financing, 3 constituent and 5 Evening Colleges along with 18 approved institutions. The Directorate of Distance Education of the University, is the second oldest Distance Education Directorate in the country, next only to the University of Delhi.

Adoption of Kannanur Village

4.7 Under the "University towards villages" concept, Madurai Kamaraj University along with the Madurai District Administration adopted Kannanur, a backward village in Chellampatti Panchayat

Union of Usilampattti Taluk. By this adoption, a 12 point action plan including provision of basic education to men and women, improvement of infrastructure facilities, proper healthcare and safe drinking water, guarantee of ration cards and voter identity cards to all eligible persons, computerization of village details and internet connectivity, clean environment and developing it as a "model green village" has been envisaged.

4.8 Madurai Kamaraj University has established 10 Community Colleges attached to its affiliated colleges. Ten different courses of a duration of 6 months each are being offered by these colleges in collaboration with 9 Polytechnic institutions. The youth will be trained in soft skills and entrepreneurship.

Establishment of Administrative Staff College

4.9 Absence of an Administrative Staff College to train the administrative staff was a lacuna for long in higher education across the country. In order to rectify the situation for the first time in India, an Administrative Staff Training College in a university was established this year in this university.

Green Campus in the University

4.10 A MoU has been signed between the Madurai Kamaraj University and the Tamil Nadu Agricultural University to make the university campus green and clean.

Anna Centenary IAS Coaching Centre at the University

4.11 To provide free training for 100 students for preparing them for the Indian Administrative Service Examinations, a Training Centre has been established in this University.

Seminars, Workshops and Conferences

4.12 All the Departments of the university have conducted seminars, workshops and conferences for the benefit of teachers, scholars and students through financial support from Central and State Government agencies. Opportunities for modern research have been explored and research papers at the national and international level have been presented.

4.13 The Academic Staff College of Madurai Kamaraj University has conducted 11 Refresher Courses and 3 Orientation Programmes for the benefit of teachers working in various colleges and Universities.

4.14 Activities proposed to be undertaken during 2011-2012

1. To submit proposals to the University Grants Commission for obtaining grant for the Second Phase of the University with Potential for Excellence Scheme.
2. To explore the possibility of establishing a Solar Energy Plant to meet the ever increasing demand for electricity in the campus.
3. To strengthen a Digital Learning Repository to ensure quality teaching and learning at Madurai Kamaraj University.

4.15. A new co-educational university constituent arts and science college has been started at Sattur (Virudhunagar District) this year.

BHARATHIAR UNIVERSITY

4.16 Bharathiar University was established at Coimbatore in February 1982. The jurisdiction of the University extends over the Revenue districts of Coimbatore, Tiruppur, Erode and the Nilgiris. There are 37 teaching and Research departments which are grouped under 13 Schools

4.17 The University has 104 affiliated colleges of which 19 are Autonomous and 85 are non-autonomous. The University has been re-accredited with A Grade (CGPA3.02) Status by National Assessment and Accreditation Council.

Community College

4.18 The Bharathiar University launched the Community College concept in April 2007 through Community College Consultancy Centre (CCCC).

School of Distance Education

4.19 The School of Distance Education was established in the year 1991-92 and at present has a students' strength of 56,000.

Library

4.20 The University is providing full text – e-journal access services to the users through the Library UGC – INFONET LAB. The user can access more than 5500 titles of various journals and 13 national and international publishers.

Counselling Centre

4.21 The Bharathiar counselling Centre was established in the year 2001. The Counselling Centre functions by rendering service free of charge to the students, scholars, staff, faculty of the campus as well as to the General public.

BHARATHIDASAN UNIVERSITY

4.22 Bharathidasan University was established in the name of Tamil Poet, Bharathidasan in 1982.

4.23 Activities

- ❖ All the teaching programs in the departments of the University and also in all the colleges affiliated to this University have been converted into choice based credit system(CBCS) which offers flexibility and freedom to the students in choosing their areas of learning.
- ❖ To ensure the employability of the degree holders skill based courses have been included in the University curriculum.
- ❖ An innovative 6 year Integrated M.Tech course in four disciplines have been started. A number of diploma courses and certificate courses have been introduced for specific skill development.

- ❖ Research centers have been established in certain specific departments in order to achieve excellence in specialized research areas like in the Centres for Nanotechnology, High Pressure Research, GIS technology etc.
- ❖ A students counselling and grievance redressal cell has been set up.

4.24 Activities / Schemes proposed to be undertaken during the year 2011-2012

- To introduce 10 different types of New/Innovative P.G. programmes and also subjects like Diploma in Saiva Philosophy, Certificate programme in Server Administration, Certificate programme in Network Management and Administration, Certificate programme in Web Design and Development, Certificate programme in Sanskrit (part-time) and

Certificate programme in Hindi
(part-time)

- Four new co-educational university constituent arts and science colleges have been started at Srirangam (Tiruchirapalli District), Thiruthuraipoondi and Nannilam (Tiruvarur District) and at Vedaranyam (Nagappattinam District).

- To construct, a Gymnasium in Palkalaiperur campus at a cost of Rs. 30 Lakhs, a Lecture Hall building at Palkalaiperur campus at a cost of Rs. 94.25 Lakhs and a Seminar-cum-Students facility centre at Palkalaiperur campus at a cost of Rs. 1.3 Crores

ALAGAPPA UNIVERSITY

4.25 Alagappa University was established in 1985, accredited with 'A' grade by the NAAC in May 2005. Educationist "Vallal" Dr. R.M. Alagappa Chettiar established the Colleges which later became the University.

4.26 The University comprises of 30 Arts and Science Colleges including 8 Govt. Colleges, 5 Aided Colleges, 11 Self-financing Colleges, 4 Evening Colleges of Alagappa University and 2 Institutes (Arabic College and Royal institute of SandT) catering to about 26000 students, offering 68 UG, PG and research programs.

4.27 **Activities:**

- 4 Departments of the University have been divided into 15 Schools and 21 Departments, 2 Constituent Colleges and 9 Centres of Studies / Development Service.

- 4 new Departments namely Animal Health and Management, Bioinformatics, Bio-sensors and Bio-Electronics and Nano Science and Technology were created.
- Centre for Rural Development and Centre for Adult and Continuing Education were upgraded into full-fledged 2 Departments.
- 145 courses are offered in this University under Choice Based Credit System. (CBCS)
- Need based Skill oriented 44 programs are offered Certificate, Diploma, UG, P.G Diploma programmes in Catering and Hotel Management, Fine Arts, Textile Designing, Paramedical Sciences, Nautical and Aeronautical Sciences, Biotechnology are given through

collaborating institutions of repute.

- As many as 178 International seminars and 526 educational programmes were organized.
- There is a Fine Arts Centre in the University.

4.28 Activities / Schemes proposed to be undertaken during 2011-12:-

- To introduce New Academic Programs especially in Management and Science faculties
- Moving towards an ICT networked office system with vastly reduced dependence on paper communication, with ample training and investment.

- Linking the University with the local community/institutions so that the resources of the University become a support to them in their growth and development.
- Captive Solar Energy Generation Panel for partly meeting the Energy needs of the University, thus adding to Green Energy usage.
- Furnishing and equipping the class rooms with modern utilities so that the ambience looks encouraging and enticing to learn.
- Technology Embedded Learning for all programs to familiarize them with ICT technology irrespective of the program studied by them.

