## Annexure: I Norms and Requirements

## Appendix 3

## Norms for Intake \& Number of Courses / Divisions in the Technical Institutions <br> 3.3 <br> Post Graduate Degree and Post Graduate Diploma Level

|  | Intake per division <br> without foreign <br> collaboration | PG <br> withoutdivisions <br> foreign <br> collaborationTotal without <br> foreign <br> collaboration | Intake per Division <br> with _Foreign <br> collaboration <br> Twinning |  |
| :--- | :--- | :--- | :--- | :--- |
| MCA | 60 | 3 | 180 | 60 |
| Management | 60 | 3 | 180 | 60 |
| Engineering <br> Technology | \& | $30^{*}$ | 6 | 180 |
| Pharmacy | $30^{*}$ | 6 | 180 | 30 |
| Architecture \& Town <br> Planning | $30^{*}$ | 6 | 180 | 30 |
| Applied Arts \& Crafts | $30^{*}$ | 6 | 180 | 30 |
| HMCT | $30^{*}$ | 6 | 180 | 30 |

- Out of the two divisions allotted in Post Graduate and Post Diploma level, one shall be of "Cyber Security" or Cyber Security related courses in Computer / IT branches of Engineering / Technology.
- Minimum of 18 seats in steps of 6 up to Maximum 24
- Additional 6 seats above 24 seats if the course is accredited.
- New Course with Intake less than 18 shall not be approved. However, existing Courses where approved intake is less than 18 may continue with existing Intake.


### 3.4 Private Limited or Public Limited Company/Industry Establishing Diploma or Under Graduate or Post Graduate Institute

|  | Intake per <br> Division | Maximum number of UG courses \& / or divisions allowed <br> in the new Institution <br> (Single shift working) |  |
| :--- | :--- | :--- | :--- |
|  | Division/s |  |  |
| Engineering \& Technology | 60 | 10 | Intake |
| Pharmacy | 60 | 6 | 600 |
| Architecture \& Town Planning | 60 | 6 | 360 |
| Applied Arts \& Crafts | 60 | 6 | 360 |
| HMCT | 60 | 6 | 360 |

a New Technical Institution in Engineering \& Technology, Pharmacy, Architecture \& Town Planning, and HMCT established by a Private Limited or Public Limited Company/Industry having turnover of at least Rs

|  | 100 Cr per year for previous 3 years shall be eligible for application and granted approval for intake as above <br> following due procedure as per Approval Process Handbook. |
| :--- | :--- |
| b | The Institute setup by such a Private Limited or Public Limited Company/Industry shall be governed by the <br> rules as in Chapter 1 |
| c | Private Limited or Public Limited Company/Industry Establishing Diploma or Under Graduate or Post <br> Graduate Institute may choose any course from the approved list of any size as intake not exceeding <br> maximum as above and in any combination in the same program. |

Appendix 4

Norms for Land requirement and Building Space for Technical Institution

### 4.1 Land Requirements for Technical Institutions

|  | Land Area requirement in Acres |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Other than Rural places <br> (Competent Authority to certify that the place is not located in a rural area) |  |  | Rural Places as defined by Competent Authority |  |  |
|  | UG <br> Programs | Diploma | Stand alone Post Graduate Programs | UG <br> Programs | Diploma | Stand alone Post Graduate Programs |
| Engineering \& Technology | 2.50 | 1.50 | 2.5 | 10.0 | 5.00 | 10.0 |
| Pharmacy | 0.75 | 0.75 | 0.75 | 2.00 | 2.00 | 2.00 |
| Architecture \& Town Planning | 1.00 | 1.00 | 1.00 | 2.50 | 2.50 | 2.50 |
| Applied Arts \& Crafts | 0.75 | 0.75 | 0.75 | 2.00 | 2.00 | 2.00 |
| HMCT | 1.00 | 1.00 | 1.00 | 2.50 | 2.50 | 2.50 |
| MCA | -- | -- | 0.50 | -- | -- | 1.50 |
| Management | -- | -- | 0.50 | -- | -- | 1.00 |


|  | 4.1 .1 | a | Land area shall cover hostel facilities, if any |
| :--- | :--- | :--- | :--- |
|  |  | b | Land shall be in one continuous piece. |
|  |  | c | Considering hilly nature of land in North Eastern States, land may be made available in 3 <br> pieces which are not away from each other by more than 1 Km |

