# THE TAMILNADU Dr. M.G.R. MEDICAL UNIVERSITY CHENNAI

# (AFFILIATION OF PHARMACY COLLEGE) STATUTES B.PHARMACY / M.PHARMACY

# **ASSENT OF THE CHANCELLOR**

These statutes have received the assent of the chancellor communicated in Lr.No.589/U2/2012 dated 24.8.2012 of the Secretary to the Governor of Tamil Nadu.

# **UNIVERSITY AUTHORITIES**

The Tamil Nadu Dr. M.G.R. Medical University, Chennai.

# Laws of the University.

The Tamil Nadu Dr. M.G.R. Medical University (Affiliation of Pharmacy College) Statutes (B.PHARMACY / M.PHARMACY)

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In exercise of the powers conferred by section 42 of the Tamil Nadu Dr.M.G.R. Medical University, Chennai, Act, 1987 (Tamil Nadu Act 37 of 1987), and in supersession of the Statutes for Affiliation of Pharmacy College (B.PHARMACY / M.PHARMACY), the Governing Council of the Tamil Nadu Dr. M.G.R. Medical University, Chennai, hereby makes the following Statues.

1. (i) These Statues may be called The Tamil Nadu Dr. M.G.R Medical

University (Affiliation of Pharmacy College) Statutes(B.PHARMACY / M.PHARMACY).

- (ii) They shall come into force from the date of assent of the Chancellor.
- 2. The words and phrases used in these statues shall, unless expressly explained otherwise, have the same meaning as they have with reference to The Tamil Nadu Dr. M.G.R. Medical University, Chennai, Act, 1987 (Tamil Nadu Act 37 of 1987) hereinafter called "the Act".
- 3. It shall be necessary for the proposed Pharmacy College seeking Provisional Affiliation to The Tamil Nadu Dr. M.G.R. Medical University for starting first batch of B.Pharm degree course to apply for Certificate of Registration of their application with The Tamil Nadu Dr. M.G.R. Medical University, Chennai.
- 4. The application for the Certificate of Registration shall be in writing and in Form I addressed to the Registrar of The Tamil Nadu Dr. M.G.R. Medical University, Chennai. The application shall be submitted to the University between the 1<sup>st</sup> May and 30<sup>th</sup> September of every year with an intake of 60 admissions along with processing fee of Rs.50,000/- (Rupees fifty thousand only), Rs.30,000/- towards Inspection fee and cost of application for Rs.1,000/- (Rupees one thousand only) or such amount as may be prescribed by Governing Council from time to time.
  - 5. The application shall contain the following particulars:-
  - (a) Name of the proposed Pharmacy College;

- (b) Address where the Pharmacy College is to be located, with telephone number, E-Mail, Web Site .
- (c) The number of students proposed to be admitted in the first batch of the course;
- (d) Copy of Essentiality Certificate obtained from Government of Tamil
  Nadu
- (e) The availability of land, building and other physical infrastructure, facility of training available to the students to be admitted;
- (f) Ready built area available for accommodation of the academic complex;
- (g) Residential quarters for the staff of the college;
- (h) Playground;
- (i) Hostel;
- (j) Name of the Trust or Promoting body; and
- (k) Inspection Proforma duly filled-in pertaining to issue of Certificate of Registration

Such other particulars as may be required by The Tamil Nadu Dr. M.G.R. Medical University, Chennai, from time to time.

6. The application shall also contain the particulars regarding

- (i) the pharmaceutical manufacturing unit where training in manufacture and analysis for the fourth batch B.Pharm students is proposed.
  - (ii) tie-up with 100 bedded Hospital
- 7. On receipt of the application along with the duly filled-in Inspection Proforma, the University shall scrutinize the same and verify whether the following conditions which are necessary for the issue of the Certificate of Registration to the proposed pharmacy college, are fulfilled:-
- (a) The proposed pharmacy college shall own and possess a minimum 0.75 acres in Metro cities and 2.50 acres in other areas as per Pharmacy Council of India/All India Council for Technical Education. (b) The applicant college shall satisfy the University that the college has clear title to the lands without any encumbrance and shall furnish the original title deeds and such other documents as required by the University from time to time in this regard.
- (c) The applicant college shall fulfill necessary provisions of relevant Acts on the subject such the Tamil Nadu Town and Country Planning, Act, 1971 (Tamil Nadu Act 35 of 1971) and Tamil Nadu Land Reforms (Fixation of Ceiling on Land) Act 1961 (Tamil Nadu Act 58 of 1961) or other local body Acts as in force, etc., and shall also ensure the evidence so produced in this regard is valid and binding on the applicant college.
- (d) The applicant college shall satisfy the University that all the infrastructural facilities of the college are in one campus and that the residential quarters for staff, the playground and hostels are located in a separate campus, if the extent of land is shown in two or more places.

However, the academic complex shall be located in a minimum of of contiguous land as prescribed in Annexure-I.

- (e) The applicant college shall be located in the proximity of a medical college or a well established general hospital with which the management has an agreement to facilitate training of the pharmacy students in the subjects of clinical pharmacy, hospital pharmacy, hospital administration, etc., or in the alternative the pharmacy college shall have a tie up with a general hospital with a minimum of 100 beds. The medical college or a general hospital shall be within a radius of 30 K.M. from the academic complex. In the case of a tie up with a general hospital there shall be a binding evidence to show that the said hospital shall oblige to extend the necessary facilities to the pharmacy students in imparting the training.
- (f) The pharmacy college shall submit an undertaking from a pharmaceutical manufacturing unit to provide training for 15 days in manufacture and for 15 days in analysis for the fourth batch B.Pharm students of the proposed college.
- (g) A pharmacy college shall have a minimum ready built area of 1,500 Sq.mtrs. initially necessary for the first batch of course and 3500 sq.mtrs. for the entire course to accommodate the administrative office, laboratories, class rooms, library, store-rooms, toilets for students and staff (separately for men and women), with proper hygiene, adequate sanitation facilities, safe drinking water, adequate water supply, etc. as prescribed in Annexure-I.

- (8) The University, after a preliminary inspection, if fully satisfied, that all the conditions required to be fulfilled, by the applicant college are fulfilled, shall issue a Certificate of Registration in Form II to the applicant college to enable the college to make further arrangements to start the course on payment of Rs.50,000/- towards fee for issue of Certificate of Registration.
- (9) The issue of the Certificate of Registration alone shall not confer any right on the applicant college to start the B.Pharm Degree Course.
- (10) The applicant college on receipt of the Certificate of Registration shall fulfill the following conditions to enable the University to appoint and send an inspection commission to the pharmacy college:-
- (11) (1) It shall obtain and submit the approval from the All India Council for Technical Education & Pharmacy Council of India as the case may be for starting the said course along with Rs.30,000/- towards Inspection fee or such amount as may be prescribed by Governing Council from time to time.
- (2) It shall produce evidence of qualified staff members for the departments listed below who have consented to join the faculty of the institution along with the Inspection Proforma duly filled-in intended for Provisional Affiliation. It shall also furnish the consent letter / appointment order for such staff members required for the conduct of First Batch of B.Pharmacy course.

### 1. Pharmaceutics

## 2. Pharmaceutical Chemistry

# 3. Pharmacognosy

# 4. Pharmacology

- (3) It shall appoint a qualified Principal before the inspection commission is sent for the visit.
- (4) (a) It shall have the following posts of staff members with the qualification prescribed hereunder which are essential for the first batch of B.Pharm degree course and such posts shall be created by the pharmacy college management:-

(i)	Professor-cum-Principal, in any speciality in	1 Post
	Pharmaceutical Science	
(ii)	Associate-Professor of Pharmaceutical Chemistry	1 Post
(iii)	Assistant Professor of Pharmacology	1 Post
(iv)	Assistant Professor of Bio-Statistics (Part time)	1 Post
(v)	Assistant Professor of Computer Science (Part	1 Post
	time)	
(vi)	Assistant Professor in Pharmacy (Pharmaceutical	3 Posts
	analysis/chemistry -1; Pharmaceutics- 1;	
	Pharmacognosy -1) <del>(</del>	
(vii)	Librarian	1 Post
(viii)	Office Superintendent	1 Post
(ix)	Office Staff –Gr. I	1 Post
(x)	Accountant	1 Post

(xiii)	Store Keeper	1 Post
(xiv)	Computer operator	1 Post
(xv)	Gas Mechanic	1 Post
(xvi)	Electrical Assistant	1 Post
(xvii)	Other supporting staff:	8 Posts
	Laboratory Technician -4 3, Laboratory	
	Assistant/Attender - 3 Office Assistant - 1,	
	Sweeper -1	

\*\* Note: The Institution shall have appointed a qualified Principal and a minimum of 90% of the qualified staff members required for conduct of first batch of B.Pharmacy degree course at the time of inspection for grant of Provisional Affiliation for the first batch of B.Pharmacy degree course

(b) Qualifications for the post of Principal:- (i) A Ph.D degree in any branch of Pharmaceutical sciences;

## with

A Post-Graduate degree in Pharmacy / M.Pharm in any speciality)

- (ii) A basic degree in Pharmacy (B.Pharm)
- (iii) Teaching experience for a period of not less than ten years after obtaining P.G. (M.Pharmacy) qualification in Pharmacy-Preferably

with research and administrative experience and not less than 5 years experience as Associate Professor

Or

A minimum of 13 years of experience in teaching and/or research and/or in industries with

- (ii) A basic degree in Pharmacy (B.Pharm) & M.Pharm with Ph.D.
- (iii) Teaching and research experience in that particular speciality for a period of not less than 10 years after obtaining the P.G. qualification

# (c) Qualifications for the post of Professor:-

(i) A Ph.D degree in Pharmacy in the respective speciality;

- with

A Post-Graduate degree in Pharmacy / M.Pharm)

In that particular speciality of any Indian University.

- (ii) A basic degree in Pharmacy (B.Pharm)
- (iii) Teaching and research experience in that particular speciality for a period of not less than 10 years of which 10 years should be after obtaining the P.G. qualification and not less than 5 years experience as Associate Professor.

Or

A minimum of 13 years of experience in teaching and/or research and/or in industries with

- (ii) A basic degree in Pharmacy (B.Pharm) & M.Pharm
- (iii) Teaching and research experience in that particular speciality for a period of not less than 10 years after obtaining the P.G. qualification
- (d) Qualification for the post of Associate Professor:
  - (i) A Ph.D degree in Pharmacy in the respective speciality; or Equivalent

with

A Post-Graduate degree in Pharmacy (M.Pharm)

In that particular speciality of any Indian University.