MOTHER TERESA WOMEN'S UNIVERSITY

4.29 Mother Teresa Women's University was established in 1984, at Kodaikanal. The motto of the University is "Towards equal status" which means that gender equality should be achieved by women and men through equal participation in all areas of life. At present, the University is having 18 departments with different curriculum, research and extension activities.

4.30 Apart from the constituent colleges of Women's College of Education and Mother Teresa Women's University College, Kodaikanal, eight Arts and Science Colleges are affiliated to this University, out of which two affiliated colleges have been given Autonomous status by UGC.

4.31 Tribal Welfare, Environment, Biodiversity, Natural Resource Planning and other areas where the possibility of initiating new programmes are being analyzed. It is also proposed to organize a placement exposure to the students by inviting

companies and Industries for campus interview.

Directorate of Distance Education

4.32 Directorate of Distance Education, Mother Teresa Women's University has the goal of reaching higher education to the women coming from the weaker sections of society and women deserted by their families and husbands.

MANONMANIAM SUNDARANAR UNIVERSITY

4.33 Manonmaniam Sundaranar University was established in 1990. The University is named after Prof. P. Sundaram Pillai (1855-1897), a distinguished professor of Philosophy and a renowned Tamil writer, who composed the verse drama, 'Manonmaniam'. The University caters to the long-felt educational needs of the three southern districts of Tamil Nadu viz., Tirunelveli, Thoothukudi and Kanyakumari. It also extends educational service through Distance Education Mode.

Departments and Colleges

4.34 The University has 26 academic departments with 2 Government Colleges, 32 Aided Colleges, 27 Self-Financing Colleges, 2 Constituent Colleges, 6 Mano Colleges, 22 Community Colleges and 114 Extension Learning Programme Centres. Apart from P.G. and Research programmes, diploma and certificate courses are also offered.

Mano Colleges

4.35 A frontline educational venture was the floating of MANO colleges in rural areas of the University region so as to educate and empower the poor and women students at an affordable cost. At present, there are 6 colleges at Nagampatti, Sankarankovil, Puliyangudi, Govindaperi, Thisaiyanvilai and panagudi.

Community Colleges

4.36 To promote the employability of the rural youth who have completed 10/+2, the University introduced the Community Colleges Scheme in 1999. Under this scheme, 22 Community Colleges have been approved and through these Colleges 25 job-oriented, work-related and skill-based courses are offered and diplomas are awarded.

4.37. A new co-educational university constituent arts and science college has been started at Nagalapuram (Tuticorin District) this year.

PERIYAR UNIVERSITY

4.38 Periyar University was established in the year 1997 at Salem. It is a teaching cum affiliating university.

4.39 At present Periyar University is offering 167 courses in the affiliating colleges and there are 21 departments in the University namely Tamil, Commerce, Mathematics, Physics, Chemistry, Computer Science, Biochemistry, Economics, Education, Food Science, Management Studies, Geology, English, Microbiology, Biotechnology, Sociology, Journalism and Mass Communication, Psychology, Botany, Environmental Science. Library and Information Science.

Career Guidance and Placement Cell

4.40 For the benefit of the students, Periyar University is providing career guidance and counselling and placement to the students from the academic year 2004-2005.

Skill Development Centre (Community College)

4.41 In order to empower the students with skills, Skill Development courses have been introduced from the academic year 2002-2003 onwards. These courses aim at the improvement of poor and rural students who cannot afford to study in the regular colleges. They are offered one-year skill development diploma courses.

Distance Education

4.42 Periyar Institute of Distance Education (PRIDE) is functioning since 2001-2002 onwards.

Research

4.43 Periyar University has 21 teaching and research departments and also, provides research programme in Library Science and Physical Education.

New University Constituent Arts and Science colleges

4.44 Two new co-educational university constituent Arts and Science colleges have been started at Pappireddipatti and Harur (Dharmapuri District) this year.

THIRUVALLUVAR UNIVERSITY

4.45 The Thiruvalluvar University was established under Thiruvalluvar University Act, 2002 (Tamil Nadu Act 32 of 2002). The University was started with 52 approved colleges in its jurisdiction of Vellore, Tiruvannamalai, Villupuram and Cuddalore Districts. Presently 100 Colleges are affiliated to this University, out of which 10 Government Colleges, 9 Aided Colleges, 74 Self-financing Colleges, 4 University Constituent Colleges, and 3 Oriental Title Colleges.

Activities of the University

4.46 Thiruvalluvar University has implemented semester system and Choice Based Credit System in the University and the colleges affiliated to this University. Presently, the University has 7 Post Graduate and Research Departments namely, Economics, Zoology, Tamil, English, Mathematics, Chemistry and Biotechnology.

4.47 Two University Constituent Colleges have been started at Thiruvannainallur Village in Villupuram

District and at Thennangur Village in Tiruvannamalai District during the year 2010-2011. Two new co-educational university constituent arts and science college have been started at Tirupattur (Vellore District) and Kallakurichi (Villupuram District) this year.

4.48 In these University Constituent Colleges, cent percent admissions have been made. More than 90% of the students studying in these colleges hail from socially and economically backward sections of the society. They belong to backward, most backward and SC/ST communities. Most of these students are also first generation graduates. The four University Constituent Colleges cater to the Higher Education needs of the poor students residing in and around that backward remote area. The University has started P.G. Extension Centre at Villupuram. This centre offers four P.G. Courses.

TAMIL NADU OPEN UNIVERSITY

4.49 The Tamil Nadu Open University was established in 2002. It is the 10th State Open University established in the Country. The main objective of the University is to offer higher education through open and distance learning mode to the socially and educationally disadvantaged sections of the society. The University admits students both under formal and non-formal streams. The University is the only University authorised to offer programmes under non-formal stream in Tamil Nadu.

4.50 The University which started functioning with 14 programmes and 14000 students has grown from strength to strength over the years. Now it has reached the stature of a Mega University with a student population of around 2 lakhs in a total number of 108 programmes offered at various levels.

4.51 In order to realize the objectives for which the University was established, Learning Resource Centres (LRCs), Computer Programme Centres (CPCs) and Community Colleges have been established in many

places in Tamil Nadu. The University is extending scholarship facilities to the SC/ST students through Adi Dravidar Welfare Department, Government of Tamil Nadu.

4.52 The Distance Education Council (DEC), New Delhi has sanctioned Rs. 4.2 Crores as Development Grant for the year 2011-2012. With these funds, many developmental activities in the areas such as Construction of Buildings, Purchase of Equipments related to ICT, creation of new course materials and development of course materials through e-content CDs are being taken up.

4.53 A remarkable achievement of the University is that one Community College in the name of Mahatma Gandhi has been established in collaboration with the Prison Department, Government of Tamil Nadu to give Vocational Education to the inmates of all central prisons in the State of Tamil Nadu.

4.54 Further as a Rehabilitation measure, free Vocational Education is being offered to a total number of 1020 widows in various Community Colleges affiliated to Tamil Nadu Open University with the help of funds to the tune of Rs.20 Lakhs obtained

from the Distance Education Council. Further, 5000 hair dressing workers were identified throughout the length and breadth of Tamil Nadu. They were provided with Self-Instructional Materials (SIM) and tools for their profession free of cost.

