

## NATIONAL INSTITUTIONAL RANKING FRAMEWORK

Methodology for Ranking of Academic Institutions in India

(RANKING METRICS FOR RESEARCH INSITUTION)



**Ministry of Human Resource Development** 

# Summary of Ranking Parameters and Weightages- 2024 (Research Institution)

Sr.	Parameter	Marks	Weightage
No.			
1	Metric for Quantitative Research (QNR)	100	0.30
2	Metric for Qualitative Research (QLR)	100	0.30
3	Metric for Students and Faculty Contribution (SFC)	100	0.20
4	Outreach and Inclusivity (OI)	100	0.10
5	Perception (PR)	100	0.10

neters	Marks
NR)	100
ns (PU): 50 marks Index (CI): 25 marks Isional Practice (FPPP): 25 marks	
R)	100
is in 1st Quartile JCR(JCRQ1): 30	
ns in Top 25 (TOP25): 30 marks Granted (IPR): 20 marks	
tribution (SFC)	100
th PhD (or equivalent) and toral Students (SS): 30 marks dents Graduated (GPHD): 30 marks	
	100
Ranking weight: 0.10	
Diversity WD): 30 marks CTS): 20 marks ged Students (PCS): 20 marks	
	100
Ranking weight: 0.10	
Academic Peer (PR): 100 marks	
<b>Ac</b>	ademic Peer (PR): 100 marks

# 1. Metric for Quantitative Research (QNR): 100 marks

- Ranking weight: 0.30
- Overall Assessment Metric:

$$QNR = PU (50) + CI (25) + FPPP (25)$$

- Component metrics based on:
  - A. Combined metric for Publications: PU
  - B. Combined metric for Citations Index: CI
  - C. Footprint of Projects and Professional Practice: FPPP



- $PU = 50 \times f(P/F_{RQ})$
- $F_{RQ}$  is the maximum of nominal number of faculty members as calculated on the basis of a required FSR of 1:15 or the available faculty in the institution.
- Sources: Third party sources.

## B. Combined metric for Citations Index (CI): 25 marks

- $CI = 25 \times f(CC/F_{RQ})$
- Here CC is Total Citation Count over previous three years.
- $F_{RQ}$  is the maximum of nominal number of faculty members as calculated on the basis of a required FSR of 1:15 or the available faculty in the institution.
- Primary Data: Third Party Sources.

#### C. Footprint of Projects and Professional Practice (FPPP): 25 marks

- $\mathbf{FPPP} = \mathbf{FPR} + \mathbf{FPC}$
- $FPR = 18.75 \times f (RF)$
- RF is average annual research funding earnings (amount actually received in rupees) per faculty at institute level in previous three years.
- FPC =  $6.25 \times f$  (CF)
- CF is average annual consultancy amount (amount actually received in rupees) per faculty at institute level in previous three years.

# 2. Metric for Qualitative Research (QLR): 100 marks

- Ranking weight: 0.30
- Overall Assessment Metric:

$$QLR = JCRQ1(30) + TOP 25(30) + IPR(20) + HI(20)$$

The component metrics explained on following pages.

- A. Combined metric for publications in 1st Quartile: JCRQ1
- B. Combined metric for Publications in Top 25: TOP25
- C. IPR and Patents: Published and Granted: IPR
- D. H- Index: HI

# A. Combined metric for publications in 1st Quartile JCR(JCRQ1): 30 Marks

- $JCRQ1 = 30 \times f(JCRQ1/F_{RQ})$
- JCRQ1 is weighted number of publications in 1<sup>st</sup> Quartile as ascertained from suitable third party sources.
- $F_{RQ}$  is the maximum of nominal number of faculty members as calculated on the basis of a required FSR of 1:15 or the available faculty in the institution.
- Sources: Third party sources.

# B. Combined metric for Publications in Top 25 (TOP25): 30 marks

- $TOP25 = 30 \times f (TOP25P/P)$
- *P is weighted number of publications as ascertained from suitable third party sources.*
- TOP25P: Number of citations in top 25 percentile averaged over the previous three years.
- Primary Data: Third Party Sources.

# C. IPR and Patents: Patents Published and Granted (IPR): 20 marks

• IPR = IPG + IPP

$$IPG = 10 \times f(PG)$$

• PG is the number of patents granted over the previous three years.

$$IPP = 10 \times f(PP)$$

- PP: No. of patents published over the previous three years.
- Primary Data: Third Party Sources.

