

## FEE COMPUTATION FORMULAE AND ITS CALCULATION

### 1(a) Institutional Development Fund (IDF) Formula:

$$\text{IDF} = 15\% \text{ of BTF}$$

### 2 (a) Base Tuition Fee (BTF) Formula

Tuition Fee depends on the cost of Equipments including Computer Hardware, Software & Peripherals, books and journals, running cost of faculty & staff and annual operational cost.

While calculating these costs, the following assumptions have been taken:

- a. Set of books, computer and equipments once purchased shall be used for four consecutive years for each batch of class.
- b. Cost of Journals is taken as 10% of the total cost of Books.
- c. Cost of Software, peripherals, networking, servers etc. is taken as 50% of the total cost of computers.
- d. Cost of faculty as per prescribed teacher: student ratio and the salary structure by AICTE.
- e. Annual cost of non-teaching technical and administrative staff is taken as 35% cost of the faculty.
- f. Operational cost which includes electricity, water, maintenance, telecom, transport, sports, outreach, medical, documentation, photocopying etc. per student.

These costs are however variable, but taken as constant for the present exercise. The actual cost is going to vary over a period of time on account of changes in the parameters such as faculty cost, operational costs etc. It is, therefore, necessary that the Base Tuition Fee should be reviewed every three years.

$$\text{BTF} = \text{TF}_b + \text{TF}_c + \text{TF}_e + \text{TF}_f + \text{TF}_s + \text{TF}_o$$

Where,

- $\text{TF}_b$  = TF due to cost on books;
- $\text{TF}_c$  = TF due to cost on Computer Centre
- $\text{TF}_e$  = TF due to cost on Equipments
- $\text{TF}_f$  = TF due to cost on Faculty
- $\text{TF}_s$  = TF due to cost on Staff
- $\text{TF}_o$  = TF due to Operational cost

$$\mathbf{TF_b = (1.1 * c_b * (b_t + b_o)) / (4 * N)}$$

where,

- $c_b$  = Average Cost per Book
- $b_t$  = No. of Technical Books required for N students
- $b_o$  = No. of other Books required for N Students
- N = Annual Intake of students
- Factor 1.1 takes care of cost of Books (100%) and additional cost on account of Journals (10%)
- Factor 4 indicates the number of years a book can be used effectively after which there shall be a requirement of addition of new books and a recurring cost on Journals

$$\mathbf{TF_c = 1.5 * c_c / (4 * N_c)}$$

where

- $c_c$  = Average Cost of Computer
- $N_c$  = No. of Students sharing a Computer
- Factor 1.5 takes care of cost of Computers (100%) and additional costs on account of Software, net working and peripherals (50%)
- Factor 4 indicates the number of years a computer, peripheral or a software can be used effectively after which there shall be a requirement of new or up gradation or additional computer, peripheral and software

$$\mathbf{TF_e = c_e / (4 * N)}$$

where

- $c_e$  = Cost of equipment for an annual intake of N.
- Factor 4 indicates the number of years an equipment can be used effectively after which there shall be a requirement of replacement or addition of new equipment

$$\mathbf{TF_f = (N_p * C_p + N_r * c_r + N_1 * C_1) / (SFR * SFCR)}$$

where

- SFR = Student Faculty Ratio as per AICTE Norms
- SFCR = Sum of Faculty Cadre Ratio as per AICTE Norms
- $N_p$  = No. of Professors in SFCR
- $N_r$  = No. of Readers in SFCR
- $N_1$  = No. of Lecturers in SFCR
- $C_p$  = Annual Cost of Professor

- $c_r$  = Annual Cost of Reader
- $C_1$  = Annual Cost of Lecturer

$$TF_s = 0.35 * TF_f$$

where

- Factor 0.35 indicates that the cost of staff is 35% cost of Faculty.

**TF<sub>o</sub> = Operational Cost per student per year**

## 2 (b) Computation of TF

$c_b$	=	Rs. 500
$b_t$	=	4000
$b_o$	=	1000
$N$	=	250
$c_c$	=	Rs. 25000
$N_c$	=	4
$c_e$	=	Rs. 50 lacs
$N_p$	=	1
$C_p$	=	Rs. 8 lacs
$N_r$	=	2
$C_r$	=	Rs. 6 lacs
$N_1$	=	6
$C_1$	=	Rs. 4 lacs
SFR	=	15
SFCR	=	9 (1 + 2 + 6)

$$BTF = \frac{(1.1 * c_b * (b_t + b_o))}{(4 * N)} + \frac{1.5 * c_c}{(4 * N_c)} + \frac{c_e}{(4 * N)} + \frac{(N_p * C_p + N_r * c_r + N_1 * C_1)}{(SFR * SFCR)} + (0.35 * (N_p * C_p + N_r * c_r + N_1 * C_1)) / (SFR * SFCR) + TF_o$$

$$= \frac{(1.1 * 500 * (4000 + 1000))}{(4 * 250)} + \frac{(1.5 * 25000)}{(4 * 4)} + \frac{(5000000)}{(4 * 250)} + \frac{((1 * 800000 + 2 * 600000 + 6 * 400000))}{(15 * 9)} + \frac{(0.35 * (1 * 800000 + 2 * 600000 + 6 * 400000))}{(15 * 9)} + 5000$$

$$= 2750 + 2343.75 + 5000 + 32592.6 + 11407.4 + 5000$$

$$= \text{Rs. } 59093.75$$

$$BTF = \text{Rs. Say } 60000 + 17600 * = 77600 \text{ approx.}$$

Additional cost due to revision of pay scales for teaching and non teaching staff after the report of latest pay commission is implemented

**3. Total Base Fee for UG Programme for Engineering & Technology**  
**= Fixed IDF + BTF**  
**= Rs. (10500 + 77600)**  
**= Rs. 88100**

**Note:**

1. Total Fee for NRI students or Management quota students may be charged up to a maximum of 4 times than the Total Base Fee.
2. 15% Students from weaker sections of the society out of the National quota as well as state Quota may be charged 50% of the Total Fee. This shall be Compensated by the higher Fee charged from students admitted under NRI/ NRI Sponsored/Management Quota.
3. "Institutions, in which 75% of the eligible programs are accredited by NBA or any other agency authorized by Government or have been granted Autonomous status by AICTE with a minimum of 50% of the eligible programmes accredited may charge TF 25% more than the BTF".
4. The above Total Base Fee shall be revised every three years.
5. The Technical Institutions established exclusively for women will charge 10% less BTF. In lieu of this concession, these institutions will be given additional seats up to 10 % over and above the approved intake.
6. Committee may take note of instructions issued by AICTE on matters relating to fixation of fee of any course and consider any other relevant factor as it deemed fit, while calculating expenses of an institute and fixing fee of a course.