4.55 Important academic activities.

1. The work with regard to taking multiple copies of e-Content CDs prepared for 75 courses is over. The CDs will be distributed to the students in addition to the course materials.
2. 25% fee concession is given to students who opt to study courses on Tamil Literature.
3. The School of Tamil and Cultural Studies has taken up a project with regard to conversion of Classical Tamil Literature into video Lecture with the grant of Rs.10 Lakhs obtained from Central Institute of Classical Tamil.

4.56 Important Proposals to be undertaken during 2011-2012:

1. To produce e-Content CDs for more subjects.
2. To establish an e-Studio, by the Electronic Media Production Research Centre of the University
3. To establish the University's Regional Centres in Tamil Nadu and monitor the activities of the centres.

ANNAMALAI UNIVERSITY

4.57 Annamalai University was established in the year 1929 at Chidambaram. One of the Premier Centres of Higher Learning and Research in India, the University, has now 50 Departments of Study under ten faculties.

4.58 An Internal Quality Assurance Cell has been set up to monitor the quality of academic output. Students Progression Cell has been created to coach students from backward classes for taking IAS examinations. In keeping with the national policy of public health, the concept of 'No Smoking Zone' has been put into practice. A Grievance Redressal Cell for on-campus students has been set up in conformity with students' welfare measures.

4.59 The Centre of Advanced Study in Marine Biology known for its contribution to research in Marine Sciences at the National and International levels has been endowed with a separate Faculty status.

4.60 The Rajah Muthiah Institute of Health Sciences rendering Medical Care and Community Service to down-trodden people

of Cuddalore District celebrated the Silver Jubilee this year.

The Directorate of Distance Education

4.61 The Directorate of Distance Education was established in the year 1979. Today, the Directorate of Distance Education offers 500 different programmes in 38 disciplines.

TAMIL NADU PHYSICAL EDUCATION AND SPORTS UNIVERSITY

4.62 The Tamil Nadu Physical Education and Sports University, established in the year 2005. It is the first of its kind in India. It is an affiliating University, exclusively for Physical Education and Sports.

4.63 125 acres has been alienated for the establishment of main University campus at Melakottaiyur Village (Near Kelambakkam), Chengalpet Taluk, Kancheepuram District.

4.64 23 regular courses and 41 Distance Education Courses are offered in this University on various disciplines. 11 Colleges are affiliated to this University by offering B.P.E, B.P.Ed., M.P.Ed. and M.Phil courses.

4.65 M.P.Ed.(Regular- Two Years) post graduate degree course has been started in the department of physical education.

Academic Programme

4.66 All the Departments have offered the following academic activities programme: -

- UG/PG Programme in Physical Education, Yoga, Exercise Physiology and Nutrition, Sports Bio Mechanics, Sports Psychology and Sociology, Advanced Sports Training and Coaching, Sports Management and Sports Technology.
- PG Diploma in Sports Coaching in various disciplines
- M.Phil Programme in various disciplines.
- Ph.D. Programme in various disciplines.

Village Placement Programme

4.67 All the five Departments of this University have organised the village placement programme in many places.

Choice Based Credit System And Uniform Syllabus

4.68 The University has 5 Departments, 3 Supportive Departments and 11 Affiliated colleges offering U.G., P.G, and P.G. Diploma programme. Uniform syllabus and Choice based Credit System are adopted in the above said departments and colleges for the various courses.

TAMIL NADU TEACHERS EDUCATION UNIVERSITY

4.69 The Tamil Nadu Teachers Education University was established during the year 2008.

The main objectives of this University is:

- to monitor teachers education as approved by the National Council for Teachers Education at all levels in the State
- to workout the modalities to offer programmes in latest fields for the development of teachers education;
- to establish and maintain University libraries, research stations and publication bureau;
- to affiliate colleges to the University as affiliated colleges or post graduate colleges under conditions prescribed;

- to hold and manage endowments and other properties and funds of the University.
- to enter into agreement with other bodies or persons for the purpose of promoting the objectives of the University including the assuming of the management of any institution under them and the taking over of its rights and liabilities.

4.70 Activities Undertaken

- The Annual State Level Sports Meet was conducted and prizes/medals were awarded to the winners of first three places.
- Two day Workshop on Research Methodology and Educational Statistics was conducted at Chennai, Madurai and Coimbatore to impart the knowledge of systematic Research Methodology to M.Ed teachers in the Colleges of Education.

- A Ph.D Programme has been introduced in the affiliated colleges of this University.

4.71 Activities / Schemes Proposed to be undertaken during 2011 - 2012

- To introduce Four Year Integrated B.Ed Degree Course as per norms of NCTE.
- To conduct one day training programme on Computer Education for all the Teachers of the affiliated colleges in a phased manner.
- To introduce Yoga course in the curriculum of B.Ed Degree Course

ANNA UNIVERSITY, CHENNAI

4.72 Anna University was established on 4th September 1978 as a unitary type of University to promote teaching and research in the field of Engineering, Technology, Architecture and Applied Sciences by bringing together the College of Engineering Guindy (CEG), Alagappa College of Technology (ACT), Madras Institute of Technology, Chromepet (MIT) and School of Architecture and Planning (SAP).

4.73 The Government have felt that Quantity does not result in Quality in many cases. The creation of a large number of Universities and appointment of multiple Vice-Chancellors will not in any way contribute to ensuring a high standard in education. Therefore, as announced in the Governor's address, a decision has been taken to merge all the Anna Universities of Technology with the Anna University, Chennai.

4.74 True to its image as a premier technical institution in the Country, Anna University constantly strives for excellence in education, research and societal service

through competent teachers who are also experts in research in various emerging and advanced technologies.

4.75 The following are the important achievements/objectives of the University:-

- Prior to the year 1978 the University was conducting only 16 UG programmes, 26 PG programmes and 6 PG Diploma programmes. After the formation of the University more number of new courses was introduced taking into account the emerging areas in technology development. At present the University is conducting 45 UG programmes (Full Time and Part Time), 108 PG programmes (Full Time and Part Time), 6 M.Phil programmes and Ph.D. programmes in Engineering, Technology and Applied Sciences.
- Anna University, Chennai has established tie-ups with Universities and organisations abroad in order to promote research in technical Education.

More than 147 National and 103 International Memorandum of Understanding have been signed so far.

- Anna University established a placement and training cell in the year 1991 and the University is taking all steps in getting placement to all the outgoing students.
- Through Tamil Nadu State Level Placement Programme, the Anna University has placed 2234 students from 171 colleges from the State of Tamil Nadu.
- Anna University, Chennai occupies the second position in the e-journal access made available under UGC Infonet Programme at State Level and eleventh position at the International Level.
- Anna University, Chennai has been awarded "Island of Excellence" by UGC to create a University Centre with potential for Excellence in Environmental Sciences.

- A Digital Knowledge Centre has been inaugurated in the University Library.
- Anna University has created a research corpus fund to enhance and strengthen its research activities for the first time. The interest earned through this fund will be utilized to provide fellowship for research scholars. This unique scheme is introduced in the line with the State Government's ambition of making Anna University as a World class Research University.
- Anna University has designed and fabricated a micro satellite named ANUSAT, which is first of its kind by any Indian Universities, with the support of ISRO and was launched by ISRO.