- (ii) A basic degree in Pharmacy (B.Pharm)
- (iii) Teaching and research experience in that particular

  Speciality for a period of not less than 5 years of experience in teaching or research and class or industry of which atleast 2 years shall be post Ph.D. is desirable.
  - (e) Qualifications for the post of Assistant Professor:-
- M.Pharm degree in the respective speciality;

### with

a degree with basic degree in Pharmacy with first class or equivalent in bachelors or masters degree;

If a class/ division is not awarded, minimum of 60% marks in aggregate shall be considered equivalent to first class/ division. If a Grade Point System is adopted the CGPA will be converted into equivalent marks as below:

Grade Point	Percentage Equivalent
6.25	55 %
6.75	60 %
7.25	65 %
7.75	70 %
8.25	75 %

(f) Qualifications for other non-professional posts, Laboratory as prescribed in Annexure-II:

Supervisors:- B.Pharm or D.Pharm or B.Sc degree with Chemistry as major and Botany or Zoology as ancillary; or Botany or Zoology as major with Chemistry or Physics as ancillary.

- (5) It shall furnish a budget for each year and a separate development budget which will cover the expenses for the fulfillment of the requirements prescribed in the second, third and fourth batch of the course
- 11. The proposed pharmacy college shall be equipped as prescribed in Annexure-II

- (i) Facilities for teaching pharmaceutical/Inorganic and Organic Chemistry, , Anatomy, Physiology and Health Education, and Bio-statistics & Computer applications.
- (ii) Adequate chemicals, glasswares and necessary equipments as applicable to the syllabus recommended.
- (iii) Pharmaceutical Chemistry laboratory with a minimum space of 75 sq.mtrs. accommodating the laboratory of the balance room, preparation room, staff room, Fume cupboard, as prescribed in Annexure-II in the remaining space.
- (iv) A separate Physiology laboratory in a minimum space of 75 sq.mtrs. with facilities for experimental Physiology, smoking and varnishing chamber, frog tank and animal room.
- (v) All the laboratories above mentioned shall have a good lighting, ventilation and sufficient number of doors for any emergency.
- (vi) Each laboratory shall be fitted with work benches and furniture required for 20 students in a batch as per the standard specification and the pharmaceutical chemistry laboratory shall have all the equipments as essential as as prescribed in Annexure-III.
- (vii) There shall be adequate number of exhaust fans and fire extinguishers in each laboratory.
- (viii) There shall be an Anatomy Museum-cum-demonstration hall in a minimum space of 50 sq.mtrs. (ix) There shall be a Central Library with

reading room with a minimum space of 150 Sq.Mtrs. with a minimum of 1500 volumes of 150 titles as prescribed in Annexure-I for the use of students.

- (x) There shall be a computer lab of 75 Sq.M. space with adequate computing facilities (as prescribed in the Annexure-I) shall be utilized for the teaching Computer application practical and also to function as a language laboratory.
- (xi) (a) There shall be a store-room for chemical and glasswares in a minimum space of 100 sq.mtrs.
- (b) A petrol gas plant or provision for LPG gas supply shall be provided.
- (xii) There shall be one lecture hall of 75 sq.mtrs with a seating capacity for 60 students with adequate ventilation, fighting and fans.
- (xiii) In addition there shall be one tutorial hall of 33 Sq.M. with adequate ventilation, lighting and fans.
- (xiv) There shall be staff rooms for all departments with a sectional library.
- (xv) There shall be a separate administrative office with a minimum space of 150 sq.mtrs.
- (xvi) All the said laboratories shall be functional at the time of inspection.

- (xvii) There shall be a minimum of 20 chemical balances, vacuum pump, single pan analytical balances with associated equipments and instruments fully installed in the room adjacent to the laboratory.
- (xviii) There shall be separate common halls with 75 sq. mtrs. each for men and women students with adequate toilet facilities.
- (xix) There shall be space and equipments for extra curricular activities for the students.
- 12. The Inspection Commission shall inspect the above facilities duly verifying the Inspection Proforma submitted by the Management and report to the University as to the satisfactory fulfillment of the conditions.
- 13. The Inspection Commission shall submit its report to the Registrar within 10 days after the inspection. The Commission shall point out in the report, lacunae, if any, in the fulfillment of the conditions to be satisfied and advise on the possibilities of rectification by the management within the given time not exceeding three months in any case.
- 14. The University shall satisfy itself on the possibility and capacity of the management of the college to rectify the defects pointed out by the inspection commission in its report.
- 15. After a detailed examination of the report of inspection commission and if the University is fully satisfied as to the fulfillment of the conditions for the Provisional Affiliation for the first batch of B.Pharm degree course, the University shall direct the management of the proposed Pharmacy college to remit a sum of Rs.5,00,000/- (Rupees five lakhs only) towards the security

deposit. The security deposit shall be invested in a fixed deposit of a Nationalised Bank or Government Undertaking/Corporation which accepts fixed deposits, jointly in the names of the Registrar of the University and the management of the proposed pharmacy college. The fixed deposit receipt shall be kept in the custody of the Registrar.

- 16. On the remittance of Rs.5,00,000/- (Rupees five lakhs only) towards the security deposit by the Management of the proposed college, the University shall grant Provisional Affiliation for the first batch of course of B.Pharm after collecting a sum of Rs.4,00,000/- (Rupees four lakhs only) towards the fee for the Provisional Affiliation for the first batch of B.Pharm course
- 17. The interest accrued on the security deposit shall be spent on the maintenance of the Pharmacy college. The management of the Pharmacy college shall show evidence of a minimum of annual receipt of atleast Rs.50,00,000/- (Rupees fifty lakhs only) to facilitate the proper running of the Pharmacy college. This is only a portion of the liability which the college is likely to incur every year towards payment of salaries to the teaching staff and the maintenance of the college.
- 18. The Provisional Affiliation granted by the University shall be only for the first batch of the B.Pharm degree course. On receipt of the intimation regarding the grant of Provisional Affiliation for the first batch of B.Pharm degree course, the management of the Pharmacy college shall intimate the University that all the staff mentioned in the statute above have been appointed and are in a position to take up classes.

- 19. The University shall on receipt of the above intimation from the Pharmacy college, issue orders to the college to admit students for the first batch of B.Pharm course for the corresponding academic year.
- (1) Every college shall have a duly constituted Governing Body as prescribed by AICTE & Pharmacy Council of India with representatives of the teaching staff, to advise the Principal in the internal affairs of the College. A record of proceedings of the said Governing Body of the college shall be maintained by the Principal.
- (2) The Governing Body of the College shall meet at least once in every six months to consider the budget estimates and such other matters as may arise in its working. It shall meet in May-June each year to consider the Annual Report, the audited statement of accounts, changes in the staff subjects or courses in which fresh Affiliation or approval is to be sought in the following year. A copy of the notices of meeting shall be sent to the Registrar within 15 days of the meeting. A copy of the minutes of the meeting shall also be sent the Registrar with 15 days of the meeting.
- 21. By the end of the first batch of B.Pharm degree course, the Pharmacy college shall apply to the University along with a copy of Inspection Proforma duly filled in & Rs.30,000/- towards Inspection fee or such amount as may be prescribed by Governing Council from time to time for the Continuance of Provisional Affiliation for the second batch of B.Pharm degree course, after creating additional infrastructure as indicated below:-

- (a) A separate department of Pharmaceutical chemistry with a laboratory of 75 sq.mtrs. with a standard chemistry laboratory work tables to accommodate 20 students in a batch at a time with gas, water, drainage and sufficient electrical connection on the table and in the laboratory for easy operation of electrical equipments. There should also be a provision for vacuum points and space for laboratory, staff, preparation room and balance room. There should also be a Professor's room.
- (b) A separate laboratory of 75 sq.mtrs. for physical pharmaceutics and pharmacy practice with water, drainage, gas and electrical connections in the table as well as at suitable points in the wall and in the preparation room.
- (c) (i) A multi-purpose hall with facilities for audio-visual aids for use in seminars, symposia and for the conduct of the examinations. The hall shall have a seating capacity of 120 students. All equipments, glasswares and chemicals required for the use in the second batch of the course as per the syllabus and as prescribed in Annexure-I shall be provided.
  - (ii) The following additional staff shall be appointed to conduct second batch classes and as per Annexure-II:-

(a) Professor of Pharmaceutical chemistry 1 post

(b) Professor of Pharmaceutics 1 post

(c) Associate Professor of Pharmacology 1 post

- (d) Other supporting staff for each department/laboratory 5 posts
- (i) Laboratory Technician

1 Post,

- (ii) Laboratory Assistant/Attendant
- 3 Posts
- (iii) Sweeper/cleaning personnel

1 Post.

- 22. The University, if fully satisfied on an inspection as it deems necessary that the conditions mentioned above are fulfilled by the Management, shall grant Continuance of Provisional Affiliation for the second batch of B.Pharm degree course and for existing batch after collecting a payment receipt of sum of Rs.50,000/- (Rupees fifty thousand only) towards the fee for Continuance of Provisional Affiliation for the second batch of B.Pharm course subject to production of approval from Pharmacy Council of India/All India Council for Technical Education. Explanation The Continuance of Provisional Affiliation granted under this statute is only for the second batch of the B.Pharm degree course and for existing batch.
- 23. It shall be the duty of the Management of the Pharmacy college to fulfill the requirements for starting the third of the B.Pharm degree course
- 24. The following additional departments with necessary staff members, additional laboratories and additional facilities have to be provided by the Management of the Pharmacy college to become eligible for applying for Continuance of Provisional Affiliation for the third batch of B.Pharm degree course

Additional departments:- (a) Pharmacology department,

## (b) Pharmacognosy department.

Additional laboratories (i) There shall be Pharmacognosy laboratory of 75 sq.mtrs. to accommodate not more than 20 students at a time with separate space for preparation room, laboratory, staff room, They shall be fitted with Biology Type of wok tables with provision for gas, water, drainage and electrical connection on the table with fixed lightings for microscopic work. Separate sinks for washing shall be provided in the preparation room. A store room of 15 sq.mtrs. shall be provided in continuity with the laboratory. A museum room of 50 sq.mtrs. shall be set up with furniture for display of crude drugs. An aseptic room of 20 sq.mtrs. shall be provided with an A/C Unit for Tissue Culture work.

