REPORT OF THE COMMITTEE ON EXTENDING RESEARCH SUPPORT TO NEWLY APPOINTED TEACHERS AND FOR A RATIONAL SCHEME FOR PROVIDING INCENTIVES TO FACULTY MEMBERS FOR PUBLISHING HIGH QUALITY PAPERS AND GENERATING INTELECTUAL PROPERTIES

Terms of Reference: Resolution of the Executive Committee meeting held on 25.04.2023 under agenda no. 32 and the notice issued by the Joint Registrar, University of North Bengal [Ref. No. 1942/R-2023 date: 10.05.2023]

1.0.Preamble: University of North Bengal (UNB) in the background of the NAAC peer review committee report should have its strategic vision and aspiration to be among the top 20 Universities in India by 2030. UNB will strive to make it a center for high quality education, outstanding research, innovation and scholarship. The strategic vision will be governed by three major goals: (i) Excellent teaching, learning and student experience; (ii) Outstanding research; and (iii) Social responsibility.

We are cognizant of the fact that a University with excellent research output is also equipped to meet the needs and aspirations of the students, faculty, and other stakeholders of the society. The UNB envisages becoming the location for choosing bright and exciting career paths by active researchers. Three driving forces will give direction to our research strategy.

- 1. To pursue high quality and high impact research of topical importance;
- 2. To motivate, train, and support faculty for conducting cutting edge research;
- 3. To engage in research activities those are for the benefit of society.

The driving forces will allow us to achieve our targets. The identified targets are as follow:

- To being among the top in the country in terms of research output.
- To see that UNB's research findings get published in high impact factor journals. It will work for raising the h-index from the present status to around 200.
- To provide a conducive research environment such that it enables at least three faculty members to be recognized by one of the national academies in the next five years.
- To have at least three innovations to transfer to industry.
- To work towards increasing the grant received for research projects by 10% annually.
- To aim at marketing UNB's intellectual property
- To conduct research which have present day social relevance and can contribute to national development.
- To aim at connecting with industries rather strongly.

Hence, UNB will undertake the following research strategies to achieve the abovementioned targets.

- 1. Faculty with research excellence in the identified key areas of research will be recruited.
- 2. Faculty will be advised to have 1-3 research projects, not excluding collaborative research, at any point of time.
- 3. Policy for break from academics for a semester to focus on research will be framed.
- 4. Research areas will be aligned with the approved thrust areas.
- 5. Six to eight clusters of research on leading areas will be set up.
- 6. Interdisciplinary research will be promoted.
- 7. Call for submission of proposals issued by funding agencies will be intimated to faculty by the office of the Development Officer.
- 8. Year-wise research outcome of faculty will be made available by the researcher on University website through dedicated portal .
- 9. Innovative projects in M.Tech/M.Sc/ M.A levels will be emphasized.

2.3 Conditions/ Eligibility/Formalities for availing SMS

- 1. Applicant must be a full-time recruited faculty as Assistant Professor in UNB in last 3 years or a new entrant to guide research as per new Ph.D guideline. Principal Investigator (PI) must have Ph.D. degree. At any time, a PI can submit only one application. This restriction will not be applicable for team research where the PI of one project can be a member of another team of researchers
- 2. If a proposal is turned down by the Seed Grant approval committee, the PI is allowed to submit a new proposal in the same year.
- 3. The amount of grant depends on the funds allocated for the scheme for the given year and also on other factors such as the number of applications, quality of proposal, etc.
- 4. In case of team of researchers the upper individual limit of seed money will be factored in by the Seed Grant approval committee
- 5. A faculty is not permitted to use the seed money for organising or attending conferences, seminars, webinars and other such events.
- 6. If the PI leaves the University, all items procured (books, equipment, stationery, furniture, etc.) will become property of the University.
- 7. The SMS will be discontinued in the absence of PI for more than 30 days of unsanctioned leave and in such case PI will have to return the money. If the leave is taken due to unforeseen health condition then PI may get special permission to continue the SMS.
- 8. In case of resignation without completion of SMS, PI has to refund all the money availed under the scheme to BIT
- 9. In case of Maternity Leave, PI will be given special permission to extend their project after joining duty. However, priori permission is required in such cases.
- 10. After completion PI must submit a proper report along with achievements, and deliver a formal presentation in the respective department before the committee and PI need to submit utilization certificate as per given format.
- 11. Any intellectual property generated during the course of such a project will be owned by UNB.
- 12. Faculty may not demand seed money as their right.
- 13. The Seed money approval committee shall not grant seed money to any researcher before a two year gap from the date of report submission of previous university sponsored research involving seed money, if applicable.