4.76 Activities / Schemes proposed to be undertaken during 2011-2012

- To get financial assistance from the UGC under the scheme

“Potential for Centre for Excellence in the field of Civil Engineering, Mechanical Engineering, Computer Science and Engineering, Biotechnology, Aerospace Engineering, Software and Wireless Technology”.

- To design core engineering modules which are attractive in the job market, in collaboration with the National Association of Software and Service Companies (NASSCOM).
- To create State-of-art additional facilities like Video Conferencing Facility, Multi-purpose auditorium, Sophisticated Class Rooms, Information and Communication Technology Park, a Modern Convention Centre, Student Amenity Centre, State-of-art Digital Library, Centralised Hi-tech Computer Centre, Hi-tech Building for Administration offices, Extra curricular Centers etc. for enhancing the University as a World Class University of learning and research.

- Merger of Anna Universities of Technology with Anna University to restore its past glory and credibility, lost due to decentralization; Follow up action on the merger of the Anna Universities of technology at Chennai, Tiruchi, Madurai, Coimbatore and Tirunelveli already announced in the Governor's address will be taken.

5. TAMIL NADU SCIENCE AND TECHNOLOGY CENTRE

5.1 Tamil Nadu Science and Technology Centre was established in 1983 as an autonomous body. This Centre is functioning under the Chairmanship of Hon'ble Minister for Higher Education. The main objective of the Centre is to popularize Science and Technology among the common people in general and students in particular. Tamil Nadu Science and Technology Centre has set up Science Centre and Planetarium in both Chennai and in Tiruchirappalli.

5.2 The activities of the Science and Technology Centre include organising science and technology based temporary exhibitions, conducting workshops, seminars, lectures, short-term courses, astronomy camps competitions like quiz, essay, elocution, drawing, maths talent contest, astronomy Olympiad, astronomy talent contest, "Meet the Scientist" and "Meet your Medical Expert" programmes, short term astronomy courses, computer courses. Apart from this, a Mobile Science Exhibition unit, comprising 24 built-in participatory exhibits and mini-

planetarium has been in continuous operation to popularize science and technology among the rural public and the student community.

5.3 **Activities**

- Ocean Technology gallery and Models of Five Types of Lands described in Ancient Tamil Literature viz., Kurunchi, Mullai, Marutham, Neithal and Palaai were established in Periyar Science and Technology Centre.
- 3-D Science Theatre was established in Anna Science Centre, Tiruchirappalli.
- Mirror Dome and Plasma Screen Facility and Three Portable Planetarium facility were provided in B.M.Birla Planetarium in Periyar Science and Technology Centre in Chennai.
- District Science Centre at Vellore was dedicated to the public.

- To promote scientific temper among the public, Regional Science Centre, Coimbatore at an estimated cost of Rs.850 lakhs is expected to be completed and ready for visit of the public, in September 2011.
- To make the public aware of technological developments taking place in our Defence Forces, a Gallery on Defence Research and Development is being established at an estimated cost of Rs.100 lakhs.
- With a view to eradicate the phobia prevailing among the student community about mathematics, "Ramanujam Gallery on Mathematics" is being established at a cost of Rs.40 lakhs.
- Keeping in view the necessity of facilitating the student community in rural area to understand mathematical concepts clearly, a mobile bus with exhibits on

Mathematics (Mathematics on wheels) is being developed.

- Transport Gallery and Nano Technology Gallery existing at present in Periyar Science and Technology are being strengthened. Besides, the existing Science Park is being provided with a face-lift.
- Evolution Park is proposed to be dedicated during this year. It has been developed in an area of 25000 sq.ft. at an estimated cost of Rs. 45 lakhs.

5.4 Activities/Schemes proposed to be undertaken during 2011-2012: -

- Introduction of Laserium in Periyar Science and Technology Centre to attract more number of visitors.
- Introduction of 3-D Theatre facility in District Science Centre, Vellore.

- Establishment of Herbal Garden in Anna Science Centre, Tiruchirappalli.

- Establishment of District Science Centre in Kanyakumari.

- Establishment of District Science Centre in Madurai-Kamaraj University Campus.

6. TAMIL NADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

6.1 Tamil Nadu State Council for Science and Technology was constituted as an autonomous body in 1984. It is "to be the apex body to look after research and development in different scientific disciplines". During the last 26 years the Council has implemented various Science and Technology schemes to fulfill the development needs of Tamil Nadu. During 2011-12, the Council will be implementing schemes with financial assistance from the Government of Tamil Nadu and also with grants-in-aid from the Scientific Departments of the Government of India.

Important Schemes

Science and Technology Projects

6.2 Under this scheme, projects in major areas of research in sectors such as Agriculture, Environmental Sciences, Medical Sciences, Social Sciences and Engineering and Technology etc., will be undertaken to contribute to the development of our State.

The financial assistance is provided to scientists and researchers for carrying out Research and Development work having social relevance and usefulness to our State. During 2011-12, 8 projects will be supported at the cost of Rs.20.00 lakhs.

Students Project Scheme

6.3 This scheme is aimed at utilizing the tremendous student talent for the development of Science and Technology. Final year students of UG/PG courses in Engineering/ Medicine/ Agriculture/ Veterinary Sciences and P.G. Students of Sciences are provided with a maximum grant of Rs.10000/- for carrying out socially relevant projects under their curriculum. During 2011-12, 250 projects will be supported with the budget of Rs.14.00 lakhs benefiting 800 students.

Travel Grant for Young Scientists

6.4 Under this scheme young scientists and researchers below 40 years of age and working in organisations (University/ College/ Research Centre) located within the State of Tamil Nadu are provided with 50%

of air fare in case of international conferences and 100% train fare (First class) in case of national conferences to enable participation in such scientific conferences and present their research findings. During 2011-12, Travel Grants will be given to 13 scientists to the tune of Rs.3.00 lakhs.

Young Scientists Fellowship Scheme

6.5 The aim of this scheme is to encourage young scientists and researchers below 35 years of age to acquaint themselves with latest techniques in science research and development. These scientists will do collaborative work with senior scientists at universities and research scientists in institutions outside the State. They are provided with a fellowship of Rs.3000/- P.M for a period of 2 to 6 months in addition to their regular salaries by their parent institutions. During 2011-12, 14 scientists will be supported with the budget of Rs.1.50 lakhs.

Tamil Nadu Scientists Award (TANSA)

6.6 The objective of this scheme is to encourage and honour scientists and

researchers who have made significant contribution in their fields of specialization through their pioneering or outstanding applied research work and any other activities leading to Science and Technology development in the State. Each selected scientist is awarded a sum of Rs.10,000/- in cash and a citation. Awards are given in various disciplines such as (i) Agriculture (ii) Biology (iii) Chemistry (iv) Engineering and Technology (v) Environment (vi) Medicine (vii) Mathematics (viii) Physics (ix) Social Sciences and (x) Veterinary Sciences. During 2011-12, TANSa will be awarded to 10 scientists with the budget of Rs.2.00 lakhs.

Popularisation of Science and Technology

6.7 Under this scheme financial support is provided to Universities, Colleges and Voluntary Organisations to conduct Science Exhibitions, Teacher Training Programmes, Popular Lectures, on various aspects of Science and Technology. During 2011-12, about 70 organisations will be supported with a budget provision of

Rs.10.50 lakhs and 2,50,000 people will be benefited.