D. H-Index:20 n	narks
H-Index=20*HI	
HI is weighted n science and Scop	umber of H Index as ascertained from suitable third party sources (Web o ous)

# 3. Metric for Students and Faculty Contribution (SFC): 100 marks

- Ranking weight: 0.20
- Overall Assessment Metric:
- SFC = FQE(40) + SS(30) + GPHD(30)
- The component metrics are explained on the following pages:
  - A. Combined metric for Faculty with PhD (or equivalent) and Experience: FQE
  - B. Student Strength including Doctoral Students: SS
  - C. Metric for Number of Ph.D. Students Graduated: GPHD

#### A. Combined Metric for Faculty with PhD (or equivalent) and Experience (FQE): 40 marks

- $FQ = 20 \times (F_{RA}/95)$ ,  $F_{RA} < 95\%$ ;
- $FQ = 20, F_{RA} \ge 95\%$ .
- Here  $F_{RA}$  is the percentage of Faculty with Ph.D. (or equivalent qualification) with respect to the total no. of faculty required or actual faculty whichever is higher, in the previous year.

F1=Fraction with Experience up to 8 years;

F2= Fraction with Experience between 8+ to 15 years;

F3=Fraction with Experience > 15 years.

•  $FE = 6 \min (3F1, 1) + 6 \min (3F2, 1) + 8 \min (3F3, 1)$ 

Rationale: Full marks for a ratio of 1:1:1

- $\mathbf{FQE} = \mathbf{FQ} + \mathbf{FE}$
- Primary Data: Faculty List in the Prescribed Format.

#### B. Student Strength including Ph.D. students (SS): 30 Marks

- $SS = f(N_T, N_E) \times 20 + f(N_P) \times 10$
- The functions  $f(N_T, N_E)$  and  $f(N_p)$  are functions to be determined by NIRF.
- N<sub>T</sub>: Total sanctioned approved intake in the institution considering all UG and PG programs of the institution.
- N<sub>E</sub>: Total number of students enrolled in the institution considering all UG and PG Programs of the institution.
- $\bullet$  N<sub>p</sub> = Total number of students enrolled for the doctoral program till previous academic year.
- Primary Data: To be provided in a prescribed Format.

# C. Metric for Number of Ph.D Students Graduated (GPHD): 30 Marks

- GPHD =  $30 \times f(N_{phd})$
- $N_{phd}$ = Average number of Ph.D students graduated (awarded Ph.D) over the previous three years.
- Primary Data: Number of graduating Ph.D. Students as reflected in the approved Annual Report/Convocation Report to be provided in the prescribed format.

# 4. Outreach and Inclusivity (OI): 100 marks

- Ranking weight: 0.10
- Overall Assessment Metric: OI = RD(30) + WD(30) + ESCS(20) + PCS(20)
- The component metrics are explained on following pages:
  - A. Percentage of Students from other States/Countries (Region Diversity): RD
  - B. Percentage of Women (Women Diversity): WD
  - C. Percentage of SC/ST Students: SCTS
  - D. Facilities for Physically Challenged Students: PCS

A. Pe	rcentage of Students from other States/ Countries (Region Diversity RD): 30 marks
•	RD = $25 \times$ fraction of total students enrolled from other states + $5 \times$ fraction of students enrolled from other countries
•	Primary Data: To be provided in the prescribed format.

## B. Percentage of Women (Women Diversity WD): 30 marks

- WD =  $15 \times (N_{WS}/50) + 15 \times (N_{WF}/20)$
- Nws are the percentage of Women students.
- N<sub>WF</sub> are the percentage of Women Faculty including the women members in senior administrative positions, such as Heads of Departments, Deans or Institute Heads.
- Expectation: 50% women students and 20% women faculty.
- Primary Data: To be provided in the prescribed format.

# C. Percentage of SC/ST Students (SCTS): 20 marks

- SCTS =  $20 \times f(N_{scts})$
- $N_{scts}$  is the percentage of UG students being provided full tuition fee reimbursement by the institution to pursue their degree programs.
- Primary Data: To be provided by the institution in the prescribed format.

# D. Facilities for Physically Challenged Students (PCS): 20 marks

• PCS = 20 marks, if the Institute provides full facilities for physically challenged students, as outlined.

Else, in proportion to facilities.

- Basis: Verifiable Responses to Questions.
- Primary Data: To be provided in a prescribed format.

# 5. Perception (PR) – 100 marks

• Ranking weight: 0.1

• Overall Assessment Metric: PR = 100

• Component metrics are explained in the following pages:

A. Peer Perception: Employers & Academic Peers: (PR)

## A. Peer Perception: Employers & Academic Peer (PR): 100 marks

- This is to be done through a survey conducted over a large category of Employers,
   Professionals from Reputed Organizations and a large category of academics to ascertain their preference for graduates of different institutions.
- Comprehensive list will be prepared taking into account various sectors, regions, etc.
- Lists to be updated periodically.