- (ii) There shall be a provision for Medicinal garden to provide and to grow atleast 250 medicinal plants.
- (iii) There shall be Pharmacology department with a separate laboratory of 75 sq.mtrs with a provision for experimental pharmacology with adequate gas, water, drainage and electrical connections. A preparation room, a laboratory, staff room and a smoking and varnishing room shall also be provided.
- (iv) There shall be a department of Pharmaceutics with a separate laboratory of 75 sq.mtrs for pharmaceutical dosage forms practical with gas, water, drainage and electrical connections on the table. A preparation room, a room for laboratory staff may be provided adjacent to the laboratory.

- (v) A separate machine room of 80 sq.mtrs shall also be provided with electrical plug points for fixing all the pharmaceutical machineries as required under the syllabus and making it operational for the use of the students. Gas and water supply with drainage shall also be provided at appropriate points. This machine room shall be in continuity with the Pharmaceutics Laboratory.
- (vi) There shall be separate laboratory for Pharmaceutical Biotechnology under Department of Pharmaceutics of 75 Sq.Mtrs. with Biology type of work-tables with gas, water and drainage facilities. A small room of 10 Sq. Mtrs. with a laminar flow unit shall be provided with A.C. for aseptic dispensing and other microbiological works. This section can manage both clinical and Hospital Pharmacy and Dispensing and Biological Pharmacy. The Professor and other Assistant Professors shall be provided with separate accommodating space. Separate media sterilization rooms, preparation room, room for laboratory staff, etc., shall be provided.
- (vii) An additional Pharmaceutical Chemistry laboratory with a minimum space of 75 Sq.Mtrs. accommodating the laboratory balance room, preparation room, Laboratory staff room, Fume cupboard, as prescribed in Annexure-I. This laboratory shall be utilized for the Practical's in Medicinal Chemistry..
- 25. The equipments, glasswares, chemicals, etc., for the laboratories and connected departments must be in accordance with the syllabus recommended and pharmacy regulations as prescribed if any by the Pharmacy Council of India in adequate quantity and number.

- 26. The Library facilities for the students shall be expanded to provide for 2500 books of 250 titles covering all the subjects in the entire course and not less than 10 national & five international journals in different specialities.
- 27. The college shall have one more lecture hall with 75 sq.mtrs. to accommodate 60 students.
- 28. There shall be a staff Research Laboratory with a minimum space of 75 sq.mtrs.
- 29. The permanent hostel buildings separately for men and women students shall be completed before the end of the second batch
- 30. The facilities for sports and extra-curricular activities for the students shall be strengthened.
- 31. The college shall be equipped with audio-visual teaching aids, Xerox copying machine, other office equipments, and a photography section.
- 32. Provision shall be made for giving the students training in Community Clinical and Hospital Pharmacy for a period of 3 1 month
  - (A) The following additional staff shall be appointed:-
  - (1) Professor of Pharmacology 1 Post
  - (2) Associate Professor of Pharmaceutics 1 Post
  - (3) Assistant Professor of Pharmaceutical

Chemistry 1 Post

- (4) Associate Assistant Professor of Pharmacognosy 1 Post
- (6) Other supporting staff for each department laboratory 9 Posts
  - (i) Lab Technician -1
  - (ii) Lab. Asst./Attender 5
  - (iii) Office Staff Gr.II 1
  - (iv) Office Assistant 1
  - (v) Sweeper/cleaning personnel 1
- 33. (1) The University, if fully satisfied on an inspection as it deems necessary that the conditions prescribed above are fulfilled by the management, shall grant the Continuance of Provisional Affiliation for the Third Batch B.Pharm degree course and for existing batches after collecting a payment receipt of Rs.75,000/- (Rupees seventy five thousand only) towards the fee for Continuance of Provisional Affiliation for the third batch B. Pharmacy Degree course subject to production of approval from Pharmacy Council of India & All India Council for Technical Education. (2) The University shall satisfy itself that the Management have taken adequate steps to fulfill the requirements, for the fourth batch of B.Pharm Degree course of
- 34. The management shall, before starting the fourth batch of course in the Pharmacy college, fulfill the following conditions The management should fulfill all the requirements as prescribed in the Annexure I, II,& III.

- (1) The departments shall be expanded and additional facilities shall be provided as follows:-
- (a) A separate laboratory for Pharmaceutical Analysis under Pharmaceutical Chemistry may be started with a separate room 80 sq.mtrs with provision for A.C. for setting up of all modern analytical equipments as prescribed in Annexure-III

Explanation:- There shall be adequate electrical connections with voltage stabilizers for the safety of the sensitive analytical equipments. Separate sitting space shall be provided for the Associate Professors and Assistant Professors incharge. Separate room adjacent to the Instruments Laboratory shall be provided to prepare solutions with heating arrangements, water and drainage facilities.

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- (b) A separate Department of Pharmacognosy shall be organized with separate space for the Professor and other Associate Professors.
- (c) All laboratories shall be provided with fire extinguishers and adequate number of exhaust fans.
- (d) A separate Multipurpose hall shall be provided with facilities for audio visual aids to accommodate 250 students.
- (e) A spacious animal house (80 sq.mtrs.) to accommodate experimental animals necessary for teaching and research work shall be provided.

- (2) The Pharmacy College shall be equipped with the analytical and other laboratories with the latest standard equipments required as per the syllabus recommended in addition to the equipments prescribed as above.
- (3) Provision shall be made to give practical training for one month in any one of the established manufacturing units.
  - (4) The college shall have a minimum of one bus for the students.
  - (5) The following pharmacy staff shall be appointed for the fourth batch

a ) Professor of Pharmacognosy	1 Post
b ) Assistant Professor of Pharmaceutical Chemistry/Pharmaceutical Analysis	1 Post
c ) Assistant Professor of Pharmacology	1 Post
d ) Assistant Professor of Pharmaceutics	1 Post
e ) Assistant librarian	1 Post
f) Physical Education Director (Part time)	1 Post
	1 Post
g) Library Attender	
	1 Post
h) Physical Education – Marker (Part time)	
"\ 0.0"   0.1 ( 0 )	4.5

1 Post

i)Office Staf Gr.II

- (6) The management of the college shall also provide:-
  - (i) Auditorium
  - (ii) Faculty & students Recreation Hall
- 35. The University if fully satisfied, on an inspection as it deems necessary, that the conditions mentioned above are fulfilled by the management, shall grant Continuance of Provisional Affiliation for the fourth Batch of B.Pharmacy degree course and for existing batches after collecting a payment receipt of Rs.75,000/- (Rupees seventy five thousand only) towards the fee for Continuance of Provisional Affiliation for the fourth batch of B.Pharmacy course subject to production of approval from Pharmacy Council of India & All India Council for Technical Education.
- 36. (a) Thereafter, three months before the closure of every academic year, the management of the college shall make an application in writing along with the Inspection Proforma duly filled in to the University for grant of Continuance of Provisional Affiliation for conduct of the entire course during the next academic year along with the prescribed inspection fee and request the University to appoint an Inspection Commission to inspect the college for grant of Continuance of Provisional Affiliation for conduct of the entire course
- (b) The University on receipt of such application shall appoint an Inspection Commission to inspect the college and to verify whether all the

infrastructural facilities required for the conduct of the entire course are continued to be provided by the college. The Inspection Commission duly verifying the Inspection Proforma submitted by the Management and after inspecting the college shall submit a report to the University as to the continuance of all the required infrastructural facilities in the college for conduct of the entire course.

(c )The University after detailed examination of the Inspection Report and if the University is fully satisfied as to the continuance of all the required infrastructural facilities for grant of Continuance of Provisional Affiliation for conduct of the entire course, the University shall after collecting a sum of Rs.50,000/- (Rupees fifty thousand only) or such amount as may be fixed by the Governing Council from time to time towards the fee for the grant of Provisional Affiliation for conduct of the entire course subject to production of approval from Pharmacy Council of India/All India Council for Technical Education.

(d) It shall be necessary for the management of the college to obtain the Continuance of Provisional Affiliation to conduct the entire course, as stated above every year. The above provisions will be followed for granting Continuance of Provisional Affiliation for conduct of the entire course of study, every year.

- 37. It shall be necessary for the college seeking Provisional Affiliation of the University for starting M.Pharm Degree course to apply for Certificate of Registration of their application with the Tamil Nadu Dr. M.G.R. Medical University, Chennai.
- 38. The Colleges which are conducting B.Pharmacy course and which is approved by the Pharmacy Council of India under Section 12 of the Pharmacy Act are eligible to apply for Provisional Affiliation to for M.Pharmacy degree course
- 39. The application for the Certificate of Registration shall be in writing and in Form I and addressed to the Registrar of the Tamil Nadu Dr. M.G.R. Medical University, Chennai. The application shall be submitted to the University between 1<sup>st</sup> May and 30<sup>th</sup> September along with the Inspection Proforma duly filled in along with processing fee of Rs.25,000/- (Rupees twenty five thousand only) per speciality and cost of application for Rs.1,000/- (Rupees one thousand only) or such amount as may be prescribed by Governing Council from time to time.

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- 40. The application shall contain the following particulars:-
  - (a) Name of the College
  - (b) Address
  - (c) The number of students proposed to be admitted in the first batch of the M.Pharmacy degree course.

- (d) Availability of land, building, facility of training and other physical infrastructure available exclusively for the students of M.Pharmacy degree course to be admitted.
- (e) Approval status by Pharmacy Council of India & AICTE.
- (f) Ready built area available for the accommodation of the academic complex.
- (g) Residential quarters for the staff of the college.
- (h) Play ground
- (i) Hostel, etc.
- (j) Name of the Promoting body.
- (k) Whether the college has fully complied with the guidelines of the University with regard to the conducting of B.Pharmacy degree course.
- (I) Whether the first batch of students of B.Pharm degree course have passed out of the college;
- 41. On receipt of the application for Certificate of Registration, the University shall scrutinise the same and verify whether the following conditions, which are necessary to start first batch M.Pharmacy degree course are fulfilled by the college:-

- (a) the college shall possess suitable ready built area of not less than 250 sq.mtrs. exclusively for each speciality of M.Pharm degree course proposed to be started.
- (b) The college shall possess suitable two tutorial halls for each speciality with an area not less than 33 sq.mtrs. with adequate facilities.
- (c) the college shall satisfy the University that the lacunae, if any, pointed out in the earlier inspections of the college with regard to B.Pharmacy degree course have been already rectified.
- (d) the college shall satisfy the University that the first batch of students of B.Pharmacy degree course have passed out of the college at the time of application and should submit the approval obtained from the PCI under section 12 of Pharmacy Act for Provisional Affiliation of M.Pharmacy degree course is made.
- (e) It shall furnish a budget for each year and a separate development budget which will cover the expenses for the fulfillment of the requirements prescribed for the second batch of the course.
- 42. The University, if satisfied that all the conditions required to be fulfilled by the college for starting first batch of M.Pharmacy degree course are fulfilled by the college, shall issue a Certificate of Registration in Form II to the college to enable it to make further arrangements to start the first batch of M.Pharmacy degree course on payment receipt of Rs.50,000/- towards fee for issue of Certificate of Registration.