### 4.2 Built-up Area Requirements

| 4.2 | a | The Institution area is divided in, Instructional area (INA, carpet area in sq. m.), Administrative area <br> (ADA, carpet area in sq. m.), Amenities area (AMA, carpet area in sq. m.). |
| :--- | :--- | :--- |
|  | b | Circulation area (CIA) is equal to $0.25 \times$ (INA+ADA+AMA). |
|  | c | Total built up area in sq. m. is equal to (INA+ADA+AMA) + (CIA). |

### 4.2.1 Instructional Area (Carpet Area) in sqm

Engineering / Technology (Degree Institute)

|  |  |  | 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carpet <br> Area in <br> sqm per <br> room |  |  | 66 | 33 | 66 | 66 | 200 | 200 | 150 | 132 | 400 | 132 |
| Number of rooms required for new Institution | A | 4 | $\mathrm{C}=\mathrm{A}$ | $\mathrm{D}=\mathrm{C} / 4$ | 02/Course | - | 1 | - | 1 | 1 | 1 | 1 |
| Total Number of rooms (UG) | A | 4 | $C=A x 4$ | $\mathrm{D}=\mathrm{C} / 4$ | 10/Course\# | - | 1 | $\begin{aligned} & \text { 2/Cour } \\ & \text { se } \end{aligned}$ | 1 | 1 | 1 | 1/Course |
| Total Number of rooms (PG) | F | 2 | - | $\mathrm{H}=\mathrm{Fx} 2$ | 1/Speciali sation | 1/Speci alisatio n | 1 | (Maximu m 4 ) | 1 | 1 | 1 | 1/Course |


| 1 | Category X of courses: Mechanical, Production, Civil, Electrical, Chemical, Textile, Marine, Aeronautical <br> and allied courses of each. |
| :--- | :--- |
| 2 | Classrooms, Tutorial rooms and Laboratories required for $2^{\text {nd }}, 3^{\text {rd }}$ and $4^{\text {th }}$ year may be added progressively <br> to achieve total number as stated. |
| 3 | Additional Library (Reading room) area of 50 sq $\mathrm{m} /$ per 60 student (UG+PG) intake beyond 420. |
| 4 | UG laboratories if shared for PG courses shall be upgraded to meet requirements of PG curriculum |
| 5 | ${ }^{\text {\# }}$ Progressive requirement, $2^{\text {nd }}$ year onwards shall be calculated as 3+3+2 labs/course |
| 6 | ${ }^{\text {\# }}$ Additional 5 Labs/Course when number of divisions are more than 2/course. |
| 7 | Round off fraction in calculation to the next integer. |

## Pharmacy (Degree Institute)

|  |  |  | O 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carpet Area in sqm per room |  |  | 66 | 33 | 75 | 75 | 75 | 75 | 150 | 132 |
| Number of rooms required for new Institution | A | 4 | $\mathrm{C}=\mathrm{A}$ | $\mathrm{D}=\mathrm{C} / 4$ | 4 | - | 1 | 1 | 1 | 1 |
| Total <br> Number of rooms (UG) | A | 4 | $\mathrm{C}=\mathrm{Ax} 4$ | $\mathrm{D}=\mathrm{C} / 4$ | 12 | - |  |  |  |  |
| Total Number of rooms (PG) | F | 2 | - | $\mathrm{H}=\mathrm{Fx} 2$ | 1/Specialisat ion | 1/Specialisatio <br> n | 1 | 1 | 1 | 1 |


| 1 | Laboratories include Machine room \& Instrumentation room |
| :--- | :--- |
| 2 | Classrooms, Tutorial rooms and Laboratories required for $2^{\text {nd }}, 3^{\text {rd }}$ <br> $(3+3+2)$ to achieve total number as stated. $4^{\text {th }}$ year may be added progressively <br> 3 UG Laboratories if shared for PG courses shall be upgraded to meet requirements of PG curriculum. |
| 4 | Round off fraction in calculation to the next integer |

