

**APPENDIX-B**  
**(See regulation 9)**  
**CONDITIONS TO BE FULFILLED BY THE**  
**ACADEMIC TRAINING INSTITUTION**

- 1) Any authority or institution in India applying to the Pharmacy Council of India for approval of courses of study for Pharm.D. and Pharm.D. (Post Baccalaureate) under sub-section (1) of section 12 of the Pharmacy Act, 1948 shall comply with the infrastructural facilities as prescribed by the Pharmacy Council of India from time to time.
- 2) Pharm.D. and Pharm.D. (Post Baccalaureate) programmes shall be conducted only in those institutions which -
  - a) are approved by the Pharmacy Council of India for B.Pharm course as provided under section 12 of the Pharmacy Act, 1948;
  - b) have 300 bedded hospital attached to it.

**(i) Hospital Details**

1. Institution with their own hospital of minimum 300 beds.
2. Teaching hospital recognised by the Medical Council of India or University, or a Government hospital not below the level of district headquarter hospital with 300 beds with clearly defined Memorandum of Understanding including housing pharmacy practice department with minimum carpet area of 30 square feet per student along with consent to provide the professional manpower to support the programme.
3. Corporate type hospital with minimum 300 beds with clearly defined Memorandum of Understanding including housing pharmacy practice department with minimum carpet area of 30 square feet per student along with consent to provide the professional manpower to support the programme.
4. Number of institutions which can be attached to one hospital shall be restricted by the student pharmacist to bed ratio of 1:10.

**(ii) Speciality**

- a) Tertiary care hospitals are desirable
- b) Medicine[compulsory], and any three specialization of the following
  1. Surgery
  2. Pediatrics
  3. Gynecology and obstetrics
  4. Psychiatry
  5. Skin and VD
  6. Orthopedics

**(iii) Location of the Hospital**

Within the same limits of Corporation or Municipality or Campus with Medical Faculty involvement as adjunct faculty.

### 3) TEACHING STAFF REQUIREMENT

- i) Staff Pattern : All faculty shall be full time. However part time perceptors in hospital shall be allowed.
- ii) Subject wise specialisation of the Teaching Staff :

| S.No. | Subject  | Specialisation required  |
|-------|--|--|
| 1.    | Pharmacy Practice                                    | M.Pharm in Pharmacy Practice or Pharmacology or Pharmaceutics.                                   |
| 2.    | Human Anatomy & Physiology                           | M.Pharm in Pharmacology or Pharmacy practice   |
| 3.    | Pharmaceutics (Dispensing & General Pharmacy)        | M.Pharm in Pharmaceutics   |
| 4.    | Pharmacognosy-I                                      | M.Pharm in Pharmacognosy   |
| 5.    | Pharmaceutical Organic Chemistry-I                   | M.Pharm in Pharmaceutical chemistry or Pharmaceutical Analysis or Quality assurance or Bulk Drug |
| 6.    | Pharmaceutical Inorganic Chemistry                   | M.Pharm in Pharmaceutical chemistry or Pharmaceutical Analysis or Quality assurance or Bulk Drug |
| 7.    | Pharmaceutical microbiology                          | M.Pharm in Pharmaceutics or Pharmaceutical Biotechnology   |
| 8.    | Pathophysiology                                      | M.Pharm Pharmacy practice or Pharmacology  |
| 9.    | Applied Biochemistry & Clinical Chemistry            | M.Pharm in Pharmacology or Pharmacy practice or Pharmaceutical chemistry                         |
| 10.   | Pharmacology-I                                       | M.Pharm in Pharmacology or Pharmacy practice   |
| 11.   | Pharmaceutical Jurisprudence                         | M.Pharm in Pharmaceutics   |
| 12.   | Pharmacology-II                                      | M.Pharm in Pharmacology or Pharmacy practice   |
| 13.   | Pharmaceutical Dosage Forms                          | M.Pharm in Pharmaceutics or Industrial Pharmacy  |
| 14.   | Pharmacotherapeutics –I, II and III                  | M.Pharm Pharmacy practice or Pharmacology  |
| 15.   | Community Pharmacy                                   | M.Pharm in Pharmacy practice or Pharmacology or Pharmaceutics                                    |
| 16.   | Hospital Pharmacy                                    | M.Pharm in Pharmacy practice or Pharmacology or Pharmaceutics                                    |
| 17.   | Clinical Pharmacy                                    | M.Pharm in Pharmacy practice   |
| 18.   | Computer Science or Computer Application in pharmacy | MCA  |
| 19.   | Mathematics  | M.Sc. (Maths)  |

