Screening Methodology for Induction Level Post (Post Code CAT1, Advt. R&D/97)

The applicants meeting the prescribed eligibility criteria as advertised in the Advertisement R&D/97 will be shortlisted for further Selection Process as per the following screening methodology specified for induction level qualification of PhD, for Post Code CAT1.

1. **Screening Methodology:**
   1.1 **National Level Test i.e. Joint CSIR-UGC Test(National Eligibility Test)/Biotechnology Eligibility Test(BET)/GATE – (Max 25 Marks)**

Examinations	Marks admissible
PhD without clearing the requisite National Level Test	18
OR	
PhD having cleared the Joint CSIR-UGC Test for determining eligibility for appointment of Lecturers(NET)/BET (DBT-JRF Category-II)	**20**
OR	
PhD having cleared the Joint CSIR-UGC Test for award of Junior Research Fellowship-JRF-NET/ BET(DBT-JRF Category-I)	**25***
OR	
GATE Marks (out of 100)based on which admission taken in PhD **(Max:25)**	
Marks will be allocated as under: GATE Marks x 25 100	

*to also read clause 1.1.5

1.1.1. In respect of candidates who have qualified both **NET** (for Lectureship) and **JRF-NET** (i.e. Fellowship), only the marks applicable for JRF-NET will be reckoned.

1.1.2. In respect of candidates who have qualified both **GATE** and **NET** (for lectureship) examinations, only the higher marks admissible as per calculations explained in the table at 1.1 above will be reckoned.

1.1.3. In respect of candidates who have qualified both **GATE** and **JRF-NET**, only the marks applicable for JRF-NET will be reckoned.

1.1.4. Candidates who have cleared BET(DBT-JRF) shall be considered only if the position being applied is in the areas of Biotechnology/Micro-biology.

1.1.5. CSIR-UGC JRF(NET) awardees who were recipient of CSIR-Shyama Prasad Mukherjee Fellowship will be granted an additional 2(two) marks over and above 25 marks as a special recognition of their meritorious performance(but within the overall limit of a total of 100 marks prescribed under the screening methodology with a view that any marks scored above 100 marks in the screening methodology shall not be taken into account and shall be ignored).

1.1.6. Candidates who have acquired PhD from a Foreign University must submit a **Certificate of Equivalence** from the Association of Indian Universities (AIU), certifying that their qualification is equivalent to PhD in the corresponding field of an Indian University.

1.1.7. Marks awarded to candidates who have taken admission in PhD based on GATE Marks under clause 1.1 will be subject to minimum of 18 marks awarded to any candidate with PhD without clearing any National Level Test.

1.2. Publications/articles/Papers/Patents:

1.2.1. Refereed Journals with Impact Factor (**Max 50 Marks**)

Only in respect of the **articles/Papers** that are **published/accepted** for publication in a Refereed Journals in relevant subject/ discipline (Chemistry/Polymer Chemistry/Biotechnology etc., as the case may be), up to a maximum of 2 years from date of successful defense of PhD, marks will be allocated based on its Impact Factor (**IF**) by referring to the latest Impact Factor of the journal available on the journal website. Articles/ Papers those are **published/ accepted** for publication in a Refereed Journals after 2 years from the date of successful date of defense of PhD **will not be** considered for award of marks under this clause.

With regard to number of authors, in the event of upto two authors of an article/paper, full points as per the Impact Factor shall be admissible. However, if the said article/paper has been co-authored by more than two individuals, the Impact Factor applicable to that particular Refereed Journal shall be divided by the number of authors to arrive at the **Average Impact Factor** (AVIF).

In case more than one article/paper of a candidate has been published/ accepted for publication, the IF/AVIF, as the case may be, shall be worked out in the same manner as explained above, and, the IF/AVIF of article/ Paper-1, article/Paper-2 and so on will be added to arrive at the combined AVIF. The combined AVIF finally arrived at, in respect of the candidate will be normalized (as Percentile calculation) to arrive at the final marks against this assessment factor. A maximum of 50 Marks will be admissible under this head after normalization. An illustration of allocation of marks to as per this is given below:

Sl.No	Candidate	Combined Average Impact Factor (AVIF)	Allocation of Marks after normalization
I	II	III	(IV= AVIF of Candidate/ Highest AVIF all Candidates* 50)
1	A	10.158	14.491
2	B	8.898	12.694
3	C	12.842	18.32
4	D	1.498	2.137
5	E	35.049	50
6	F	5.314	7.581

1.2.1.1 The latest impact factor available on the journal website will be used for calculation of marks under this category.