Young Student Scientist Programme

6.8 The objective of this scheme is to expose talented young students of our State studying in IX std., to science and technology so that they take up science and technology as their career in future. Selected students from various districts are given this exposure in a reputed college/ university with all facilities for twenty days . During 2011-12, 400 students from 10 districts will be trained with a budget provision of Rs.12.00 lakhs.

Quality Improvement of Science Education in Rural Schools

6.9 The objective of the programme is to improve the quality of science education, particularly for the benefit of rural school children. It is proposed to conduct "In service Training programme" for the Science Teachers who are handling the Science subjects of VI, VII and VIIIth standards. During 2011-12, 10 programmes

will be conducted in 10 districts with the budget of Rs.9.50 lakhs.

Assistance for Science and Technology Publications

6.10 The objective of this scheme is to bring out scientific publications in Tamil especially useful to children, researchers and general public. Financial assistance is provided to organizations publishing such magazines/books. These publications will help to spread science and technology among children and the masses. Financial assistance is also provided to scientists to bring out text books in Tamil for the use of students. In the year 2011-12, this scheme will be implemented with an allocation of Rs.0.37 lakhs to benefit 10,000 students.

Technology Innovation and Dissemination

6.11 Large number of reach projects are carried out in our state in various universities, research centres and colleges. The useful technologies and scientific activities must reach the beneficiaries. Innovations with potential for field

applications will be disseminated by educationists and scientists through training programmes and workshops. During 2011-12, 17 programmes will be conducted benefiting around 430 individuals with a budget provision of Rs.6.00 lakhs.

Creation of Scientific Awareness

6.12 The objective of the programme is to create scientific awareness among the rural school students, rural farmers and self help groups. The outcome of the research work carried out at the laboratories of the colleges, universities and research Institutions will be transferred to the concerned people through the educational institutions for improving their economic status. During 2011-12, this programme will be conducted in 10 districts with a budget of Rs.6.00 lakhs.

Partial Assistance for Seminar / Symposium / Workshop

6.13 The aim of this scheme is to foster exchange of scientific knowledge and also facilitate between various groups of people such as teachers, scientists,

industrialists, research scholars and others. During 2011-2012, 34 organisations will be supported with the budget of Rs.3.50 lakhs.

Science and Technology Capacity Building for Industrial Needs

6.14 The objective of this programme are two fold a) to enable graduates to acquire skill sets relevant to industries and b) motivate them to opt for self employment. This programme would act as a bridge course reinforcing institute-industry interaction. This proposed bridge programme will be organized with the active collaboration of industries and colleges. With skill sets, the graduates become more employable. During 2011-2012, this programme will be organized with a budget of Rs.12.00 lakhs at 12 centres benefitting 3000 students.

Application of Science and Technology in Rural Areas

6.15 The objective of the programme "Application of Science and Technology" is to uplift the socio-economic and educational status of the people in backward panchayats

in districts of Tamil Nadu. The scheme envisages the transfer of science and technology techniques and findings to rural areas. During 2011-2012, this programme will be implemented at a cost of Rs.12.00 lakhs to benefit 5000 farmers, artisans and rural people.

7. SCIENCE CITY

7.1 The Vision of Science City is popularization and propagation of Science and Technology among the masses. The Primary goals of Science City include Promotion of Science and Technology components, involving existing and new institutions, promoting of technology transfer component involving industrial houses and venture capital agencies, promoting global technology monitoring and forecasting, and establishing and fully equipped resource centres for the benefit of member institutes.

7.2 The unique agglomeration of 60 educational and research institutions like Anna University, Indian Institute of Technology (IIT), Central Leather Research Institute (CLRI) and Tamil Nadu Science and Technology Centre etc. belonging both to Central and State governments in the Guindy – Tharamani area has been declared as Science City.

Important Activities of Science City

7.3 The activities of Science City includes Popularization of Science

programmes such as Popular Lectures, Meet the Scientist programme, organizing Conferences, Seminars, Science Exhibitions, honouring young scientists with Children's Science Academy Awards, Science Camps, Science Festival, Awareness Campaigns in Frontier Technologies, Science and Technology programmes for the differently abled and the economically challenged students, environment related programmes like wealth from waste, etc. Since inception, 458 students with a rural background were awarded the Children's Science Academy Awards.

7.4 Science City has instituted Lifetime Achievement award for women and Tamil Nadu young women scientist awards. Since inception 44 Women Scientists have been awarded the Tamil Nadu Young Women Scientists Awards and 17 Women have been awarded the Life time Achievement Awards.

7.5 Science City organized three Awareness Campaigns in Genetic Engineering, Nanotechnology and Communication Technology incurring an expenditure of Rs. 6.00 Lakhs. More than 500 post graduate students were benefited by these programmes.

7.6 10 workshops in Science and Technology for the benefit of different categories of differently abled students such as visually challenged, speech and hearing impaired, ortho challenged, mentally retarded and slow learners were organized. Around 1000 differently abled children were benefited. The expenditure incurred was Rs. 4 lakhs.

7.7 For the Welfare of P.G. Students, Workshops in emerging areas of Science and Technology such as Biotechnology, Information and Communication Technology, Tissue culture, Virology, Nanotechnology and Nuclear Technology were organized at the cost of Rs. 7.00 Lakhs. About 475 Post Graduate students participated and benefited by these workshop.

7.8 Training was imparted in hot spots areas such as Global warming, Disaster mitigation, Astronomy, Bio diversity Instrumentation to school teachers and college teachers at a cost of Rs. 3.00 Lakhs. 500 Teachers both at the School and College level participated and benefited.

Chennai Science Festival 2011

7.9 Chennai Science Festival 2011 has been organized by the Science City at a cost of Rs. 30.00 Lakhs.

Activities/Schemes proposed to be undertaken during 2011-2012

Workshops in Frontier Technologies

7.10 Six workshops would be organized for a period of 3 days each on Frontier Technologies such as Genetic Engineering, Stem Cells, Nanotechnology, Astronomy, Global warming and Information and Communication Technology. Students would be exposed to various aspects of each discipline. 750 students from all over Tamil Nadu will participate and be benefited.

Seminars in Science and Technology for the Differently abled

7.11 Twelve programmes in Science and Technology for the visually challenged, speech and hearing impaired, ortho challenged, Mentally retarded and slow learners will be organized. 1200 differently abled children would be benefited.

Chennai Science Festival 2012

7.12 Chennai Science Festival 2012, a mega science festival designed to create awareness among the public on science, would be organized in the month of January 2012. A mega science exhibition, public lectures, panel discussions, scientific demonstrations, scientific entertainment and competitions in science for school and college students will be organised to mark the science festival.

8. TAMIL NADU ARCHIVES

8.1 Started in 1909 in the Grassmere Garden, Egmore, as a separate establishment, the Tamil Nadu Archives and Historical Research Department has seen a Century. When inaugurated, its name was 'Madras Record Office' and consequent on the naming of Madras State into Tamil Nadu, the Madras Record Office also became 'Tamil Nadu Archives' and later 'Tamil Nadu Archives and Historical Research'.