## Architecture \& Town Planning (Degree Institute)

|  | $\stackrel{\sim}{6}$ 응 $\therefore \stackrel{4}{0}$ " ©令 |  | 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carpet Area in sqm per room |  |  | 66 | 33 | 66 | 66 | 200 | 132 | 75 | 150 | 132 |
| Number of rooms required for new Institution | A | 5 | $\mathrm{C}=\mathrm{A}$ | $\mathrm{D}=\mathrm{A} / 4$ | 1 | - | 1 | 1 | 1 | 1 | 1 |
| Total Number of rooms (UG) | A | 5 | $C=A x 5$ | $\mathrm{D}=\mathrm{C} / 4$ | 5 | - |  | 5 | 1 | 1 | 1 |
| Total Number of rooms (PG) | F | 2 | - | $\mathrm{H}=\mathrm{Fx} 2$ | 1/Specialisati on | 1/Speciali sation |  | 5 | 1 | 1 | 1 |


| 1 | Classrooms, Tutorial rooms and Laboratories required for $2^{\text {nd }}, 3^{\text {rd, }} 4^{\text {th }}$ and $5^{\text {th }}$ year may be added <br> progressively $(1+1+1+1)$ to achieve total number as stated. UG laboratories if shared for PG courses shall <br> be upgraded to meet requirements of PG curriculum. |
| :--- | :--- |
| 2 | Round off fraction in calculation to the next integer |

Administrative Area (Carpet Area) in sq m

|  |  |  |  |  |  |  |  |  | Z 总 © |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carpet Area in sqm per room | 30 | 20 | $\frac{150^{*}}{300^{\$}}$ | 20 | 10 | 5 | 30 | 10 | 10 | 10 | 10 | 30 | 30 |
| Number of rooms required for New Technical Institution | 1 | 1 | 1 | - | - | First Year Student intake/15 | 1 | 1 | 1 | 1 | 1 | 1 | - |
| Total Number of rooms | 1 | 1 | 1 | 1/Dept | 1/Dept | One per teaching faculty (as per | 1 | 1 | 1 | 1 | 1 | 1 | 1 |


|  |  |  |  |  |  | norms $)$ in the <br> Institution |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 1 | \$Technical Campus having more than one Program |
| :--- | :--- |
| 2 | * Technical Institution having one Program |

### 4.2.3 Amenities Area (Carpet Area) in sqm

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carpet Area in sqm per room for Technical Campus having more than one Program | 350* | 100 | 100 | 150 | 10 | 10 | 150 | 30 | 200 | 400 | Adequate | Adequate |
| Carpet Area in sqm per room for Technical Campus having one Program | 150\$ | 75 | 75 | 150 | 10 | 10 | 150 | 30 | 100 | 250 |  |  |
| Number of rooms required for New Technical Institution | Adequate | 1 | 1 | 1 | 1 | 1 | - | - | - | - | - | - |
| Total Number of rooms | Adequate | 1 | 1 | 1 | 1 | 1 | $\begin{aligned} & \text { 으N } \\ & \text { " } \end{aligned}$ | $\begin{aligned} & \text { 윾 } \\ & \text { In } \\ & \hline 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { 응 } \\ & \text { O} \end{aligned}$ |  |


| 1 | ${ }^{*}$ Estimated total area for Technical Campus having more than one Program |
| :--- | :--- |
| 2 | ${ }^{\$}$ Estimated total area for Technical Campus having one Program |

## Circulation Area in sqm

| 4.2.4 | a | $\begin{array}{l}\text { Circulation area of } 25 \% \text { of sum of Instructional, Administrative and Amenities area is desired } \\ \text { covering common walk ways, staircases, entrance lobby }\end{array}$ |
| :--- | :--- | :--- | :--- |