1.2.1.2 In case of Journals where Impact factor is not available on the journal website, but Cite Score is available, Cite Score to be treated as equal to Impact factor (IF) and marks will be awarded accordingly. If both of them are not available, in that case SNIP/ SJIF/Scopus Marks to be treated as equal to Impact factor (IF) and marks will be awarded accordingly. However, for journal where Impact factor and Cite Score/ Scopus Marks/ SNIP/ SJIF are available, only Impact factor (IF) will be used for calculating marks as per screening methodology.

1.2.1.3 If the applicant has a publication in a journal for which the names have been changed & mentioned on the website of the journal, latest impact factor of the new journal to be used for calculating marks. If Impact factor is not available for rechristened journal, the last impact factor of that publication to be used.

1.2.1.4 If the applicant has a publication in rechristened journal having no Impact factor / Cite Score /SNIP/ SJIF/ Scopus Marks, then 'No Impact Factor but with ISSN Number' (Clause 1.2.2) to be applicable.

1.2.2. Publication of article/Paper in a refereed Journal without Impact Factor (Max 5 marks)

Only the Article/Paper published/accepted for publication in a refereed journal in relevant subject/discipline (Chemistry/Polymer Chemistry/ Biotechnology etc., as the case may be) **without Impact Factor** but with **ISSN,** up to a maximum of 2 years from date of successful defense of PhD, shall be considered for allocation of marks under this head. **Papers in Journal with IF will not be considered under this Clause**. Articles/ Papers those are **published/ accepted** for publication in a Refereed Journals after 2 years from the date of successful date of defense of PhD **will not be** considered for award of marks under this clause.

One (01) mark shall be admissible per article/paper. In the event of upto two authors, full one mark per article/paper/chapter shall be admissible. Where, the number of authors in respect of an article/paper is more than two, the marks for that particular article/paper shall be divided by the number of authors. An illustration of allocation of marks in respect of a candidate with more than one article/paper where some of them have more than two authors is given in the following table:

Different articles/Papers published/accepted for publication in a refereed journal without impact factor but with **ISSN**	Upto two Authors	More than two authors	
	Marks admissible	No. of Authors	Marks Admissible
A	1.000	3	0.333
B	1.000	4	0.250
C	1.000	5	0.200
D	1.000	6	0.167
E	1.000	7	0.143
TOTAL MARKS	**5.000**		

The final marks arrived as per the above illustration, in respect of the candidate will be normalized (as Percentile calculation) to arrive at the final marks against this assessment factor. A maximum of 5 Marks shall be admissible under this head after normalization. An illustration of allocation of marks to as per this is given below:

Sl.No	Candidate	Total Marks Admissible	Allocation of Marks after normalization
I	**II**	**III**	**(IV= III/ Highest 'III' all Candidates* 5)**
1	A	5	2.083
2	B	3	1.25
3	C	12	5
4	D	2	0.833

1.2.3. Publication of chapter in book (**Max 10 Marks**):

Only the Chapter(s) published in a book with **ISBN,** up to a maximum of 2 years from date of successful defense of PhD, shall be considered for allocation of marks under this head. Chapters in Book **published** after 2 years from the date of successful date of defense of PhD **will not be** considered for award of marks under this clause.