2.4. Process:

- 1. Announcement will be made to submit proposal.
- 2. Proposals submitted by PI will be evaluated by a committee constituted by Deans of the respective faculty and deans of both the Faculties where the proposal involves inter faculty researchers, concerned Head of the Department, and two external members (not below the rank of an Associate Professor) having adequate expertise on the subject of research concerned. The external members will change per proposal.
- 3. Criteria of evaluation will be based on: (i) Innovative research; (ii) promise of sustainable research and development attracting external funds; (iii) Budget matches to claimed outcomes; (iv) Potential to generate intellectual property (Including product and process development).
- 4. PIs of short-listed applications will be asked to present the proposal before the evaluation committee (may be held in the on-line mode). The external evaluators would be entitled to receive the sitting-fee. The committee's decision on the issue of acceptance or rejection will be final.
- 5. Decision on the award will be announced following the evaluation Committee's decision.

2.5 Outcome be Linked with Issuance of Utilisation Certificate:

- Provision of Utilisation Certificate be linked with production of evidence of publication of report in reputed
 journals with high impact factor / submission of report for publication in Journals under SCOPUS, WEB of
 Science or UGC CARE/. Publication in peer-reviewed journals/intellectual property generation including product/
 process development
- Externally funded projects
 - 10. UNB's research inventions will be commercialized: rules for incentives to faculty will be framed.
 - 11. The expertise of the university for consultancy services will be publicized on university website. The earning from consultancy by a faculty will be enhanced by suitably amending extant rules of sharing income from consutency.
 - 12. All departments/academic centres (as applicable) will be required to have one or two consultancy services.
 - 13. IPR cell of the University will discuss with each department and identify processes/ products for patenting. Such identified processes/ products will be vigorously taken up.

2.0.RESEARCH SUPPORT (SEED MONEY SCHEME or SMS) TO NEWLY APPOINTED TEACHERS AND NEW ENTRANTS TO GUIDING RESEARCH

2.1 Description

Research and developmental activities create and disseminate new knowledge in range of fields, promotes innovation and these will motivate better learning. Research is the foundation of knowledge that brings new energy, builds state of the art facilities, promotes research publications, develops collaborations and becomes part of active community that shares the mission objectives. Taking these into considerations, UNB Seed Money Policy is made for implementation.

Seed Money Scheme (SMS), sponsored by the University of North Bengal, aims to promote research and innovation amongst young faculty. Seed funding under this scheme is to be used to initiate/continue the research work of the new faculty. The faculty members who have been appointed (up to three years of joining or in case where the teacher was not permitted to conduct research) to a position of Assistant Professor in UNB are encouraged to apply for Seed Money Research Projects/Research Grant. Normally, the Seed Money Research Projects/Research grant shall be limited to Rs. Two Lakhs however, in exceptional cases, it may go up to Rs. Three Lakhs with the approval of the Vice-Chancellor. The Purpose of the SMS is to create a vibrant atmosphere of research among faculty and researchers in the University. The objective of the scheme is to accelerate the possibility to receive the financial support from external agencies in future (elaborated in the section 2.2). The applicant must clearly and convincingly demonstrate that the proposed project represents a new research direction in an area likely to generate external funding. Research Project that is already supported by other sources will not be considered for funding. The project under SMS will be considered as Minor Project and relevant API score will be credited as per CAS rule.