The issue of the Certificate of Registration alone shall not confer any right on the applicant college to start the M.Pharmacy degree course.

- 43. The applicant college on receipt of Certificate of Registration shall fulfill the following conditions to enable the University to appoint and send an inspection commission to the college:-
- (a) It shall obtain the approval of the Pharmacy Council of India (if applicable) & All India Council for Technical Education for starting the M.Pharmcy Degree course of study and submit a copy of the same to the Tamil Nadu Dr. M.G.R. Medical University, while making the application for Provisional Affiliation in Form III.
- (b) It shall produce evidence of qualified staff members for the specialities who are either already in the staff with adequate free time to handle the M.Pharmacy classes or the staff who have consented to join the faculty of the college after starting the course and if so their consent letters or appointment orders for such staff members shall be furnished to the University.
- (c) It shall have the following posts of staff members with qualifications prescribed as in Annexure-II which are essential for the first batch of M.Pharmacy degree course
- (i) Senior Professor of Pharmaceutics / Pharmacognosy / Pharmaceutical Chemistry / Pharmacology / Pharmacy Practice / Pharmaceutical Analysis / Pharmaceutical Bio-Technology / Phyto-Medicine & Phyto-Pharmacy of one post in each branch for which Affiliation is sought for.

- (ii) Such number of Assistant Professors as per the norms prescribed from time to time with reference to the number of students proposed to be admitted in the first batch of M.Pharm degree course.
- (d) The Professor and the other guides in each speciality shall possess the following qualifications, as prescribed in Annexure-II
- (e) It shall provide one laboratory of 75 sq.mtrs. with a preparation room, a sectional library and a room for Laboratory staff with adequate number of work table with gas, electrical, water and drainage connections. All laboratories shall also be provided with exhaust fans and fire extinguishers and separate fume cupboards wherever necessary.
- (f) It shall restrict the number of candidates to five two students per guide in each speciality subject to a maximum of eighteen per speciality for the M.Pharmacy Degree Course.
- (g) It shall provide a small captive power generator for the Post-Graduate Laboratories for continuous operation of the different equipments.
- (h) It shall provide atleast 10 Indian and 5 International journals and ejournals as prescribed in Annexure-I with their back numbers and reference books in each speciality in the library.
- (i) It shall provide all chemicals, glassware and equipment required in respect of each speciality as per the syllabus recommended for the course.

- 44. All the said laboratories shall be functional at the time of the inspection.
- 45. The Inspection Commission shall inspect the College regarding the facilities available and submit its report to the University with respect to the Inspection Proforma submitted by the Management. The Inspection Commission shall also examine and specifically report about the capability of the Management of the College to deposit a sum of Rs.10,00,000/- (Rupees ten lakhs only) in three instalments (viz.,) Rs.4,00,000/- (Rupees four lakhs only) in the first instalment and 3,00,000/- (Rupees three lakhs only) each in the next two instalments in a Nationalised Bank or Government Undertaking / Corporation which accepts fixed deposits.
- 46. The inspection commission shall submit the report to the Registrar within 10 days after the inspection. The commission shall point out in the report lacunae, if any duly, in the fulfillment of the conditions to be satisfied and also advise on the possibilities of rectification by the management within a given time not exceeding three months.
- 47. The University, shall satisfy itself on the possibility and capacity of the management of the college to rectify the effects pointed out by the Inspection Commission in its report.
- 48. After a detailed examination of the report of the Inspection Commission and if the University is fully satisfied as to the fulfillment of the conditions for Provisional Affiliation for the first batch of M.Pharmacy Degree Course the University shall direct the Management of the college to remit a

sum of Rs.4,00,000/- (Rupees Four Lakhs only) towards the first instalment of security deposit. The Security deposit shall be invested in a fixed deposit of a Nationalised Bank or Government Undertaking / Corporation which accepts fixed deposits jointly in the names of Registrar of the University and the Management of College. The fixed deposit receipt shall be kept in the custody of the Registrar.

- 49. On the remittance of Rs.4,00,000/- (Rupees Four lakhs only) towards the first instalment of security deposit by the Management of the proposed college and subject to Statute 47 herein, the University shall grant Provisional Affiliation for the first batch of course of M.Pharmacy after collecting a payment receipt of f Rs.1,75,000/- per speciality (Rupees lakh seventy five thousand only) towards the fee for the Provisional Affiliation for the first batch of M. Pharmacy course subject to production of approval from All India Council for Technical Education & Pharmacy Council of India as the case may be.
- 50. The interest accrued on the fixed deposit shall be spent on the expenses connected with the conducting of the M.Pharm Course. The management shall show evidence of a minimum annual receipt-Rs.25,00,000/- (Rupees twenty five lakhs only) to facilitate the proper conduct of the Post–Graduate course in Pharmacy (M.Pharm) in the college. Such amount will be only a portion of the liability which the college is likely to incur every year towards payment of salaries to the teaching staff and the maintenance of the Post-Graduate Departments.

- 51. The Provisional Affiliation granted by the University shall be only for the first batch of the M.Pharm degree course. On receipt of the intimation regarding the grant of Provisional Affiliation for the first batch of M.Pharm degree course the management of the Pharmacy College shall intimate the University that all the staff mentioned in these statutes above have been appointed and are in position to take up classes.
- 52. The University shall, on receipt of the above intimation from the Pharmacy college, issue orders to the college to admit students for the first batch of M.Pharm degree course for the corresponding academic year and shall nominate a member to represent the interest of the University in the Governing body of the Pharmacy College.
- 53. After fulfilling all the conditions required to be fulfilled by the college under these statutes the college, by the end of the first batch of M.Pharm degree course, shall apply to the University for Provisional Affiliation for the second batch of M.Pharm degree course along with the Inspection Proforma duly filled in.
- 54. (a) The University if fully satisfied on an inspection as it deems necessary that the conditions prescribed above are fulfilled by the Management for Continuance of Provisional Affiliation of the second batch M.Pharmacy degree course, shall direct the management of the college to remit a sum of Rs.3,00,000/- (Rupees three lakhs only) towards the Second Instalment of the Security deposit. The Security Deposit shall be invested in a Nationalised Bank or Government Undertaking / Corporation which accepts fixed deposits jointly in the names of the Registrar of the University and the

management of the college. The fixed deposit receipt shall be kept in the custody of the Registrar. The interest accrued on the fixed deposit receipt shall be kept in the custody of the Registrar. The interest accrued on the fixed deposit receipt shall be kept in the custody of the Registrar. The interest accrued on the in the fixed deposit shall be spent on the expenses connected with the conducting of the M.Pharmacy Course.

- (b) On remittance of Rs.3,00,000/- (Rupees three lakhs only) towards the second instalment of Security Deposit by the management of the College, the University shall grant the Continuance of Provisional Affiliation for the second batch of M.Pharmacy degree course-after collecting a payment receipt of Rs.20,000/- (Rupees Twenty Thousand only) per speciality towards the fee for Continuance of Provisional Affiliation for the second batch of M.Pharmacy Degree course subject to production of approval from All India Council for Technical Education & Pharmacy Council of India as the case may be.
- (c) After fulfilling all the conditions required to be fulfilled by the college under these statutes, the college, by the end of the second batch of M.Pharmacy course, shall, apply to the University for entire M.Pharmacy degree course.
- (d) The University, if fully satisfied on an inspection as it deems necessary that the conditions required to be fulfilled by the management for grant of Continuance of Provisional Affiliation for the entire M.Pharmacy degree course of are fulfilled, shall direct the Management of the college to remit a sum of Rs.3,00,000/- (Rupees three Lakhs only) towards the third instalment of the security deposit. The security deposit shall be invested in a

Nationalised Bank or Government Undertaking / Corporation which accepts fixed deposits jointly in the names of Registrar of the University and the Corporation which accepts fixed deposits jointly in the names of Registrar of the University and the Management of the College. The fixed deposit receipt shall be kept in the custody of the Registrar. The interest accrued on the fixed deposit shall be spent on the expenses connected with the conducting of the M.Pharmacy course.

- (e) On the remittance of Rs.3,00,000/- (Rupees three lakhs only) towards the third instalment of security deposit by the management of the college, the University shall grant the Continuance of Provisional Affiliation for the entire M.Pharmacy degree course after collecting a payment receipt of Rs.20,000/-(Rupees twenty thousand only) per speciality towards the fee for Continuance of Provisional Affiliation for entire M.Pharmacy degree course subject to the submission of approval from All India Council for Technical Education & Pharmacy Council of India(if applicable).
- (f) The grant of Continuance of Provisional Affiliation for conduct of the entire M.Pharm Degree course, as stated above, shall be continued every year. The above provision will be followed for granting Continuance of Provisional Affiliation for conduct of the entire course, every year.

#### GENERAL

55.- A Provisional Affiliation/Continuance of Provisional Affiliation granted by the University in respect of each batch of the B.Pharmacy

Degree Course and in respect of each batch of the M.Pharmacy Degree Course is subject to the following conditions, namely:-

- (a) an affiliated college of B.Pharmacy and M.Pharmacy as the case may be shall strictly conduct the course in accordance with the course contents framed by the University and any modifications thereon suggested by the Boards of Studies concerned and the Standing Academic Board of the University from time to time.
- (b) it shall be competent for the University to inspect the College by sending an Inspector of the University if the University so deems fit, after giving two weeks notice to the management of the college concerned.
- 56. (i) The management of the affiliated College may apply to this University for the increase in seats in Under Graduate Courses upto a maximum of one hundred and twenty (120) seats only. Permission for increase in seats beyond one hundred and twenty will not be granted.
- (ii) The Management of the affiliated college may apply to this University for the increase in seats in M.Pharmacy Degree Course upto a maximum of (18) eighteen seats only in each speciality.
- (iii) The Management of an affiliated college which applies to this University for increase of seats either in B.Pharmacy or M.Pharmacy Degree Course shall enclose a copy of the order of approval of the All India Council for Technical Education & Pharmacy Council of India for such increase along with the Inspection Proforma duly filled in.