## iii) Teaching Staff :

| <b>Department/Division</b>  | <b>Name of the post</b> | <b>No.</b> |
|---|-------------------------|------------|
| Department of Pharmaceutics   | Professor               | 1          |
|   | Asst. Professor         | 1          |
|   | Lecturer                | 2          |
| Department of Pharmaceutical Chemistry<br>(Including Pharmaceutical Analysis) | Professor               | 1          |
|   | Asst. Professor         | 1          |
|   | Lecturer                | 3          |
| Department of Pharmacology  | Professor               | 1          |
|   | Asst. Professor         | 1          |
|   | Lecturer                | 2          |
| Department of Pharmacognosy   | Professor               | 1          |
|   | Asst. Professor         | 1          |
|   | Lecturer                | 1          |
| Department of Pharmacy Practice   | Professor               | 1          |
|   | Asst. Professor         | 2          |
|   | Lecturer                | 3          |

## iv) Prescribed qualifications and experience for Professor, Assistant Professor, Lecturer and others :

| <b>Sl. No.</b> | <b>CADRE</b>        | <b>QUALIFICATIONS</b>  | <b>EXPERIENCE</b>  |
|----------------|---------------------|--|--|
| 1.             | Lecturer            | i) Basic degree in pharmacy (B.Pharm).<br>ii) Registration as a pharmacist under the Pharmacy Act.<br>iii) First Class Master's degree in appropriate branch of specialization in Pharmacy (M.Pharm) | No minimum requirement.  |
| 2.             | Assistant Professor | i) Basic degree in pharmacy (B.Pharm).<br>ii) Registration as a pharmacist under the Pharmacy Act.<br>iii) Master's degree in appropriate branch of specialization in Pharmacy (M.Pharm)             | Three years experience in Teaching or Research at the level of Lecturer or equivalent. |

|    |  |   |   |
|----|--|---|---|
|    |  | iv) Ph.D. degree (with First Class degree either at Bachelor's or Master's level) in the appropriate branch of specialization in Pharmacy.  |   |
| 3. | Professor                                  | <ul style="list-style-type: none"> <li>i) Basic degree in pharmacy (B.Pharm).</li> <li>ii) Registration as a pharmacist under the Pharmacy Act.</li> <li>iii) Master's degree in appropriate branch of specialization in Pharmacy (M.Pharm).</li> <li>iv) Ph.D. degree (with first Class either at Bachelor's or Master's level) in appropriate branch of specialization in Pharmacy.</li> </ul>          | <ul style="list-style-type: none"> <li>i) Ten years experience in Teaching or Research.</li> <li>ii) Out of which five years must be as Assistant Professor.</li> </ul>   |
| 4. | Director or Principal or Head of institute | <ul style="list-style-type: none"> <li>i) Basic degree in pharmacy (B.Pharm).</li> <li>ii) Registration as a pharmacist under the Pharmacy Act.</li> <li>iii) Master's degree in appropriate branch of specialization in Pharmacy (M.Pharm)</li> <li>iv) Ph.D. degree (with first Class degree either at Bachelor's or Master's level in the appropriate branch of specialization in Pharmacy.</li> </ul> | <ul style="list-style-type: none"> <li>i) Fifteen years experience in Teaching or Research.</li> <li>ii) Out of which five years must be as Professor or above in Pharmacy.</li> </ul> <p>Desirable :<br/>Administrative experience in responsible position.</p> <p>The maximum age for holding the post shall be 65 years.</p> |

**Note :** If a class or division is not awarded at Master's level, a minimum of 60% marks in aggregate or equivalent cumulative grade point average shall be considered equivalent to first class or division, as the case may be.

## v) Workload of Faculty :

Professor – 8 hrs. per week

Assistant Professor – 12 hrs. per week

Lecturers – 16 hrs. per week

## vi) Training of Pharmacy Practice Faculty :

a) Teaching staff will be trained as per the module prescribed by the Central Council.

b) Duration of training – Minimum 3 months.

c) Training sites – Institutions running pharmacy practice or Programmes for atleast five years.

d) Trainer – Professor or Assistant Professor with minimum of five years of clinical pharmacy teaching and practice experience.