2.1.1. Preference will be given to proposals that:

- * Have a high potential for external funding
- * Have significant academic/scientific merit
- * Where the proposal is by a team of researchers where the PI has experience of handling major projects and other members are young researchers with no previous experience of having externally funded projects.
- * Build or strengthen inter-disciplinary research partnerships

2.2. Objectives of SMS

- To create an enabling environment within the University in order to foster a research culture as well as provide required support through research framework and guidelines.
- To nurture an environment of undertaking socially useful research with potential for commercialization.
- For creating opportunities for teachers of the University to involve themselves in real life research projects and obtaining sponsorships.
- To aid a faculty to start a research program that has the potential to sustain by attracting funds from external agencies.
- To test a novel idea and to generate preliminary results before submitting proposals to external agencies.
- To promote inter-faculty collaboration in emerging areas.
- To promote generation of IPR and product/process development.
- To attract and retain talent.

2.6.

PROPOSAL SUBMISSION WINDOW

The proposal submission will follow a notification ordinarily in the month of April by the office of the Registrar and be open throughout the financial year. The project proposal should be submitted as per format attached herewith (**Annexure I**). The duration of SMS will be Two year only (maximum), and will not be extended beyond 2 years.

2.7.PROPOSAL REVIEW

Submitted proposal will be evaluated as per the format decided by UNB.

2.8.PROJECT COMPLETION

PI must submit a proposal for external funding to the external agencies within the time period of project under SMS.

PI will be responsible to submit three copies of project completion report (**Annexure II**) along with final Utilization Certificate (**Annexure III**).

3.0. A rational scheme for providing incentives to faculty members for publishing high-quality papers in journals

Designing a rational scheme for providing incentives to faculty members for publishing high-quality papers in journals requires careful consideration to ensure fairness, transparency, and alignment with academic values. Here's a suggested rational scheme that takes these factors into account.

Quality-based – evaluation: This can include factors such as journal impact factor, citation count, peer reviews, and relevance to the field.

Tiered incentive structure: a tiered system shall be created to incentivize higher-quality papers. Different levels of rewards will be based on the quality of the journal or the impact of the publication. Higher-tier journals or papers with greater impact should receive higher incentives.

Transparent guidelines: Transparent guidelines outlining the criteria for evaluating papers and the corresponding incentives will be provided. Faculty members should have a clear understanding of the evaluation process and the rewards they can expect based on the quality of their work.

Long-term impact focus: UNB will also encourage a focus on long-term impact rather than solely on quantity. Recognize the value of transformative research and encourage faculty members to pursue innovative and influential work. Consider factors such as citations over time, real-world impact, and potential for further research or applications.

Non-monetary rewards: While monetary incentives can be effective, consider incorporating non-monetary rewards as well. Recognition within the institution, opportunities for professional development, research grants, and increased visibility within the academic community can all serve as additional incentives.

Equity considerations: UNB ensures that the incentive scheme promotes fairness and equity. UNB will avoid biases towards specific disciplines or research topics. UNB shall consider factors such as career stage, field-specific challenges, and institutional resources to provide equal opportunities for all faculty members.

Research grants: Offering research grants or other resources to faculty members who publish high-quality papers can also be a strong incentive. These grants can provide funding for research assistants, equipment, or travel to conferences, which can all help support the publication process.

Recognition: Finally, providing recognition and awards to faculty members who publish high-quality papers can also be a powerful motivator. This could include awarding them with plaques or certificates, or even nominating them for external awards and prizes.

Peer Review and Journal Rankings: Weightage will be given to papers published in reputable journals that undergo a rigorous peer-review process. Utilize established journal rankings or metrics, such as Impact Factor or h-index, to assess the quality and impact of the published work.

Merit-based Rewards: UNB will implement a merit-based reward system where faculty members are recognized and rewarded based on their individual achievements. This approach encourages and acknowledges the efforts of faculty members who consistently produce high-quality research.