Appendix 5
Norms for Books, Journals, Library facilities, Computer, Software, Internet, Printers and Laboratory Equipments for Technical Institution

### 5.1 Computers, Software, Internet and Printers

|  |  | Number of PCs to students ratio (Min 20 PCs) | Legal System Software ${ }^{@}$ | Legal Application Software* | LAN \& Internet | Mail Server \& Client | Internet Mbps / intake of 240 students with Bandwidth Contention of 1:1 (Min 1 Mbps) | Printers including Color Printer (\% of total no of PC's) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Engineering / Technology | Dip | 1:6 | 03 | 20 | All | Desired | 02 | 10\% |
|  | UG | 1:4 |  |  |  |  |  |  |
|  | PG | 1:2 |  |  |  |  |  |  |
| Pharmacy | Dip | 1:6 | 01 | 10 | All | Desired | 01 | 5\% |
|  | UG | 1:6 |  |  |  |  |  |  |
|  | PG | 1:6 |  |  |  |  |  |  |
| Architecture \& Town Planning | Dip | 1:6 | 01 | 10 | All | Desired | 01 | 5\% |
|  | UG | 1:5 |  |  |  |  |  |  |
|  | PG | 1:5 |  |  |  |  |  |  |
| Applied Arts \& Crafts | Dip | 1:5 | 01 | 10 | All | Desired | 01 | 5\% |
|  | UG | 1:5 |  |  |  |  |  |  |
|  | PG | 1:5 |  |  |  |  |  |  |
| HMCT | Dip | 1:6 | 01 | 10 | All | Desired | 01 | 5\% |
|  | UG | 1:6 |  |  |  |  |  |  |
| Management | PG | 1:2 | 01 | 10 | All | Desired | 02 | 10\% |
| MCA | PG | 1:2 | 03 | 20 | All | Desired | 02 | 10\% |


| 5.1 |  | a | Utilization of Open Source Software may be encouraged |
| :--- | :--- | :--- | :--- |
|  |  | b | Secured Wi Fi facility is highly recommended |
|  |  | c | Purchase of most recent hardware is desired. |
|  |  | d | Library, Administrative offices and Faculty members shall be provided with exclusive <br> computing facilities along with LAN and Internet. This shall be considered as over and above <br> the requirement meant for PCs to students ratio. |
|  |  | e | ${ }^{@}$ Adequate number of software licenses is required |
|  |  | f | "Central Xeroxing facility for students is preferred |

### 5.2 Laboratory Equipments and Experiments

| 5.2 | a | The laboratories shall have equipments as appropriate for experiments as stated / suitable for the <br> requirements of the affiliating University / Board's curriculum. It is desired that number of <br> experiment set up be so arranged that maximum four students shall work on one set. |
| :--- | :--- | :--- | :--- |

### 5.3 Books, Journals and Library facilities

| Program | Total number of Divisions | $\stackrel{\text { N }}{\stackrel{\text { N }}{i=}}$ | ® $\stackrel{y}{5}$ $\frac{3}{0}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number |  |  |  |  | \% of total students | \% of total students |
| Engineering / Technology(UG) | B | 100 | 500xB | $6 \times B$ | $\begin{aligned} & \frac{0}{0} \\ & \stackrel{\pi}{\omega} \\ & \hline 0 \\ & 0 \end{aligned}$ |  |  |  |
|  |  | 50 per course | 250 per course division |  |  |  |  |  |
| Pharmacy(UG) | B | 100 | 500xB | 6xB |  |  |  |  |
| Architecture \& Town Planning | B | 100 | 400xB | $6 x B$ |  |  |  |  |
| (UG) |  | 50 | 400xB |  |  |  |  |  |
| Applied Arts \& Crafts(UG) | B | 100 | 500xB | 6xB |  |  |  |  |
|  |  | 50 | 500xB |  |  |  |  |  |
| HMCT | B | 100 | 500xB | 6xB |  |  |  |  |
|  |  | 50 | 500xB |  |  |  |  |  |
| MBA / PGDM / MCA (PG) | B | 100 | $500 \times B$ | 12xB |  |  |  |  |
|  |  | 50 | $500 x$ B |  |  |  |  |  |
| Engineering / Technology/ Pharmacy / Architecture \& | B | 50 | 200 | 5xB |  |  | $\begin{aligned} & \stackrel{\rightharpoonup}{x} \\ & \underset{\Sigma}{\text { n}} \end{aligned}$ |  |
| Town Planning / Applied Arts \& Crafts (PG) |  | As Required | 100 |  |  |  | $\begin{aligned} & \text { هo } \\ & \stackrel{\sim}{N} \end{aligned}$ |  |
| Diploma in <br> Engineering / Tech / Pharmacy / Architecture \& Town Planning Applied Arts \& Crafts, HMCT | B |  |  |  | ' | - |  |  |