8.2 The Tamil Nadu Archives is a custodian and repository of Government Records. The earliest records preserved belong to the year 1657. When the Government needs records as back papers and precedents for planning, introducing reforms, drafting Bills and for routine administration, they are supplied. Since 1930, researchers from universities and colleges both native and foreign have visited Tamil Nadu Archives for their researches. Many authors and historians have published their 'magnum opus' referring archival sources. The Tamil Nadu Council of

Historical Research with the Hon'ble Minister for Higher Education as the Chairman, functions here to promote historical research. Tamil Nadu Archives has District Record Centres in Coimbatore, Salem, Madurai, Cuddalore, Tiruchirapalli and Thanjavur.

8.3 Under 12th Finance Commission grant-in-aid for heritage conservation, various renovation and restoration projects are being under taken in Tamil Nadu Archives. Likewise under Part II and Central financial Assistance Schemes Tamil Nadu Archives and District Record Centres are being progressively modernized and computerized. District Gazetteers for Thuthukudi and Kanyakumari were released.

8.4 The Erode District Gazetteer was circulated among the members of the Gazetteer Monitoring Committee and obtained the approval for publication. Measures were being taken to bring out the publication of Tamil version of the Tiruchirappalli and the Nilgiris District Gazetteer.

8.5 A Centenary function of Tamil Nadu Archives was celebrated with the following events:-

1. Quiz programme on Archives and History
2. Endowment Lecture on Archives and South Indian History
3. Launching of Web.of Tamil Nadu Archives (www.tnarchives.tn.gov.in)
4. Centenary celebration with the launching of Commemoration Souvenir; release of list of exhibits inauguration of exhibition and opening of additional floors in the Tamil Nadu Archives Library.

8.6 A sum of Rs.9 lakhs was sanctioned in 2010-2011 towards the purchase of Racks, Water purifier, Drying Racks and LCD projector under Part II schemes during the last year. During the year 2011-2012, a sum of Rs. 40 lakhs has been earmarked for the purchase of the following:-

i) Purchase of storage cabinet for Microfilm unit

ii) Purchase of heavy duty invertors and related accessories

iii) Purchase of server, web based retrieval, A.C and other related accessories

iv) Phase I of digital scanning and microfilming

9. TAMIL NADU STATE COUNCIL FOR HIGHER EDUCATION

9.1 The Tamil Nadu State Council for Higher Education (TANSCHE) was established by an Act in 1992 for the promotion and coordination of Higher Education at the State level and coordination of the State level programmes with those of University Grants commission. The Council functions with two divisions viz., (a) The Council with its members and (b)The Advisory Board of Vice- Chancellors of Universities in Tamil Nadu as its Members.

9.2 Work of the Council

- Workshop on Article Writing and Project proposal writing was conducted for Government College teachers
- Commencement of Community colleges of at least 10 per university
- Assistance was given to 10 projects in 2008-2009; A total number of 43

projects were selected. Rs. 5,000/- to UG Project and Rs.10,000/- to PG Project were sanctioned under the scheme of funding of 'Students' Mini Project', to students of Government Arts and Science Colleges.

- To bring out uniformity in grading system under CBCS, TANSCHHE has brought out a 'Model Grade Card' to be implemented in all autonomous colleges/ universities.

9.3 Activities/ Schemes proposed to be undertaken during the year 2011-2012

- To enhance the "Mini Project Scheme" being given to the UG/PG students of Government Arts and Science Colleges.
- To organise workshop on major/ Non Major Electives in subjects like: Botany, Chemistry, Physics etc.,
- Training to Government Arts and Science College teachers for preparation of research projects.

- To introduce ' Mini Project Scheme" to teachers of Arts and Science Colleges.
- To conduct regional workshops for Government College teachers in order to update them with the current methods in teaching Science and Humanities.
- To conduct workshop for teachers in Skill Based elective subjects under the CBCS.
- To give training to the students of Government Arts and Science Colleges in rural areas to raise them to the level of their counter parts in urban areas.

10. TAMIL NADU STATE COUNCIL FOR TECHNICAL EDUCATION

10.1 Tamil Nadu State Council for Technical Education was established by an act in the year 2010 (Tamil Nadu Act 4 of 2010) for making State Level Planning on the development of Technical Education. The Council started functioning with 19 members and 3 co-opted members, totalling 22 Members from 18.6.2010 onwards.

Functions of the Council

10.2 The function of the Council is to coordinate and determine the standards in college and Scientific Research in Technical Education, to evolve perspective plans for development of Technical Education in the State, to forward the developmental programmes of Technical Universities and Colleges to the University Grants Commission and All India Council for Technical Education, and also to assist them in maintenance of Norms and standards, to promote Industry-Institute interaction, to promote curriculum development, to improve standards of examinations.

Activities undertaken

10.3 The Council has convened the meetings of Vice Chancellors of Technical Universities and taken steps for enhancement of curriculum, reforms in examinations, promotion of research and for creating centres of excellence.

10.4 Activities proposed to be undertaken during 2011-2012

- ❖ To conduct Seminars/Workshops on Quality Assurance, Faculty Development Programmes in thrust areas in Engineering and Technology
- ❖ To enhance quality of research with industry participation in colleges of Engineering and Technical Universities
- ❖ To facilitate training of teachers of technical Universities and Colleges and the functioning of the academic staff College through coordination.

- ❖ To prepare a report on the working of the technical Universities, Engineering Colleges and Polytechnic Colleges in the State.
- ❖ To set up a State Technical Research Board linking the Research of Technical Universities with that of Research Agencies and Industry and to promote Scientific Research in the Technical Universities/Colleges.
- ❖ To promote Institutes of excellence within or outside the Technical Universities system in frontier areas of knowledge.
- ❖ To create and maintain a database with the collection of essential data on the number of Engineering Colleges/Polytechnic Colleges / student intake/Faculty status/nature of courses offered/Fee Structure/Research activities / Students placement etc. at district level/State Level/ National Level/Global Level.

- ❖ To create a library with the collection of latest information with upto date technology in all the disciplines of technical education in the form of books, periodicals, reports, CDs/DVDs etc.

11. TAMIL NADU STATE URDU ACADEMY

11.1 The Tamil Nadu State Urdu Academy was inaugurated on 21.7.2000.

11.2 Work:

1. The Academy co-sponsored an all India Mushaira conducted by National Chamber of Commerce
2. The Academy gave "Dr Abdul Huq Award" of literary Excellence to six poets with cash award of Rs. 25,000/- each at the public function and also gave merit award and cash prizes to State rank holders in Urdu language.

11.3 Activities / Schemes proposed to be undertaken during 2011-2012: -

1. To grant award of merit cash prizes and scholarships to meritorious Urdu students.
2. To Grant financial Assistance to Urdu coaching centres.
3. To Conduct a local Mushaira thereby helping the poets who nurture Urdu language by their poetry.