Balanced weightage: UNB will consider both quantity and quality in the evaluation process. While high-quality papers should be the primary focus, acknowledging the importance of productivity can help motivate consistently.

What should be the rational scheme for providing incentives to faculty members for publishing high quality papers in journals?

Financial incentives: One way to incentivize faculty members to publish high-quality research papers in journals is to offer financial rewards for their publications. UNB could offer incentives in the form of consumable grant. The quanta of the grant will depend not only on the nature of the journal, covered under Scopus¹ or UGC-Carelist Journals² or PubMed indexed Journals³ and Impact Factor⁴ of the journal but also upon the author status as sole corresponding author and the corresponding address mentioning the UNB department.

Incentives for Faculty belonging to Social Sciences, Commerce and Law: Faculty publishing in Scopus and or UGC-Carelist Journals will be awarded with a contingency grant of Rs. 25,000/- (Rupees twenty five thousand only) per paper published from 2023 calendar year onwards; if the journal has impact factor ≥ 2.0 to ≤ 4.0 shall be awarded with a sum of Rs. 50,000/- (Rupees fifty thousand only) which he /she may spend as consumable + contingency for his/her research; if the journal has impact factor ≥ 5.0 to ≤ 10.0 shall be awarded with a sum of Rs. 1,00,000/- (Rupees one lakh only) which he /she may spend as consumable + contingency for his/her research.

Incentives for Faculty belonging to Science, Technology, Engineering, and Mathematics (STEM) disciplines: Faculty/authors should preferably publish in reputed Scientific society-owned journals, having impact factor > 2.0 (for example: Federation of European Societies/ UK based like Royal Society of Chemistry/ American Societies having a 50 years track record) rather than in for-profit private journals, and this also concerns high-quality private journals. In particular, authors should avoid private publishers with aggressive marketing strategies, which establish open-access journals with "friendly" and fast reviews and initially with low APCs. Impact factors of some of these journals may become relatively high and attractive for authors; however, they are not earned by the hard work of authors, reviewers and editors following strict editorial policies, but often by self-citations provided by other journals within the same publishing house. Scientific societies publish journals to facilitate communication among scientists (using peer-based quality reviews) and to advance their respective fields. Some universities, museums, research institutes and non-profit academic publishers also publish scientific literature with the same motivation. It is in their interest to keep costs as low as possible, both for authors in the case of open-access publishing and for readers in the case of subscription-based funding. In contrast, private companies publish journals for profit, and it is in their interest to keep article-processing charges (APCs) or subscription fees as high as possible. When a society-owned journal is published by a private company, a compromise is sought between these two conflicting interests, resulting in a model in which journals make a profit that is shared between the owner and the publisher.

STEM Faculty publishing in Scopus journal having impact factor ≥ 1.0 to ≤ 2.0 shall be awarded with a sum of Rs. 25,000/- (Rupees twenty thousand only) per paper published from 2023 calendar year onwards which he /she may spend as consumable and or contingency for his/her research; publishing in Scopus journal having impact factor > 2.0 to ≤ 3.0 shall be awarded with a sum of Rs. 50,000/- (Rupees fifty thousand only) per paper published from 2023 calendar year onwards which he /she may spend as consumable and or contingency for his/her research; publishing in Scopus journal having impact factor > 4.0 to ≤ 8.0 shall be awarded with a sum of Rs. 1,00,000/- (Rupees one lakh only) per paper published from 2023 calendar year onwards which he /she may spend as consumable and or contingency for his/her research; publishing in Scopus journal having impact factor > 8.0 to ≤ 12.0 shall be awarded with a sum of Rs. 1,00,000/- (Rupees one lakh only) per paper published from 2023 calendar year onwards which he /she may spend as consumable and or contingency for his/her research; publishing in Scopus journal having impact factor > 12.0 shall be awarded with a sum of Rs. 1,50,000/- (Rupees one lakh fifty thousand only) per paper published from 2023 calendar year onwards which he /she may spend as consumable and or contingency for his/her research. publishing in Scopus journal having impact factor > 20.0 shall be awarded with a sum of Rs. 5,00,000/- (Rupees five lakh only) per paper published from 2023 calendar year onwards which he /she may spend as consumable and or contingency for his/her research. NO AWARD WILL BE GIVEN TO PUBLICATIONS AS REVIEW ARTICLES OR OPINIONS EVEN IN HIGH IMPACT FACTOR JOURNALS.