Two (02) marks shall be admissible per chapter. In the event of upto two authors, full two marks per chapter shall be admissible. Where, the number of authors in respect of

an chapter is more than two, the marks for that particular chapter shall be divided by the number of authors. An illustration of allocation of marks in respect of a candidate with more than one chapter where some of them have more than two authors is given in the following table:

Different chapters published in a book with ISBN	Upto two Authors	More than two authors	
	Marks admissible	No. of Authors	Marks Admissible
A	2.000	3	0.666
B	2.000	4	0.500
C	2.000	5	0.400
TOTAL MARKS	**6.000**		

The final marks arrived as per the above illustration, in respect of the candidate will be normalized (as Percentile calculation) to arrive at the final marks against this assessment factor. <u>A maximum of 10 Marks shall be admissible under this head after normalization.</u> An illustration of allocation of marks as per this is given below:

Sl.No	Candidate	Total Marks Admissible	Allocation of Marks after normalization
I	**II**	**III**	**(IV= III/ Highest 'III' all Candidates* 10)**
1	A	6	10
2	B	4	6.667
3	C	2	3.333

1.2.4. Full Patent Applications Filed and Granted Patents (**Max. 10 Marks**):

Only the Full Patent Applications Filed and the Granted Patents, up to a maximum of 2 years from date of successful defense of PhD, shall be considered for assessment. While **02** marks shall be admissible for each **Full Patent Application Filed**, **04** marks shall be admissible for each **Granted Patent**. <u>Provisional Filing of Patents will not be considered</u>. Full Patent Applications Filed and the Granted Patents after 2 years from the date of successful date of defense of PhD **will not be** considered for award of marks under this clause.

The final marks arrived as per the above, in respect of the candidate will be normalized (as Percentile calculation) to arrive at the final marks against this assessment factor. <u>A maximum of 10 Marks shall be admissible under this head after normalization.</u> An illustration of allocation of marks as per this is given below:

Sl.No	Candidate	Total Marks Admissible	Allocation of Marks after normalization
I	**II**	**III**	**(IV= III/ Highest 'III' all Candidates* 10)**
1	A	2	2.5
2	B	4	5.0
3	C	8	10.0
4	D	6	7.5

1.3. **Shortlisting of applicants with induction qualification of PhD for Personal Interview:** The marks obtained by the candidates in the table under 1.1(including as per clause 1.1.5) and the marks obtained under sub-clauses 1.2.1, 1.2.2, 1.2.3 and 1.2.4 shall be added and calculated upto 3 decimal places.

Based on the total marks arrived at by summing up the marks under **1.1** and **1.2**, (1.2.1 + 1.2.2 + 1.2.3+1.2.4) above; the candidates will be placed in the merit order. This section will be qualifying in nature and candidates getting a minimum of 25.00 marks out of 100(relaxed to 20.00 for SC/ST/PwD) will be considered eligible for shortlisting, subject to the ratio specified below. From among those who qualify this section as specified above, the candidates will be shortlisted in the ratio of 1:10 per post (subject to availability).These shortlisted candidates will be called for further selection process comprising the Personal Interview (**PI**). The marks obtained by the candidates under **1.1**(including as per clause 1.1.5) **and 1.2**, (1.2.1 + 1.2.2 + 1.2.3 + 1.2.4) above shall carry a weightage of **70%** in the final selection.

1.4. **Personal Interview (PI):** The shortlisted candidates shall be subjected to **PI.** During PI, the candidates will also be required to make a brief presentation (PPT of not more than **5 to 7 slides**) on their PhD THESIS Work, and any significant research work. The **Personal Interview will carry a weightage of 30%** in the final selection. Personal Interview shall be of 30 Marks and the allocation of marks to various attributes of assessment during Personal Interview are given in the table below:

Attributes	Marks
Professional Knowledge relevant to the post	10 Marks
Research Aptitude	10 Marks
Innovation Potential	5 Marks
Communication Skills	5 Marks
Total Marks	**30 Marks**

1.4.1. The Personal Interview shall be qualifying in nature. The minimum qualifying standard will be 50% marks in the Personal Interview. Accordingly, the candidates will be required to obtain 15 Marks to qualify in the Personal Interview. Candidates who do not qualify the PI will not be considered for Final Selection.

1.5. **Final Selection of PhD Candidates**:

1.5.1. Marks obtained by candidates under 1.1 (including marks, if any, as per clause 1.1.5) and 1.2 (1.2.1+1.2.2+1.2.3+1.2.4), weighted to 70% and the absolute marks obtained in the Personal Interview shall be totaled to arrive at the overall marks out of a total of 100(marks calculated upto 3 decimal places).

1.5.2. Based on the above, a merit list of candidates shall be prepared and the final selection will be based on the order of merit.