P. Palaniappan
Minister for Higher Education

COLLEGIATE EDUCATION

ANNEXURE - 1

NUMBER OF COLLEGES IN THE STATE DURING 2011-2012

TYPE OF COLLEGES	GOVERNMENT	GOVT.-AIDED	SELF-FINANCING	TOTAL
Arts & Science Colleges	62	133	416	611
Physical Education	-	3	8	11
Oriental	-	10	-	10
School of Social Work	-	2	-	2
College of Education	7	14	639	660
Univ. Constituent Colleges	24	-	-	24
TOTAL	93	162	1063	1318

ANNEXURE - 2

NUMBER OF STUDENTS ADMITTED DURING 2010-2011

Type of College	Sanctioned Strength					Admitted Strength				
	UG	PG	M.Phil	B.Ed	TOTAL	UG	PG	M.Phil	B.Ed	TOTAL
Govt. Colleges	46926	5332	569	1125	53952	46723	5269	517	1123	53632
University Constituent Colleges	3724	279	--	--	4003	3691	263	--	--	3954
Aided Colleges	97803	19896	2541	1794	122034	82136	19857	2512	1794	106299
Self-Financing Colleges	108952	25632	1164	66053	201801	89104	15182	1136	59258	164680
TOTAL	257405	51139	4274	68972	381790	221654	40571	4165	62175	328565

TECHNICAL EDUCATION

ANNEXURE - 3

DETAILS OF NUMBER OF POLYTECHNIC COLLEGES , SANCTIONED STRENGTH AND STUDENTS ADMITTED IN POLYTECHNIC COLLEGES DURING THE ACADEMIC YEAR 2010-2011

Category	No. of Institutions	Sanctioned Intake	Admitted	OC		BC (Others)		BC (Muslim)		MBC		SC		SC (A)		ST		TOTAL	
				Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Govt.-Regular	30	8430	7380	68	43	1950	1124	193	60	1376	602	1245	388	153	81	75	22	5060	2320
Govt. - Shift	(14)*	3420	3116	45	9	1152	193	121	7	821	91	495	91	61	4	24	2	2719	397
Government-Aided	34	13716	12113	333	63	4815	1008	547	63	2530	441	1753	261	206	39	49	5	10233	1880
Affiliated	3	215	165	0	0	55	0	7	0	64	0	32	1	6	0	0	0	164	1
Self-Financing	365	136194	94078	8192	874	36651	2956	4145	161	25573	1573	12202	889	493	31	318	20	87574	6504
TOTAL	432	161975	116852	8638	989	44623	5281	5013	291	30364	2707	15727	1630	919	155	466	49	105750	11102

(*): Not included in total, since it is included in the category – Government – Regular above.

ANNEXURE - 4

DETAILS OF NUMBER OF ENGINEERING COLLEGES , SANCTIONED STRENGTH AND STUDENTS ADMITTED IN ENGINEERING COLLEGES DURING THE ACADEMIC YEAR 2010-2011

Category	No. of Institutions	Sanctioned Intake	Admitted	OC		BC (Others)		BC (Muslim)		MBC		SC		SC (A)		ST		TOTAL	
				Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Govt.	6	2560	2425	94	66	748	448	66	30	346	185	212	135	51	20	16	8	1533	892
Govt-Aided	3	2510	2506	237	147	747	500	55	27	284	165	174	102	28	25	7	8	1532	974
Self-Financing	464	182529	149992	17001	7211	42885	27382	4872	1675	22436	10646	9404	4803	942	446	214	75	97754	52238
SUB-TOTAL	473	187599	154923	17332	7424	44380	28330	4993	1732	23066	10996	9790	5040	1021	491	237	91	100819	54104
Anna University, Chennai	4	2205	2135	180	132	554	349	50	26	273	178	177	141	32	21	13	9	1279	856
Anna Univ. of Tech. Chennai	4	1140	1058	16	13	279	207	18	18	179	119	95	84	12	8	9	1	608	450
Anna Univ. of Tech. Tirunelveli	3	900	866	60	72	148	191	25	15	110	75	68	65	18	11	8	0	437	429
Anna Univ. of Tech. Madurai	2	780	725	8	5	203	152	14	11	127	60	74	49	11	4	5	2	442	283
Anna Univ. of Tech. Tiruchy	5	2700	2524	31	21	655	532	67	34	405	274	238	167	37	35	22	6	1455	1069
SUB-TOTAL	18	7725	7308	295	243	1839	1431	174	104	1094	706	652	506	110	79	57	18	4221	3087
GRAND TOTAL	491	195324	162231	17627	7667	46219	29761	5167	1836	24160	11702	10442	5546	1131	570	294	109	105040	57191