57It shall be competent for the Governing Council to entertain or decline to entertain for reason which shall be recorded in writing, the application received from the applicant college for increase in the number of seats in the college subject to the ceiling specified in Statute No.57. The University will review the clinical facilities provided by the institution.

58.No Pharmacy college shall apply to the University for increase in seats in B.Pharmacy Degree Course until the first batch of students has successfully completed the course and has, left the college and the B.Pharm. Degree so obtained is recognized. In regard to M.Pharmacy, Degree Course, there shall be no restriction in this regard.

59.- The applicant college shall satisfy the University regarding the following norms as prescribed by the University from time to time while making application for increase in seats in Form No.IV annexed with these statutes.

- (i) Proportionate increase in the staff pattern;
- (ii) Proportionate increase in the equipment and laboratory facilities;
- (iii) Proportionate increase in the accommodation, and
- (iv) Expansion of library.
- 60. On receipt of the application from the applicant college for increase in seats, the University, shall appoint an Inspection Commission to inspect the suitability of the facilities provided by the college for such increase in seats.

- 61 The Inspection Commission referred to in statute 60 shall report to the University as to whether all the requirements specified in statute 59 have been provided by the applicant college duly verifying the Inspection Proforma submitted by the Management. The Inspection Commission shall also point out in its report the lacunae, if any, in the fulfillment of the requirements to be provided and also advise as to the capability of the management of the college to rectify the lacunae with a period of two months.
- 62.- The University shall satisfy itself on the possibility and capacity of the management of the college to rectify the defects pointed out by the Inspection Commission in its report.
- 63. After a detailed examination of the report of the Inspection Commission and if the University is fully satisfied as to the fulfillment of the conditions for increase of seats, the University shall communicate the grant of permission.
- 64. The permission granted to the applicant college by the University under statute 63 is liable to be withdrawn if any of the norms prescribed in the statute 59 is violated. In case of such withdrawal, the permission shall be restored only when a satisfactory report is received by the University on an inspection that the norms prescribed in statute 59 have been duly complied with.
- 65- Conditions to be fulfilled by the Trust / Society for starting additional course in an existing college.

- (i) The applicant college shall own and possess not less than 2 acres of land for starting every additional course, in addition to the land required to be possessed by the Trust / Society under statute 7 (a);
- (ii) The applicant college shall also deposit a sum of Rs.5 Lakhs (Rupees five lakhs only) or such amount as may be prescribed by the Governing Council from time to time towards Security Deposit. The Security Deposit shall be invested in a Fixed Deposit in a "Nationalised Bank or Government Undertaking / Corporation which accepts Fixed Deposits", jointly in the names of the Registrar, the Tamil Nadu Dr. M.G.R. Medical University and the Trust / Society. The Fixed Deposit receipt shall be kept in the custody of the Registrar. The interest accrued in the Fixed Deposit shall be spent on the maintenance of the additional course and the applicant shall submit an Utilisation Certificate in this regard in Form No.V Annexed with this Statute at the end of every academic year.
- 66. The college / institution shall not enter in any Memorandum of Understanding with other Universities without obtaining the prior permission from this University. It shall be competent for the Governing Council to entertain or decline to entertain for reasons to be recorded in writing, the application received from the affiliated colleges for such permission.
- 67. The Governing Council shall have the power after due enquiry to withdraw the Provisional Affiliation /Continuance of Provisional Affiliation granted to a college, provided that before coming to such a decision, the Governing Council shall inform the management of the college concerned of its findings after enquiry and shall allow it an opportunity of making such

representation as it may deem fit and shall record its opinion on the representation so made.

- 68. Surprise inspection will be conducted by the University suo-motto or on complaints at any point of the year to confirm whether all such institutions are maintained in best condition as per Pharmacy Council of India norms. If any deficiencies are pointed out / noticed during the surprise inspection, action will be initiated to withdraw the Provisional Affiliation granted to the particular college/institution.
- 69. It shall be competent for the University to decide/change the venue of the Examination centre at the discretion of Governing Council and to send observers flying squads during Examination. The institution cannot claim the exam centre in their institution as a matter of right.
- 70. Prior permission of the State government/University is mandatory for shifting of college from one place to another place.
- 71. All the fees payable to the University shall be in the mode prescribed by the University from time to time.
- 72. Prior permission of the State government/University is mandatory if there is a change in the Management of the College.

#### FORM I

#### (See Statutes 3 and 4)

The Tamil Nadu Dr. M.G.R. Medical University, Chennai.

#### APPLICATION FOR CERTIFICATE OF REGISTRATION FOR AFFILIATION.

#### B.Pharmacy / M.Pharmacy

- 1. Name/Name(s) of the applicant(s)
- 2. Name of the proposed College
- Details of the constitution of the managing body of the proposed College (in the case of trusts or Societies, copies of bye-laws terms of the trust, etc., to be enclosed)
- Address to which communications are to be sent with telephone number, E-Mail, Web Site .
- 5. address where the College is proposed to be located
- 6. Previous application, if any, for Affiliation or approval, in the same subject and their disposal.
- 7. No. of candidates to be admitted in the First Batch of the Course.
- 8. Details regarding availability of land, ready built area, etc., (copies of title deeds and documents and latest encumbrance certificate, etc., to be enclosed) (information Regarding accommodation should be accompanied by drawings/ 0.75 5 Acres of land in metro cities & 2.50 acres in other areas).
- 9. Particulars regarding arrangement of residential quarters for the staff.

- 10. Details regarding availability of play grounds.
- 11. Details regarding Hostel facilities proposed.
- 12. Equipments available/proposed to be purchased.
- 13. Details of earmarked assets and resources to be utilised for running the proposed college (latest statement of assets and liabilities duly certified by a Chartered Accountant to be enclosed).
- 14. Particulars regarding pharmaceutical manufacturing unit where training in manufacture and analysis is proposed for fourth Batch of B.Pharm. Students [is proposed] (Agreement to be produced).
- 15. Whether the Pharmacy College is having a tie up with a General Hospital with a minimum of 100 beds or with a Medical College within a radius of 30 Kms. from the academic complex.
- 16. whether the Pharmacy College is having a minimum ready built area of 150 sq.mtrs. for the first Batch of course to accommodate administrative office, laboratory, class rooms, library, toilets for students and staff (separately for men and women).
- 17. Status of approval by Pharmacy Council of India & All India Council for Technical Education

Signature of the Applicant

Date:

Place:

## $\underline{\mathsf{Form}-\mathsf{II}}$

## CERTIFICATE OF REGISTRATION B.Pharmacy / M.Pharmacy

	Under Statute	of the Tamil Nadu Dr. M.G.R. Medical
Univer	sity (Affiliation of Pharmacy Coll	ege) Statutes, it is hereby Certified that
the ap	plication of	
Colleg	e for starting of B.Pharmacy / N	M.Pharmacy Course of study has been
registe	ered with the Tamil Nadu Dr. M.G	S.R. Medical University, Chennai.
	The issue of this Certificate of I	Registration, alone shall not confer any
right o	n the applicant college to start th	e B.Pharm / M.Pharm Degree Course.
	This Certificate is valid for a peri	od of one year from the date of issue.
	(By order of the G	Soverning Council)
		Signature of the Registrar
		Seal
Date	:	
Place	:	

# FORM – III APPLICATION FOR PROVISIONAL AFFILIATION BY COLLEGE TO START-....B.PHARMACY ......M.PHARMACY DEGREE COURSE.

SIAK	IB.PHARMACYM.PHAF	< IVI	ACT DEGREE COURSE.
1.	Name and address of the applicant	:	
2.	Location of College with full address with telephone number, E-Mail, Web Site	• •	
3.	Does the College satisfy all the conditions stipulated in the statutes for the Affiliation (with full details with evidences therefor)	••	
4.	Does the College possess the Certificate of Registration issued by the Tamil Nadu Dr. M.G.R. Medical University for starting 1. First Batch of B.Pharmacy / 1. M.Pharmacy degree course by the college (copy of the Certificate of Registration to be enclosed).	••	
5.	Whether the approval of the All India Council for Technical Education & Pharmacy Council of India have been obtained by the College (Produce evidence)	:	
6.	Whether the college has provided additional 250 sq.mtrs per speciality (M.Pharm. courses)	:	

	Signature
Place:	
Date:	

## FORM IV (See Statutes 59)

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY, CHENNAI-32. Application for Increase in the number of seats by college for B.Pharm / M.Pharm Degree course

- 1. Name and address of the applicant
- 2. Location of the college with full address with telephone number, E-Mail, Web Site
- 3. Does the college satisfy all the conditions stipulated in the statutes of the University for increase in the number of seats (full details with evidence therefor)
- 4. Has the college obtained Provisional Affiliation/Continuance of Provisional Affiliation for all the four / two batches for the course (full details with University provisional order number and date and copies thereof to be enclosed).
- No of students permitted for each batch of course (Full details batch -wise to be furnished).
- 6. Has the first batch of students completed the course appeared for the University Examinations and Degree obtained by them has been recognized by the Pharmacy council of India. (This conditions is applicable for B.Pharmacy course only)
- 7. Percentage of result during the previous batches (batch -wise details)
- 8. Whether the increase in seats now applied for is within the maximum ceiling prescribed in the statutes.
- Status of approval by Pharmacy Council of India & All India Council for Technical Education (if applicable)

Signature of the Applicant

Place:

## FORM – V

## UTILISATION CERTIFICATE

Ce	ertified	that	а	sum	of	Rs		(Rupees
						) received	as	interest for
the year		on the S	Security	y Depos	t (Fixe	d Deposit) de	epos	sited as per
statutes	for ob	taining P	rovisio	nal Affil	iation/C	Continuance	of	Provisional
Affiliation	/ Additic	onal cours	e has	been fu	lly utiliz	zed as per d	etail	s furnished
herewith	towards ı	maintenan	ce of tl	he B.Pha	arm / M	.Pharm Degr	ee o	course.
						Signature	of th	e Applicant
Place :								
Date :								
				Dr.	MAYIL	VAHANAN N	NAT.	ARAJAN,

VICE-CHANCELLOR.