4.0. A rational scheme for providing incentives to faculty members for award of Patent

In order to promote generation of patents mere promotion of awareness of IPR processes may not be enough. Researchers need to be motivated by the UNB to apply for patent of their innovations. Since filing for patent may involve some expenditure such expenditure may be allowed to be charged from the Budget Head of Publication of concerned Department/Centre. On receiving an award of a patent the concerned individual shall be awarded with a sum of Rs. 50,000/- (Rupees fifty thousand only) by way of incentive.

1, Scopus is Elsevier's abstract and citation database launched in 2004. Scopus covers nearly 36,377 titles from approximately 11,678 publishers, of which 34,346 are peer-reviewed journals in top-level subject fields: life sciences, social sciences, physical sciences, and health sciences. There exists a List-of-570-Indian-Journals-Indexed-in-Scopus-Database.

2, UGC-Carelist Journals

Impact Factor is a measure of the frequency with which the average article in a journal has been cited in a particular year or period. It is used to measure the relative importance of a journal within its field, with journals with higher impact factors deemed to be more important than those with lower ones.

- 3, PubMed Indexed Journals are essential for researchers as they provide easy access to high-quality publications, which are peer-reviewed and have been evaluated by experts in the field. These journals follow strict publishing standards, which ensures the reliability and credibility of the published research.
- 4, When looking for a suitable journal in which to publish manuscripts, we usually consider how the topic of the study matches the journal's scope, and how reputable the journal is, which is typically judged from the impact factor or a similar citation-based metric. However, we may pay little attention to who owns the journal. Does journal ownership really matter?

In the post-World War II period, the number of new scientific articles increased at an annual growth rate of 5.1% and a doubling time of 14 years (Bornmann et al. 2021). These numbers exceeded the capacity of scientific societies, whose members usually edited society journals on a voluntary basis. A publishing industry emerged with professional for-profit publishers to whom many societies turned over their journals.

IF is used as a proxy for the relative importance of a journal within its field. IF is awarded to the journals indexed in Thomson Reuters Journal Citation Reports. IF has been criticised for manipulation and incorrect application. There are multiple factors that could bias the calculation of the IF. These include coverage and language preference of the database, procedures used to collect citations, algorithm used to calculate the IF, citation distribution of journals, online availability of publications, negative citations, preference of journal publishers for articles of a certain type, publication lag, citing behaviour across subjects, and possibility of exertion of influence from journal editors.

s/d Prof. Soumitra De

s/dProf. Ranadhir Chakraborty

s/d Dr. Mayukh Sarkar

ANNEXURE - I

FORMAT FOR PROPOSAL SUBMISSION

Details of Principal Investigator

Name	Designation	Highest Qualifications	Department	E-mail	Contact no	Date of Joining
		-				
		Details of	Other Investig	<u>gators</u>		
Name	Designation	Highest	Department	E-mail	Contact	Date of
ranic	Designation	Qualifications	Department	12-111411	no	Joining Section

Technical details

1. Introduction: (Maximum 1 page)

(Rationale for doing this work should be elaborated)

2. Literature Review of status of Research and Development in the subject

2.1 International Status: (Maximum 1 page)

(Researchers working in the area worldwide and their contributions must be properly highlighted with recent references and reviews. A correct and faithful description of the international research status must be given)

2.2 National Status: (Maximum 1 page)

2.3 Importance of the proposed project (Maximum 1 page)

(Highlight what is the new area or gap which will be solved in the project in relating to what is already known. This is a very important section to project the novelty content of the proposal)