$B=$ Number of divisions at $1^{\text {st }}$ year (shift $1+2$ ) + Number of $2^{\text {nd }}$ year direct divisions (shift $1+2$ )

| 1 | Book titles and volumes required at the time of starting new Institution. |
| :--- | :--- |
| 2 | Requirements of Book titles and volumes in Institutions started before 1950 shall be calculated considering <br> starting year as 1950. |
| 3 | Yearly increment. |
| 4 | Component for additional division / course. |


| 5 | Hard Copy International Journals is desirable to procure. However subscription to E-Journals and National <br> Journals as per Appendix 10 is essential. |
| :--- | :--- |
| 6 | Journals and Books may also include subjects of Science \& Humanities. |
| 7 | Digital Library facility with multimedia facility is essential. |
| 8 | Reprographic facility in the library is essential. |
| 9 | Document scanning facility in the library is essential. |
| 10 | Document printing facility in the library is essential. |
| 11 | Library books/non books classification as per standard classification methods is essential. |
| 12 | Availability of NPTEL facility at the library is essential. |
| 13 | Computerized indexing with bar coded / RF tagged book handling is desired. |

## Appendix 6

Norms for Essential and Desired requirements for Technical Institution (Marked as essential need to be made available at the time of the Expert committee visit)

| 1. | Stand Alone Language Laboratory <br> The Language Laboratory is used for language tutorials. These are attended by students who <br> voluntarily opt for Remedial English classes. Lessons and exercises are recorded on a weekly <br> basis so that the students are exposed to a variety of listening and speaking drills. This especially <br> benefits students who are deficient in English and also aims at confidence-building for <br> interviews and competitive examinations. The Language Laboratory sessions also include word <br> games, quizzes, extemporary speaking, debates, skits etc. This Lab shall have 25 Computers for <br> every 1000 students. | Essential |
| :--- | :--- | :--- |
| 2. | Potable Water supply and outlets for drinking water at strategic locations | Essential |
| 3. | Electric Supply | Essential |
| 4. | Backup Electric Supply | Desirable |
| 5. | Sewage Disposal | Essential |
| 6. | Telephone and FAX | Essential |
| 7. | Vehicle Parking | Essential |
| 8. | Institution web site with Mandatory Disclosure | Essential |
| 9. | Barrier Free Built Environment for disabled and elderly persons including availability of <br> specially designed toilets for ladies and gents separately. Refer guidelines and space standards <br> for Barrier Free Built Environment for disabled and elderly persons by CPWD, Ministry of <br> Urban Affairs \& Employment, India. | Essential |
| 10. | Safety provisions including fire and other calamities | Essential |
| 11. | General Insurance provided for assets against fire, burglary and other calamities | Essential |
| 12. | Road suitable for use by Motor vehicle- Motorised Road | Essential |
| 13. | General Notice Board and Departmental Notice Boards | Essential |
| 14. | First aid, Medical and Counseling Facilities | Essential |
| 15. | Public announcement system at strategic locations for general announcements/paging and <br> announcements in emergency. | Desirable |
| 16. | Enterprise Resource Planning (ERP) Software for Student-Institution-Parent interaction | Desirable |
| 17. | Transport | Desirable |
|  |  |  |