## FACILITIES REQUIRED FOR CONDUCTING B. PHARM AND M. PHARM DEGREE COURSES AS PER PHARMACY COUNCIL OF INDIA/AICTE

#### 1. LAND REQUIREMENTS:

LAND AREA REQUIREMENTS IN ACRES					
Course	Metro cities Other areas				
B. Pharm	0.75	2.5			
B. Pharm and M. Pharm	0.75	2.5			

#### 2. BUILDING REQUIREMENTS:

The built up area requirements is divided into

- A. Instructional area (carpet area in Sq. M.)
- B. Administrative area (carpet area in Sq. M.)
- C. Amenities area (carpet area in Sq. M.)
- D. Circulation area (one-fourth of the sum of Instructional, Administrative and Amenities area in Sq. M.).
- E. Total built up area is the sum of A + B + C + D in Sq. M.

## 2. A. Instructional area (carpet area in Sq. M.):

2. A. Histructional area (carpet area in Sq. IVI.).						
		No. of	Total no of rooms			
	Carpet area	rooms		PG (for each		
Infrastructure for	in Sq. M.	required	UG (for a class of 60	specialization for a		
	per room	for new	students)	class of maximum		
		institution		18 students)		
UG Class Rooms	75	1	4	-		
Tutorial Rooms	33	1	1	-		
PG Class Rooms	33	-	-	2		
			10			
			Pharmaceutics – 2			
			Pharm. Chemistry – 3			
Laboratory	75	4	Pharm. Analysis – 1	1		
			Pharmacology – 2			
			Pharmacognosy – 1			
			Pharm. Biotech – 1			
Preparation	10	One room can be shared by two laboratories, if it is in				
room for each lab	10	between two labs.				
Instrumentation						
Room (air-	80	-	1	-		
conditioned)						
Machine Room	80	-	1	-		
Research	75	_	1	1		
Laboratory	/3	_	1	1		
Animal house	80	-	1	-		
Computer Lab	75	1	1	-		
Library and	150	1	1	_		
Reading room				_		
Seminar Hall	132	1	1	-		
Museum	50	1	1	-		

2.B. Administrative area (carpet area in Sq. M.):

Name of infrastructure	No. of rooms required	Carpet area in Sq.
	Tron or rooms roquires	M. per room
Principal / Director Chamber	1	30
Board Room	1	20
Office	1	150
Department Office	1/Dept	20
Cabins for HODs	1/Dept	20
Faculty rooms	First year: 4/8*	10
Faculty rooms	First year: 4/8* One per teaching faculty  1	10
Central stores	1	100
Store room for inflammable	1	20
chemicals	1	20
Maintenance Room	1	30
Security Room	1	10
Housekeeping Room	1	10
Pantry for staff	1	10
Examination control office	1	30
Placement Office	1#	30

<sup>\*</sup> Denotes for a class of 120

## 2.C. Amenities area (carpet area in Sq. M.):

Name of infrastructure	No. of rooms	Carpet area
Name of infrastructure	required	in Sq. M. per room
Toilets (Ladies and Gents)	Adequate	150
Boys Common Room	1	75
Girls Common Room	1	75
Cafeteria	1	150
Stationery Store / Reprography	1	10
First Aid Cum Sick Room	1	10
Principal's Quarters (desirable)	1	150
Guest House (desirable)	1	80
Sports Club / Gymnasium (desirable)	1	100
Auditorium / Amphi Theatre (desirable)	1	250
Boys hostel ( <del>desirable</del> )	Adequate	9 Sq. M. per room for single occupancy
Girls hostel ( <del>desirable</del> )	Adequate	9 Sq. M. per room for single occupancy 20 Sq. M. per room for triple occupancy

<sup>\*</sup> Denotes for a class of 120

## 2.D. Circulation area (carpet area in Sq. M.):

One-fourth of the sum of Instructional, Administrative and Amenities area in Sq. M. and includes corridors, common walkways, staircases, entrance lobby, parking area

<sup>&</sup>lt;sup>#</sup> at the end of fourth year

#### 3. LIBRARY AND COMPUTING REQUIREMENTS:

## 3 A Library facilities:

Item	Titles required	Minimum volumes required
No of books	150	1500
Annual Increment in no. of books	50	500
National Journals	10	-
International Journals	5	-
E laureala	BENTHAM	Pharmacy Collection 23 e-journals Backfile access from 2000 onwards
E- Journals	ELSEVIER	SCEINCEDIRECT 70 e-journals Backfile access from 2000 onwards
Educational Aid CDs	Adequate	-

Reading room seating capacity: 15% of total no. of students or a maximum of 150

Multimedia PCs for digital library / internet surfing in reading room: 1% of total no. of students or a maximum of 10

#### 3 B Computing facilities:

Parameter	Requirements
Number of PCs to Total Number of Students ratio	1:6
Legal System Software	1
Legal Application Software	1
LAN & Internet	All computers
Mail Server & Client	Desirable
Internet speed with bandwidth contention of 1:1	1 Mbps
Printers including colour printers	10% of total number of PCs
Multimedia projector	1
Scanner	1
Central Xeroxing facility / Photocopier	1
Secured Wi Fi facility	Recommended

- Utilisation of Open Source Software may be encouraged
- Purchase of most recent hardware is desirable
- Library, administrative offices and Faculty members be provided with exclusive Computing facilities along with LAN and internet over and above the requirement meant for students

## **ANNEXURE I**

## 4. OTHER FACILITIES

Requirement	Essential / Desirable
Language Laboratory	Essential
Potable water supply and outlets for drinking water at strategic locations	Essential
Electric supply	Essential
Backup electric supply	Desirable
Sewage disposal	Essential
Telephone and Fax	Essential
Vehicle parking	Essential
Institutional website	Essential
Barrier free built environment for disabled and elderly persons including availability of specially designed toilets for ladies and gents separately.	Essential
Safety provisions including fire and other calamities	Essential
General insurance provided for assets against fire, burglary and other calamities	Essential
All weather approach road	Essential
General Notice Board and Departmental Notice Boards	Essential
First aid, Medical and Counselling facilities	Essential
Public Announcements Systems at strategic locations for general announcements / announcements in emergency	Desirable
Enterprise Resource Planning (ERP) software for student-institution- parent interaction	Essential
Transport	Desirable
Post, Banking facility / ATM	Desirable
CCTV Security system	Desirable
LCD or similar projectors in classrooms	Desirable
Group insurance to be provided for employees	Desirable
Insurance for students	Desirable
Staff Quarters	Desirable

## I. FACULTY REQUIREMENT AS PER PHARMACY COUNCIL OF INDIA/AICTE

Post	No. of staff required for I B. Pharm.	No. of staff required upto II B. Pharm.	No. of staff required upto III B. Pharm.	No. of staff required upto IV B. Pharm.	No. of staff required for entire B. Pharm. course
Principal	1	1	1	1	1
Pharmaceutical Chemistry	1	2	3	4	4
Pharmaceutical Analysis	1	1	1	1	1
Pharmacology	1	2	3	4	4
Pharmacognosy	1	1	2	3	3
Pharmaceutics	1	2	3	4	4
Total	6	9	13	17	17
Part time teaching staff*	3	-	-	-	3

<sup>\*</sup> For handling subjects Biostatistics, Computer Applications

## II. Faculty requirement by the end of four years:

Name of the post	Department	Requirement for the strength of 60 students
Principal	Any Specialisation	1
Professor		1
Associate Professor	Pharmaceutics including Pharmaceutical Biotechnology	1
Assistant Professor	Thatmaceutical biotecimology	2
Professor		1
Associate Professor	Pharmaceutical Chemistry including Pharmaceutical Analysis	1
Assistant Professor	- Thatmaceatical y marysis	3
Professor		1
Associate Professor	Pharmacology including Pharmacy Practice	1
Assistant Professor		2
Professor		1
Associate Professor	Pharmacognosy	1
Assistant Professor		1

Note: For more than 60 students intake, proportional increase in the number of Teaching Faculty should be made.

## I. Faculty Requirement for PG Course in Each Department:

Name of the post	Requirement for an intake of 18 students in each specialization
Professor	1
Associate Professor	1
Assistant Professor	2

## II. NON TEACHING FACULTY REQUIREMENT

Designation	Minimum Nos Required	Minimum Qualification
Laboratory Technician	1 for each Department	B. Pharm / D. Pharm / B Sc
Laboratory Assistants /Attender	1 for each Laboratory	SSLC
Office Superintendent	1	Degree
Accountant	1	Degree
Store Keeper	1	D. Pharm / Degree
Computer Operator	1	BCA / Graduate with Computer Course
Office Staff I	1	Degree
Office Staff II	2	Degree
Office Assistant	2	SSLC
Sweeper/Cleaning Personnel	Adequate	-
Gardener	Adequate	-

## ANNEXURE II

## III. Qualification and Experience required for faculty positions:

Position	Qualification	Experience
Assistant Professor	M.Pharm. degree in with First class or equivalent* either in Bachelors or Masters Degree	
Associate Professor	Qualification as above that is for the post of Assistant Professor as applicable and PhD or equivalent in appropriate discipline.  Post Ph.D. publications and guiding Ph.D. student is highly desirable	Minimum of 5 years' post PG experience in teaching and/or research and/or industry of which at least 2 years shall be post PhD is desirable.
Professor	Qualification as above that is for the post of Associate Professor as applicable.  Post Ph.D. publications and guiding Ph.D. student is highly desirable	(a) M. Pharm., Ph. D. qualification with minimum of 10 years' of post PG experience in teaching and/or research <sup>£</sup> and/or Industry <sup>£</sup> of which at least 5 years as Associate Professor.  Or  A minimum of 13 years of experience in teaching and/or research and/or in industries with  (ii) A basic degree in Pharmacy (B.Pharm)  & M.Pharm  (iii) Teaching and research experience in that particular speciality for a period of not less than 10 years after obtaining the P.G. qualification  (£ - In case of Research experience, good academic record and books / research paper publications / IPR / patents record shall be required as deemed fit by the expert members in Selection Committee.)  (£- If the experience in Industry is considered, the same shall be at the managerial level equivalent to Associate Professor with active participation record in devising / designing, planning, executing, analysing, quality control, innovating, training, technical books / research

## **ANNEXURE II**

	paper publications / IPR / patents record shall be required as deemed fit by the expert members in Selection Committee.)