3. Progress/achievement so far, if any, including details of externally funded projects in last three years or receipt of University Seed Money in last two years.								
4. Wor	k Plan:							
4.1 Me	thodology: (Maxin	num of 2 pages)						
section: havesev	must be detailed an veral schemes, table ation ofwhy the pro	etails of how each of d have clear plans, no es, figures, equations eject research plan wi	ot vague and general etc. in addition to te	lized statements. It should				
Sl.No	Item	1 st Year Budget	2 nd year Budget	Total Budget				
1	Equipment		, J					
2	Consumables							
3	Travel							
4	Contingency							
5	Other cost							
	Total							

4.3 Time Schedule of activities giving milestones through GANTT Chart diagram.

5. Future plan of action (stating the name of funding agency where the project will be

communicated for financial support within the time-period of project.)

7. List of Projects submitted/implemented by the Investigators (If any)

7.1 Details of Projects submitted to various funding agencies:

4.4 Expected outcome.

6. Bibliography:

Sl.No.	Title	Cost in lakhs	Month of submission	Role as	Agency Status

7.2 Details of Projects under implementation

SL.No.	Total	Cost in Lakhs	Duration	Role as

7.3 Details of Projects completed during the last 5 years

Sl. No	Title	Cost in Lakhs	Duration	Role as	Agency

8. List of publications published by the Investigators, if any:

9. Name of at least two subject experts from the Institute and one from the outside Institute with their contact details:

Sl.no	Name	Designation	Institute	Expert in	Address with
				subject	mobile no.

DECLARATION FROM THE INVESTIGATOR

T		FET 9 4 1	
Proj	IPCT	1 1 t	ρ.
110	CCL	110	

It is certified that

- 1. I do hereby agree to submit a complete proposal for financial support to the external fundingagency within the time period of SMS.
- 2. I undertake that spare time on equipment procured in the project will be madeavailable to other users.
- 3. I agree to submit a certificate from Institutional Biosafety Committee if the project involves the utilization of genetically engineered organisms. I also declare that while conducting experiments, the Biosafety Guidelines of Department of Biotechnology, Department of HealthResearch, GOI would be followed into.
- 4. I agree to submit ethical clearance certificate from the concerned ethical committee, if the project involves field trails/experiments/exchange of specimens, human & animal materialsetc.
- 5. I agree to abide by the terms and conditions of SMS, UNB.

Name of PI	Signature of PI

Date:	
Place:	
	Signature with date Head of the Department

ANNEXURE II SEED MONEY PROGRESS/COMPLETION REPORT Format (1-2 Pages only)

1. Faculty Name:
a.
b.
c
2. Department Name:
A
В
c
3. Faculty Employee Code:
A
В
c
4. Date of joining UNB and present post
A
В
c
5. Title and main objectives(<50 words) of the project:
6. Output (during/ after the seed project period):
a) Publication/patent with details:
b) Ph D guided (during project period):
c) Sponsored project(s) earned during or after this project:
d) Conference/seminar presentation:
e) National level award/recognition, if any (during project period):
f) Teaching record (Course No., Year, No. of students, any additional information):
g) Facility created:
h) Collaboration, if any:
7. Acknowledgement in papers/conference/website/report:
8. Progress Level (in %):
9. Date of completion, if applicable:

10.Most important achievement (50 words):	
Signature of the PI	Signature of the HOD
Of other Members , wherever applicable.	
(with Date)	(with Date & Seal)

ANNEXURE III

UTILIZATION CERTIFICATE

Certified that the grant of Rs(Rupees	
University of North Bengal, under the Seed Money Scheme entitled	vide
SMS letter No	ose
Signature of the Principal Investigator	
Signature of Concerned Officer from A/C section, UNB	1

ANNEXURE - IV

FORMAT FOR CLAIMING INCENTIVE/

1.	Name of the Faculty/Researcher:
2.	Name of the Department/Center:
3.	Employee Code;
	A. Details of the Publication (Year Jan-December,0000)
	Link to Publication
	Link to Award of Patent
	Signature
	Attachments