| 18. | Post, Banking Facility / ATM | Desirable |
| :--- | :--- | :--- |
| 19. | CCTV Security System | Desirable |
| 20. | LCD (or similar) projectors in classrooms | Desirable |
| 21. | Group Insurance to be provided for the employees | Desirable |
| 22. | Insurance for students | Desirable |
| 23. | Staff Quarters | Desirable |
| 24. | Establishment of Grievance Redressal Committee and Appointment of OMBUDSMAN in the <br> Institute | Essential |
| 25. | Display of Courses and approved Intake in the Institute at the entrance of the Institute. | Desirable |

## Appendix 7

## Norms for Faculty requirements and Cadre Ratio for Technical Institution

### 7.3 Faculty Requirements and Cadre Ratio (PG)

|  | Faculty: <br> Student ratio | Principal / Director | Professor | Associate Professor | Assistant Professor | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C | D | A+B+C+D |
| *Engineering / Technology | 1:12 | - | $\frac{\mathrm{S}}{12 \times \mathrm{R}}$ | $\frac{\mathrm{S}}{12 \times \mathrm{R}}$ | $\frac{\mathrm{S}}{12 \times \mathrm{R}}$ | $\frac{\mathrm{S}}{12}$ |
| *Pharmacy | 1:12 | - | $\frac{\mathrm{s}}{12 \times \mathrm{R}}$ | $\frac{s}{12 \times R}$ | $\frac{s}{12 \times R}$ | $\frac{5}{12}$ |
| *Architecture \& Town Planning | 1:10 | - | $\frac{\mathrm{S}}{10 \times \mathrm{R}}$ | $\frac{\mathrm{s}}{10 \times \mathrm{R}}$ | $\frac{\mathrm{s}}{10 \times \mathrm{R}}$ | $\frac{\mathrm{s}}{10}$ |
| *Applied Arts \& Crafts | 1:10 | - | $\frac{\mathrm{S}}{10 \times \mathrm{R}}$ | $\frac{\mathrm{S}}{10 \times \mathrm{R}}$ | $\frac{\mathrm{S}}{10 \times \mathrm{R}}$ | $\frac{\mathrm{S}}{10}$ |
| * HMCT | 1:12 | - | $\frac{s}{12 \times R}$ | $\frac{\mathrm{s}}{12 \times \mathrm{R}}$ | $\frac{\mathrm{s}}{12 \times \mathrm{R}}$ | $\frac{5}{12}$ |
| ${ }^{\text {\# }}$ MBA / PGDM | 1:15 | 1 | $\frac{\mathrm{SxN}}{\frac{\mathrm{IxR}}{15 \mathrm{R}}-1}$ | $\frac{\mathrm{S}}{15 \times \mathrm{R}} \times 2$ | $\frac{\mathrm{S}}{15 \times \mathrm{x}} \times 6$ | $\frac{5}{15}$ |
| ${ }^{\#} \mathrm{MCA}$ | 1:15 | 1 | $\frac{S}{15 \times R}-1$ | $\frac{\mathrm{S}}{15 \times \mathrm{R}} \times 2$ | $\frac{\mathrm{S}}{15 \times \mathrm{R}} \times 6$ | $\frac{5}{15}$ |

$7.3 \mathrm{a} \quad \mathrm{S}=$ Sum of number of students as per Approved Student Strength at all years $* \mathrm{R}=(1+2),{ }^{\#} \mathrm{R}=(1+2+6)$
8.1 $\quad$ Faculty Cadre and Qualifications shall be as per the All India Council for Technical Education (Pay Scales, Service Conditions and Qualifications for the Teachers and other Academic Staff In Technical Institutions (Degree) Regulations, 2010 , All India Council for Technical Education (Pay Scales, Service Conditions and Qualifications for the Teachers and other Academic Staff In Technical Institutions (Diploma) Regulations, 2010 and subsequent amendments in these Regulations issued by AICTE from time to time.