	T	
		<ul> <li>(A) M. Pharm., Ph. D. qualification with minimum of 10 years' of experience in teaching and/or research<sup>£</sup> and administrative experience/or industry<sup>E</sup> of which at least 5 years as Associate Professor.</li></ul>
Principal	Qualification as above that is for the post of Professor as applicable.	(£ - In case of Research experience, good academic record and books / research paper publications / IPR / patents record shall be required as deemed fit by the expert members in Selection Committee.)
		(E- If the experience in Industry is considered, the same shall be at the managerial level equivalent to Associate Professor with active participation record in devising / designing, planning, executing, analysing, quality control, innovating, training, technical books / research paper publications / IPR / patents record shall be required as deemed fit by the expert members in Selection Committee.)
		(C) Flair for Management and Leadership is essential.

<sup>\*</sup> denotes that if a class / division is not awarded, minimum of 60% marks in aggregate shall be considered equivalent to first class / division. If a Grade Point System is adopted the CGPA will be converted into equivalent marks as below:

Grade point Equivalent Percent	
6.25	55%
6.75	60%
7.25	65%
7.75	70%
8.25	75%

# EQUIPMENT AND APPARATUS REQUIREMENTS AS PER PHARMACY COUNCIL OF INDIA/AICTE

Department wise list of minimum equipments required for B. Pharm (for a batch of 20 students)

#### A. DEPARTMENT OF PHARMACOLOGY

## A1 Equipment:

Sl. No.	Name	Minimum Nos.
		Required
1	Microscopes	15
2	Haemocytometer with Micropipettes	20
3	Sahli's haemocytometer	20
4	Hutchinson's spirometer	01
5	Spygmomanometer	05
6	Stethoscope	05
7	Permanent Slides for various tissues	One pair of each
		tissue
		Organs and
		endocrine glands
		One slide of each
		organ system
8	Models for various organs	One model of each
		organ system
9	Specimen for various organs and systems	One model for
		each organ system
10	Skeleton and bones	One set of skeleton
		and one spare
		bone
11	Different Contraceptive Devices and Models	One set of each
		device
12	Muscle electrodes	01
13	Lucas moist chamber	01
14	Myographic lever	01
15	Stimulator	01
16	Centrifuge	01
17	Digital Balance	01
18	Physical /Chemical Balance	01
19	Sherrington's Kymograph Machine / Polyrite	10
20	Sherrington Drum	10
21	Perspex bath assembly (single unit)	10
22	Aerators	10
23	Computer with LCD	01
24	Software packages for experiment	01
25	Standard graphs of various drugs	Adequate number
26	Actophotometer	01

27	Rotarod	01
28	Pole climbing apparatus	01
29	Analgesiometer (Eddy's hot plate and radiant heat methods)	01
30	Convulsiometer	01
31	Plethysmograph	01
32	Digital pH meter	01

## A2 Apparatus:

SI. No.	Name	Minimum Nos. Required
1	Folin-Wu tubes	60
2	Dissection Tray and Boards	10
3	Haemostatic artery forceps	10
4	Hypodermic syringes and needles of size 15,24,26G	10
5	Levers, cannulae	20

NOTE: Adequate number of glassware commonly used in the laboratory should be provided in each laboratory and department.

## **B. DEPARTMENT OF PHARMACOGNOSY**

### **B1** Equipment:

SI. No.	Name	Minimum Nos. Required
1	Microscope with stage micrometer	15
2	Digital Balance	02
3	Autoclave	02
4	Hot air oven	02
5	BOD incubator	01
6	Refrigerator	01
7	Laminar air flow	01
8	Colony counter	02
9	Zone reader	01
10	Digital pH meter	01
11	Sterility testing unit	01
12	Camera Lucida	15
13	Eye piece micrometer	15
14	Incinerator	01
15	Moisture balance	01
16	Heating mantle	15
17	Flourimeter	01
18	Vacuum pump	02
19	Micropipettes (Single and multi-channelled)	02
20	Micro Centrifuge	01
21	Projection Microscope	01

#### **B2** Apparatus:

Sl. No.	Name	Minimum Nos. Required
1	Reflux flask with condenser	20
2	Water bath	20
3	Clavengers apparatus	10
4	Soxhlet apparatus	10
6	TLC chamber and sprayer	10
7	Distillation unit	01

NOTE: Adequate number of glassware commonly used in the laboratory should be provided in each laboratory and department.

#### C. DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

#### C1 Equipment:

Sl. No.	Name	Minimum Nos. Required
1	Hot plates	05
2	Oven	03
3	Refrigerator	01
4	Analytical Balances for demonstration	05
5	Digital balance 10mg sensitivity	10
6	Digital Balance (1mg sensitivity)	01
7	Suction pumps	06
8	Muffle Furnace	01
9	Mechanical Stirrers	10
10	Magnetic Stirrers with Thermostat	10
11	Vacuum Pump	01
12	Digital pH meter	01
13	Microwave Oven	02

### C2 Apparatus:

Sl. No.	Name	Minimum Nos. Required
1	Distillation Unit	02
2	Reflux flask and condenser single necked	20
3	Reflux flask and condenser double / triple necked	20
4	Burettes	40
5	Arsenic Limit Test Apparatus	20
6	Nesslers Cylinders	40

NOTE: Adequate number of glassware commonly used in the laboratory should be provided in each laboratory and department.