CHART - I
NUMBER OF STUDENTS IN ARTS & SCIENCE AND B.Ed. COLLEGES IN TAMIL NADU DURING 2010-2011

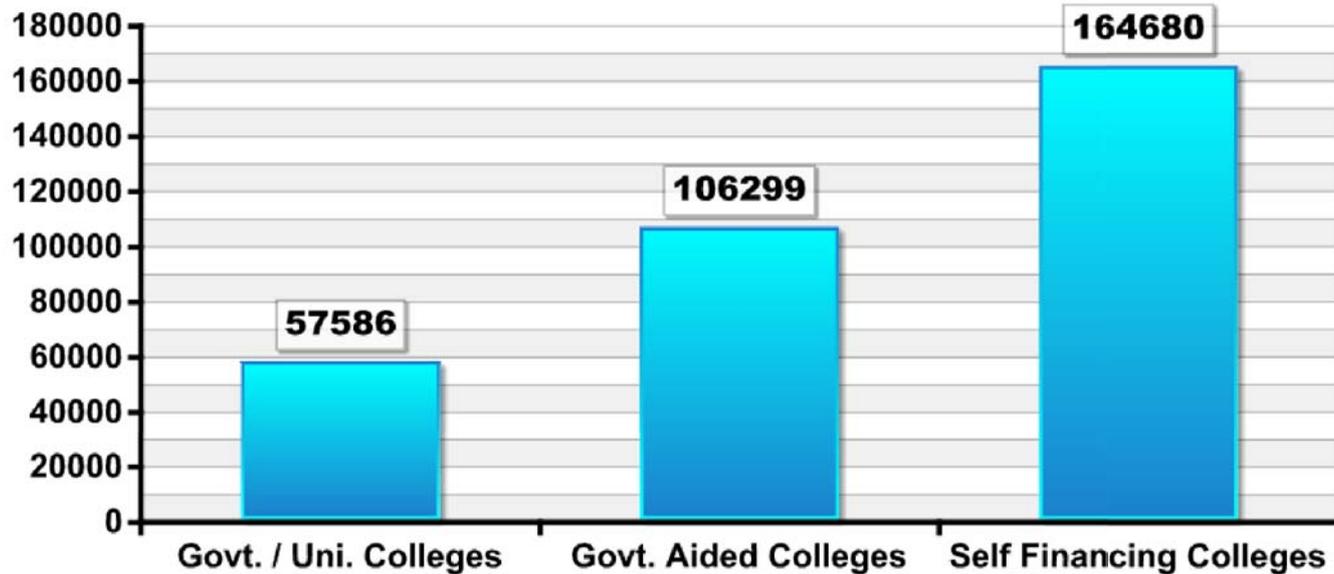


CHART - II
NUMBER OF ENGINEERING COLLEGES IN TAMIL NADU DURING 2010-2011

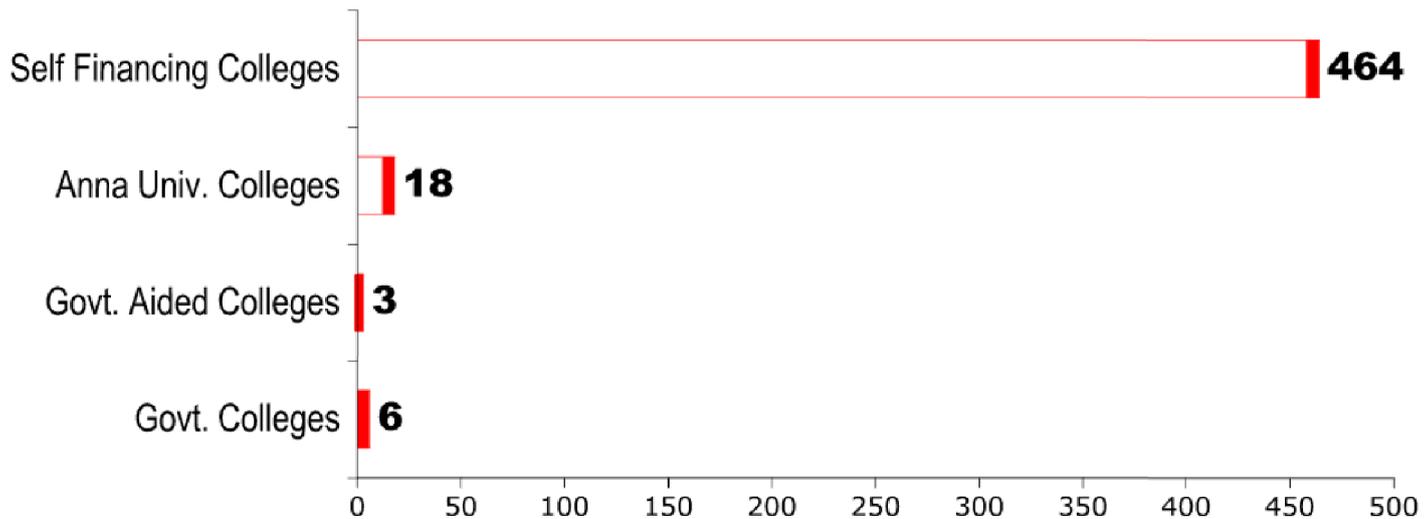


CHART - III
NUMBER OF STUDENTS ADMITTED IN ENGINEERING COLLEGES IN TAMIL NADU DURING 2010-2011

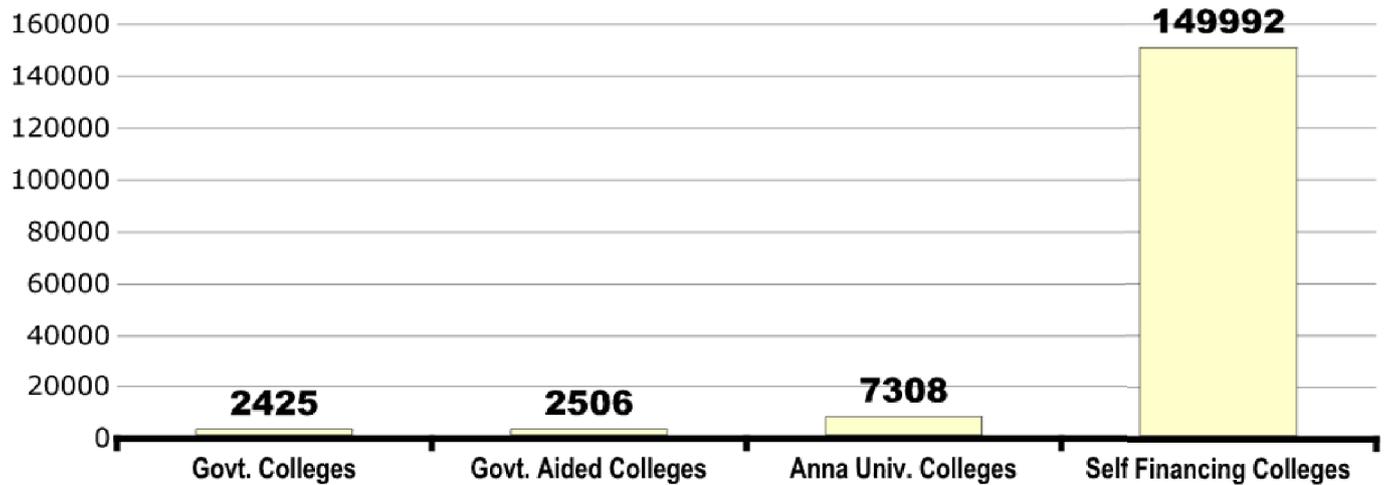


CHART - IV
NUMBER OF POLYTECHNIC COLLEGES IN TAMIL NADU DURING 2010-2011

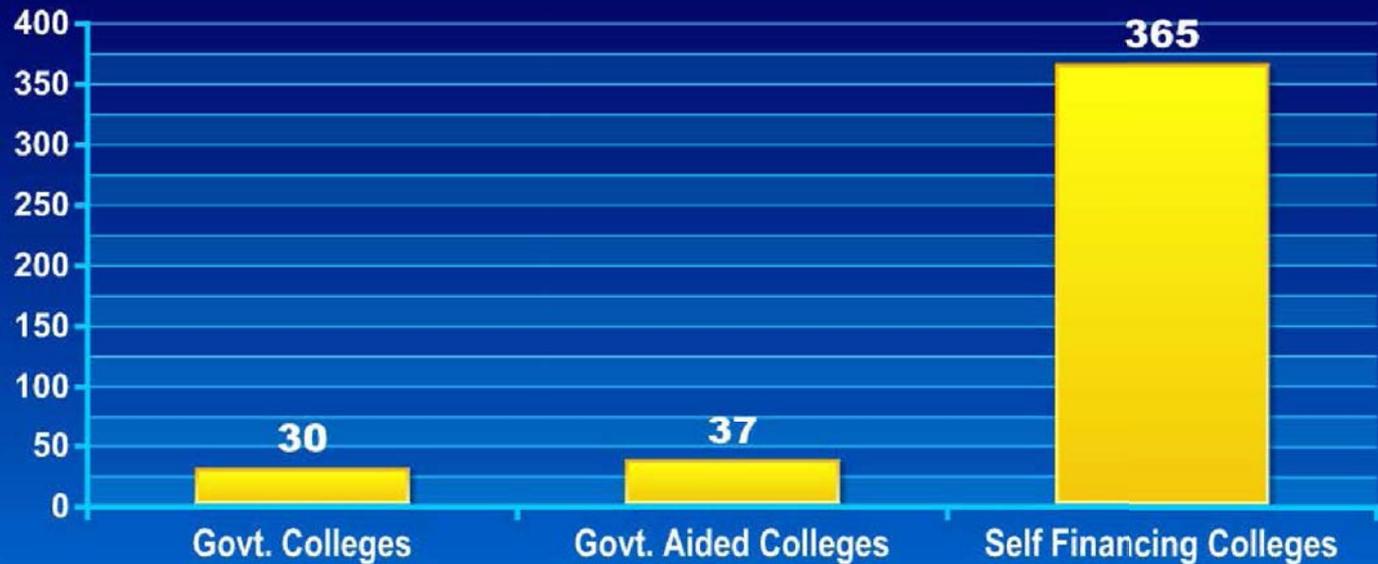


CHART - V
NUMBER OF STUDENTS ADMITTED IN POLYTECHNIC COLLEGES IN TAMIL NADU DURING 2010-2011