## 4) NON-TEACHING STAFF :

| Sl.No. | Designation                                   | Required (Minimum)       | Required Qualification  |
|--------|---|--------------------------|---|
| 1      | Laboratory Technician                         | 1 for each Dept          | D. Pharm  |
| 2      | Laboratory Assistants or Laboratory Attenders | 1 for each Lab (minimum) | SSLC  |
| 3      | Office Superintendent                         | 1                        | Degree  |
| 4      | Accountant                                    | 1                        | Degree  |
| 5      | Store keeper                                  | 1                        | D.Pharm or a Bachelor degree recognized by a University or institution. |
| 6      | Computer Data Operator                        | 1                        | BCA or Graduate with Computer Course                                    |
| 7      | Office Staff I                                | 1                        | Degree  |
| 8      | Office Staff II                               | 2                        | Degree  |
| 9      | Peon  | 2                        | SSLC  |
| 10     | Cleaning personnel                            | Adequate                 | ---   |
| 11     | Gardener                                      | Adequate                 | ---   |

## 5) ACCOMMODATION :

Suitable and sufficient accommodation with adequate ventilation, lighting and other hygienic conditions should be provided to the rooms for Principal or the Head of the department, office, class rooms, library, staff, staff common room, students common room, museum, laboratories, stores, etc.

At least two lecture halls alongwith eight laboratories as specified below should be provided for: —

|   |           |
|---|-----------|
| 1. Pharmaceutics and Pharmacokinetics Lab                   | - 2       |
| 2. Life Science (Pharmacology, Physiology, Pathophysiology) | - 2       |
| 3. Phytochemistry or Pharmaceutical Chemistry               | - 2       |
| 4. Pharmacy Practice  | - 2       |
|   | -----     |
|   | Total = 8 |
|   | -----     |

In addition to the laboratories, balance room, aseptic room or cabinet, animal house and a machine room shall also be provided.

Floor area of the laboratory should not be less than 30 square feet per student required to work in the laboratory at any given time subject to a minimum of 750 square feet.

Laboratories should be fitted and constructed in a manner that these can be kept reasonably clean. Gas and water fittings, shelves, fuming cupboards be provided wherever necessary.

## 6. EQUIPMENT AND APPARATUS :

### Department wise list of minimum equipments

#### A. DEPARTMENT OF PHARMACOLOGY :

##### I. Equipment:

| S.No. | Name                                    | Minimum required Nos.  |
|-------|---|--|
| 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<br>Organs and endocrine glands<br>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 or 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                     |

## II. Apparatus:

| S.No | Name  | Minimum required Nos. |
|------|---|-----------------------|
| 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    | Livers, cannulae                                  | 20                    |

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

## B. DEPARTMENT OF PHARMACOGNOSY :

### I. Equipment:

| S.No. | Name                             | Minimum required Nos. |
|-------|----------------------------------|-----------------------|
| 1     | Microscope with stage micrometer | 15                    |
| 2     | Digital Balance                  | 02                    |
| 3     | Autoclave                        | 02                    |

|    |  |    |
|----|--|----|
| 4  | Hot air oven                               | 02 |
| 5  | B.O.D.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 channeled) | 02 |
| 20 | Micro Centrifuge                           | 01 |
| 21 | Projection Microscope                      | 01 |

## II. Apparatus:

| S.No. | Name                        | Minimum required Nos. |
|-------|-----------------------------|-----------------------|
| 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 :

### I. Equipment:

| S.No. | Name                                  | Minimum required Nos. |
|-------|---------------------------------------|-----------------------|
| 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 |

## II. Apparatus:

| S.No. | Name  | Minimum required Nos. |
|-------|---|-----------------------|
| 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     | Nessler's Cylinders                             | 40                    |