## **ANNEXURE III**

## D. **DEPARTMENT OF PHARMACEUTICS**

### **D1** Equipment:

Required1Mechanical stirrers102Homogenizer053Digital balance054Microscopes055Stage and eye piece micrometers056Brookfield's viscometer017Tray dryer018Ball mill019Sieve shaker with sieve set0110Double cone blender0111Propeller type mechanical agitator0512Autoclave0113Steam distillation still0114Vacuum Pump0115Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 8010 sets16Tablet punching machine0117Capsule filling machine0118Ampoule washing machine0119Ampoule filling and sealing machine0120Tablet dissolution test apparatus IP0121Tablet dissolution test apparatus IP0122Monsanto's hardness tester0123Pfizer type hardness tester0124Friability test apparatus0125Clarity test apparatus0126Ointment filling machine0127Collapsible tube crimping machine0128Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01		Equipment:	
2 Homogenizer 05 3 Digital balance 05 4 Microscopes 05 5 Stage and eye piece micrometers 05 6 Brookfield's viscometer 01 7 Tray dryer 01 8 Ball mill 01 9 Sieve shaker with sieve set 01 10 Double cone blender 01 11 Propeller type mechanical agitator 05 12 Autoclave 01 13 Steam distillation still 01 14 Vacuum Pump 01 15 Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 80 10 sets 16 Tablet punching machine 01 17 Capsule filling machine 01 18 Ampoule washing machine 01 19 Ampoule illing and sealing machine 01 20 Tablet disintegration test apparatus IP 01 21 Tablet dissolution test apparatus IP 01 22 Monsanto's hardness tester 01 23 Pfizer type hardness tester 01 24 Friability test apparatus 01 25 Clarity test apparatus 01 26 Ointment filling machine 01 27 Collapsible tube crimping machine 01 28 Tablet coating pan 01 29 Magnetic stirrer, 500ml and 1 litre capacity with speed control 05 EACH 01 29 Magnetic stirrer, 500ml and 1 litre capacity with speed control 05 EACH 01	Sl. No.	Name	Minimum Nos. Required
3 Digital balance 05 4 Microscopes 05 5 Stage and eye piece micrometers 05 6 Brookfield's viscometer 01 7 Tray dryer 01 8 Ball mill 01 9 Sieve shaker with sieve set 01 10 Double cone blender 01 11 Propeller type mechanical agitator 05 12 Autoclave 01 13 Steam distillation still 01 14 Vacuum Pump 01 15 Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 80 10 sets 16 Tablet punching machine 01 17 Capsule filling machine 01 18 Ampoule washing machine 01 19 Ampoule filling and sealing machine 01 20 Tablet dissintegration test apparatus IP 01 21 Tablet dissolution test apparatus IP 01 22 Monsanto's hardness tester 01 23 Pfizer type hardness tester 01 24 Friability test apparatus 01 25 Clarity test apparatus 01 26 Ointment filling machine 01 27 Collapsible tube crimping machine 01 28 Tablet coating pan 01 29 Magnetic stirrer, 500ml and 1 litre capacity with speed control 05 EACH 01 20 Digital pH meter 01	1	Mechanical stirrers	10
4 Microscopes 05 5 Stage and eye piece micrometers 05 6 Brookfield's viscometer 01 7 Tray dryer 01 8 Ball mill 01 9 Sieve shaker with sieve set 01 10 Double cone blender 01 11 Propeller type mechanical agitator 05 12 Autoclave 01 13 Steam distillation still 01 14 Vacuum Pump 01 15 Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 80 10 sets 16 Tablet punching machine 01 17 Capsule filling machine 01 18 Ampoule washing machine 01 19 Ampoule filling and sealing machine 01 20 Tablet disintegration test apparatus IP 01 21 Tablet dissolution test apparatus IP 01 22 Monsanto's hardness tester 01 23 Pfizer type hardness tester 01 24 Friability test apparatus 01 25 Clarity test apparatus 01 26 Ointment filling machine 01 27 Collapsible tube crimping machine 01 28 Tablet coating pan 01 29 Magnetic stirrer, 500ml and 1 litre capacity with speed control 05 EACH 01 01 Digital pH meter 01	2	Homogenizer	05
5Stage and eye piece micrometers056Brookfield's viscometer017Tray dryer018Ball mill019Sieve shaker with sieve set0110Double cone blender0111Propeller type mechanical agitator0512Autoclave0113Steam distillation still0114Vacuum Pump0115Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 8010 sets16Tablet punching machine0117Capsule filling machine0118Ampoule washing machine0119Ampoule filling and sealing machine0120Tablet disintegration test apparatus IP0121Tablet dissolution test apparatus IP0122Monsanto's hardness tester0123Pfizer type hardness tester0124Friability test apparatus0125Clarity test apparatus0126Ointment filling machine0127Collapsible tube crimping machine0128Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01	3	Digital balance	05
6 Brookfield's viscometer 01 7 Tray dryer 01 8 Ball mill 01 9 Sieve shaker with sieve set 01 10 Double cone blender 01 11 Propeller type mechanical agitator 05 12 Autoclave 01 13 Steam distillation still 01 14 Vacuum Pump 01 15 Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 80 10 sets 16 Tablet punching machine 01 17 Capsule filling machine 01 18 Ampoule washing machine 01 19 Ampoule filling and sealing machine 01 20 Tablet disintegration test apparatus IP 01 21 Tablet dissolution test apparatus IP 01 22 Monsanto's hardness tester 01 23 Pfizer type hardness tester 01 24 Friability test apparatus 01 25 Clarity test apparatus 01 26 Ointment filling machine 01 27 Collapsible tube crimping machine 01 28 Tablet coating pan 01 29 Magnetic stirrer, 500ml and 1 litre capacity with speed control 05 EACH 01 01 Digital pH meter 01	4	Microscopes	05
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8Ball mill019Sieve shaker with sieve set0110Double cone blender0111Propeller type mechanical agitator0512Autoclave0113Steam distillation still0114Vacuum Pump0115Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 8010 sets16Tablet punching machine0117Capsule filling machine0118Ampoule washing machine0119Ampoule filling and sealing machine0120Tablet disintegration test apparatus IP0121Tablet dissolution test apparatus IP0122Monsanto's hardness tester0123Pfizer type hardness tester0124Friability test apparatus0125Clarity test apparatus0126Ointment filling machine0127Collapsible tube crimping machine0128Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01	6	Brookfield's viscometer	01
9 Sieve shaker with sieve set 01 10 Double cone blender 01 11 Propeller type mechanical agitator 05 12 Autoclave 01 13 Steam distillation still 01 14 Vacuum Pump 01 15 Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 80 10 sets 16 Tablet punching machine 01 17 Capsule filling machine 01 18 Ampoule washing machine 01 19 Ampoule filling and sealing machine 01 20 Tablet disintegration test apparatus IP 01 21 Tablet dissolution test apparatus IP 01 22 Monsanto's hardness tester 01 23 Pfizer type hardness tester 01 24 Friability test apparatus 01 25 Clarity test apparatus 01 26 Ointment filling machine 01 27 Collapsible tube crimping machine 01 28 Tablet coating pan 01 29 Magnetic stirrer, 500ml and 1 litre capacity with speed control 05 EACH 01 20 Digital pH meter 01	7	Tray dryer	01
10Double cone blender0111Propeller type mechanical agitator0512Autoclave0113Steam distillation still0114Vacuum Pump0115Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 8010 sets16Tablet punching machine0117Capsule filling machine0118Ampoule washing machine0119Ampoule filling and sealing machine0120Tablet disintegration test apparatus IP0121Tablet dissolution test apparatus IP0122Monsanto's hardness tester0123Pfizer type hardness tester0124Friability test apparatus0125Clarity test apparatus0126Ointment filling machine0127Collapsible tube crimping machine0128Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01	8	Ball mill	01
11Propeller type mechanical agitator0512Autoclave0113Steam distillation still0114Vacuum Pump0115Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 8010 sets16Tablet punching machine0117Capsule filling machine0118Ampoule washing machine0119Ampoule filling and sealing machine0120Tablet disintegration test apparatus IP0121Tablet dissolution test apparatus IP0122Monsanto's hardness tester0123Pfizer type hardness tester0124Friability test apparatus0125Clarity test apparatus0126Ointment filling machine0127Collapsible tube crimping machine0128Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01	9	Sieve shaker with sieve set	01
12 Autoclave 01 13 Steam distillation still 01 14 Vacuum Pump 01 15 Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 80 10 sets 16 Tablet punching machine 01 17 Capsule filling machine 01 18 Ampoule washing machine 01 19 Ampoule filling and sealing machine 01 20 Tablet disintegration test apparatus IP 01 21 Tablet dissolution test apparatus IP 01 22 Monsanto's hardness tester 01 23 Pfizer type hardness tester 01 24 Friability test apparatus 01 25 Clarity test apparatus 01 26 Ointment filling machine 01 27 Collapsible tube crimping machine 01 28 Tablet coating pan 01 29 Magnetic stirrer, 500ml and 1 litre capacity with speed control 05 EACH 01 01 Digital pH meter 01	10	Double cone blender	01
13Steam distillation still0114Vacuum Pump0115Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 8010 sets16Tablet punching machine0117Capsule filling machine0118Ampoule washing machine0119Ampoule filling and sealing machine0120Tablet disintegration test apparatus IP0121Tablet dissolution test apparatus IP0122Monsanto's hardness tester0123Pfizer type hardness tester0124Friability test apparatus0125Clarity test apparatus0126Ointment filling machine0127Collapsible tube crimping machine0128Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01	11	Propeller type mechanical agitator	05
14Vacuum Pump0115Standard sieves, sieve no. 8, 10, 12,22,24, 44, 66, 8010 sets16Tablet punching machine0117Capsule filling machine0118Ampoule washing machine0119Ampoule filling and sealing machine0120Tablet disintegration test apparatus IP0121Tablet dissolution test apparatus IP0122Monsanto's hardness tester0123Pfizer type hardness tester0124Friability test apparatus0125Clarity test apparatus0126Ointment filling machine0127Collapsible tube crimping machine0128Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01	12	Autoclave	01
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16Tablet punching machine0117Capsule filling machine0118Ampoule washing machine0119Ampoule filling and sealing machine0120Tablet disintegration test apparatus IP0121Tablet dissolution test apparatus IP0122Monsanto's hardness tester0123Pfizer type hardness tester0124Friability test apparatus0125Clarity test apparatus0126Ointment filling machine0127Collapsible tube crimping machine0128Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01	14	Vacuum Pump	01
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19Ampoule filling and sealing machine0120Tablet disintegration test apparatus IP0121Tablet dissolution test apparatus IP0122Monsanto's hardness tester0123Pfizer type hardness tester0124Friability test apparatus0125Clarity test apparatus0126Ointment filling machine0127Collapsible tube crimping machine0128Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01	18	Ampoule washing machine	01
Tablet disintegration test apparatus IP  Tablet dissolution test apparatus IP  Monsanto's hardness tester  Pfizer type hardness tester  Triability test apparatus  Clarity test apparatus  Clarity test apparatus  O1  Collapsible tube crimping machine  Tablet coating pan  Magnetic stirrer, 500ml and 1 litre capacity with speed control  Digital pH meter  O1  O1  D1  D1  D1  D1  D1  D1  D1  D1	19		01
21Tablet dissolution test apparatus IP0122Monsanto's hardness tester0123Pfizer type hardness tester0124Friability test apparatus0125Clarity test apparatus0126Ointment filling machine0127Collapsible tube crimping machine0128Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01	20		01
23Pfizer type hardness tester0124Friability test apparatus0125Clarity test apparatus0126Ointment filling machine0127Collapsible tube crimping machine0128Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01	21		01
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28Tablet coating pan0129Magnetic stirrer, 500ml and 1 litre capacity with speed control05 EACH30Digital pH meter01	26	Ointment filling machine	01
29 Magnetic stirrer, 500ml and 1 litre capacity with speed control 05 EACH 30 Digital pH meter 01	27	Collapsible tube crimping machine	01
30 Digital pH meter 01	28	Tablet coating pan	01
30 Digital pH meter 01	29	Magnetic stirrer, 500ml and 1 litre capacity with speed control	05 EACH
31 All purpose equipment with all accessories 01	30		01
-	31	All purpose equipment with all accessories	01
32 Aseptic Cabinet 01	32	Aseptic Cabinet	01
33 BOD Incubator 02	33	BOD Incubator	02
34 Bottle washing Machine 01	34	Bottle washing Machine	01
35 Bottle Sealing Machine 01	35	Bottle Sealing Machine	01
36 Bulk Density Apparatus 02	36	Bulk Density Apparatus	02
37 Conical Percolator (glass/ copper/ stainless steel) 10	37		10
38 Capsule Counter 02	38	Capsule Counter	02
39 Energy meter 02	39	Energy meter	02
40 Hot Plate 02	40	Hot Plate	02
41 Humidity Control Oven 01	41	Humidity Control Oven	01
42 Liquid Filling Machine 01	42	Liquid Filling Machine	01

43	Mechanical stirrer with speed regulator	02
44	Precision Melting point Apparatus	01
45	Distillation Unit	01

D2 Apparatus:

SI. No.	Name	Minimum Nos. Required
1	Ostwald's viscometer	15
2	Stalagmometer	15
3	Desiccator	05
4	Suppository moulds	20
5	Buchner Funnels (Small, medium, large)	05 each
6	Filtration assembly	01
7	Permeability Cups	05
8	Andreason's Pipette	03
9	Lipstick moulds	10

NOTE: Adequate number of glassware commonly used in the laboratory should be provided in each laboratory and department.

#### **E. PHARMACEUTICAL BIOTECHNOLOGY**

E1 Equipment:

SI. No.	Name	Minimum required
		Nos.
1	Orbital shaker incubator	01
2	Lyophilizer (Desirable)	01
3	Gel Electrophoresis (Vertical and Horizontal)	01
4	Phase contrast / Trinocular Microscope	01
5	Refrigerated Centrifuge	01
6	Fermenters of different capacity (Desirable)	01
7	Tissue culture station	01
8	Laminar airflow unit	01
9	Diagnostic kits to identify infectious agents	01
10	Rheometer	01
11	Viscometer	01
12	Micropipettes (single and multi-channelled)	01 each
13	Sonicator	01
14	Respinometer	01
15	BOD Incubator	01
16	Paper Electrophoresis Unit	01
17	Micro Centrifuge	01
18	Incubator water bath	01
19	Autoclave	01
20	Refrigerator	01
21	Filtration Assembly	01
22	Digital pH meter	01

NOTE: Adequate number of glassware commonly used in the laboratory should be provided in each laboratory and department.

## F. CENTRAL INSTRUMENTATION ROOM

Sl. No.	Name	Minimum required
		Nos.
1	Colorimeter	01
2	Digital pH meter	01
3	UV- Visible Spectrophotometer	01
4	Flourimeter	01
5	Digital Balance (1mg sensitivity)	01
6	Nephelo-Turbidity meter	01
7	Flame Photometer	01
8	Potentiometer	01
9	Conductivity meter	01
10	Fourier Transform Infra-Red Spectrometer (Desirable)	01
11	HPLC	01
12	HPTLC (Desirable)	01
13	Atomic Absorption and Emission spectrophotometer	01
	(Desirable)	
14	Biochemistry Analyzer (Desirable)	01
15	Carbon, Hydrogen, Nitrogen Analyzer (Desirable)	01
16	Deep Freezer (Desirable)	01
17	Ion- Exchanger	01
18	Lyophilizer (Desirable)	01