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

## D. DEPARTMENT OF PHARMACEUTICS :

### I. Equipment:

| S.No | Name   | Minimum required Nos. |
|------|--|-----------------------|
| 1    | Mechanical stirrers                                      | 10                    |
| 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 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 liter capacity with speed control | 05 EACH<br>10 |
| 30 | Digital pH meter  | 01            |
| 31 | All purpose equipment with all accessories                      | 01            |
| 32 | Aseptic Cabinet   | 01            |
| 33 | BOD Incubator   | 02            |
| 34 | Bottle washing Machine  | 01            |
| 35 | Bottle Sealing Machine  | 01            |
| 36 | Bulk Density Apparatus  | 02            |
| 37 | Conical Percolator (glass/copper/stainless steel)               | 10            |
| 38 | Capsule Counter   | 02            |
| 39 | Energy meter  | 02            |
| 40 | Hot Plate   | 02            |
| 41 | Humidity Control Oven   | 01            |
| 42 | Liquid Filling Machine  | 01            |
| 43 | Mechanical stirrer with speed regulator                         | 02            |
| 44 | Precision Melting point Apparatus                               | 01            |
| 45 | Distillation Unit   | 01            |

## II. Apparatus:

| S.No | Name                                   | Minimum required Nos. |
|------|--|-----------------------|
| 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. DEPARTMENT OF PHARMACEUTICAL BIOTECHNOLOGY :**

| S.No. | Name   | Minimum required Nos. |
|-------|--|-----------------------|
| 1     | Orbital shaker incubator                         | 01                    |
| 2     | Lyophilizer (Desirable)                          | 01                    |
| 3     | Gel Electrophoresis<br>(Vertical and Horizontal) | 01                    |
| 4     | Phase contrast/Trinocular Microscope             | 01                    |
| 5     | Refrigerated Centrifuge                          | 01                    |
| 6     | Fermenters of different capacity<br>(Desirable)  | 01                    |
| 7     | Tissue culture station                           | 01                    |
| 8     | Laminar airflow unit                             | 01                    |
| 9     | Diagnostic kits to identify infectious<br>agents | 01                    |
| 10    | Rheometer  | 01                    |
| 11    | Viscometer                                       | 01                    |
| 12    | Micropipettes (single and multi<br>channeled)    | 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. DEPARTMENT OF PHARMACY PRACTICE :****Equipment:**

| S.No. | Name  | Minimum required Nos. |
|-------|---|-----------------------|
| 1     | Colorimeter   | 2                     |
| 2     | Microscope  | Adequate              |
| 3     | Permanent slides (skin, kidney,<br>pancreas, smooth muscle, liver etc.,)                                      | Adequate              |
| 4     | Watch glass   | Adequate              |
| 5     | Centrifuge  | 1                     |
| 6     | Biochemical reagents for analysis of<br>normal and pathological constituents in<br>urine and blood facilities | Adequate              |
| 7     | Filtration equipment  | 2                     |
| 8     | Filling Machine   | 1                     |
| 9     | Sealing Machine   | 1                     |

|    |  |          |
|----|--|----------|
| 10 | Autoclave sterilizer   | 1        |
| 11 | Membrane filter  | 1 Unit   |
| 12 | Sintered glass funnel with complete filtering assemble       | Adequate |
| 13 | Small disposable membrane filter for IV admixture filtration | Adequate |
| 14 | Laminar air flow bench                                       | 1        |
| 15 | Vacuum pump  | 1        |
| 16 | Oven   | 1        |
| 17 | Surgical dressing  | Adequate |
| 18 | Incubator  | 1        |
| 19 | PH meter   | 1        |
| 20 | Disintegration test apparatus                                | 1        |
| 21 | Hardness tester  | 1        |
| 22 | Centrifuge   | 1        |
| 23 | Magnetic stirrer   | 1        |
| 24 | Thermostatic bath  | 1        |

**NOTE:**

- 1. Computers and Internet connection (Broadband), six computers for students with internet and staff computers as required.**
- 2. Adequate number of glassware commonly used in the laboratory should be provided in each laboratory and the department.**

**G. CENTRAL INSTRUMENTATION ROOM :**

| <b>S.No.</b> | <b>Name</b>  | <b>Minimum required Nos.</b> |
|--------------|--|------------------------------|
| 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 (Desirable) | 01                           |
| 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                           |

## **APPENDIX-C**

**(See regulation 16)**

### **INTERNSHIP**

#### **1) SPECIFIC OBJECTIVES :**

- i) to provide patient care in cooperation with patients, prescribers, and other members of an interprofessional health care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social cultural, economic, and professional issues, emerging technologies, and evolving biomedical, pharmaceutical, social or behavioral or administrative, and clinical sciences that may impact therapeutic outcomes.
- ii) to manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health; to provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use.
- iii) to promote health improvement, wellness, and disease prevention in co-operation with patients, communities, at-risk population, and other members of an interprofessional team of health care providers.
- iv) to demonstrate skills in monitoring of the National Health Programmes and schemes, oriented to provide preventive and promotive health care services to the community.
- v) to develop leadership qualities to function effectively as a member of the health care team organised to deliver the health and family welfare services in existing socio-economic, political and cultural environment.
- vi) to communicate effectively with patients and the community.

#### **2) OTHER DETAILS :**

- i) All parts of the internship shall be done, as far as possible, in institutions in India. In case of any difficulties, the matter may be referred to the Pharmacy Council of India to be considered on merits.
- ii) Where an intern is posted to district hospital for training, there shall be a committee consisting of representatives of the college or university, and the district hospital administration, who shall regulate the training of such trainee. For such trainee a certificate of satisfactory completion of training shall be obtained from the relevant administrative authorities which shall be countersigned by the Principal or Dean of College.

- iii) Every candidate shall be required, after passing the final Pharm.D. or Pharm.D. (Post Baccalaureate) examination as the case may be to undergo compulsory rotational internship to the satisfaction of the College authorities and University concerned for a period of twelve months so as to be eligible for the award of the degree of Pharm.D. or Pharm.D. (Post Baccalaureate) as the case may be.

### 3. ASSESSMENT OF INTERNSHIP :

- i) The intern shall maintain a record of work which is to be verified and certified by the preceptor (teacher practitioner) under whom he works. Apart from scrutiny of the record of work, assessment and evaluation of training shall be undertaken by an objective approach using situation tests in knowledge, skills and attitude during and at the end of the training. Based on the record of work and date of evaluation, the Dean or Principal shall issue certificate of satisfactory completion of training, following which the university shall award the degree or declare him eligible for it.
- ii) Satisfactory completion of internship shall be determined on the basis of the following:-
- (1) Proficiency of knowledge required for each case management SCORE 0-5
  - (2) The competency in skills expected for providing Clinical Pharmacy Services SCORE 0-5
  - (3) Responsibility, punctuality, work up of case, involvement in patient care SCORE 0-5
  - (4) Ability to work in a team (Behavior with other healthcare professionals including medical doctors, nursing staff and colleagues). SCORE 0-5
  - (5) Initiative, participation in discussions, research aptitude. SCORE 0-5

| Poor | Fair | Below Average | Average | Above Average | Excellent |
|------|------|---------------|---------|---------------|-----------|
| 0    | 1    | 2             | 3       | 4             | 5         |

A Score of less than 3 in any of above items will represent unsatisfactory completion of internship.

**APPENDIX-D**  
(See regulation 17)  
**CONDITIONS TO BE FULFILLED BY**  
**THE EXAMINING AUTHORITY**

1. The Examining Authority shall be a statutory Indian University constituted by the Central Government/State Government/Union Territory Administration. It shall ensure that discipline and decorum of the examinations are strictly observed at the examination centers.
2. It shall permit the Inspector or Inspectors of the Pharmacy Council of India to visit and inspect the examinations.
3. It shall provide:-
  - (a) adequate rooms with necessary furniture for holding written examinations;
  - (b) well-equipped laboratories for holding practical examinations;
  - (c) an adequate number of qualified and responsible examiners and staff to conduct and invigilate the examinations; and
  - (d) such other facilities as may be necessary for efficient and proper conduct of examinations.
4. It shall, if so required by a candidate, furnish the statement of marks secured by a candidate in the examinations after payment of prescribed fee, if any, to the Examining Authority.
5. It shall appoint examiners whose qualifications should be similar to those of the teachers in the respective subjects as shown in Appendix-B.
6. In pursuance of sub-section (3) of section 12 of the Pharmacy Act, 1948, the Examining Authority shall communicate to the Secretary, Pharmacy Council of India, not less than six weeks in advance the dates fixed for examinations, the time-table for such examinations, so as to enable the Council to arrange for inspection of the examinations.
7. The Examining Authority shall ensure that examiners for conducting examination for Pharm.D. and Pharm.D. (Post Baccalaureate) programmes shall be persons possessing pharmacy qualification and are actually involved in the teaching of the Pharm.D. and Pharm.D. (Post Baccalaureate) programmes in an approved institution.

**(ARCHNA MUDGAL)**  
**Registrar-cum-Secretary**  
**Pharmacy Council of India**  
**New Delhi – 110002**