

## SHIVAJI UNIVERSITY, KOLHAPUR

*Revised API - PBAS Pro forma for Recruitments and Promotion under CAS  
as per UGC's 4<sup>th</sup> Amendment Dated 11<sup>th</sup> July, 2016  
(15/06/2018 - 14/06/2019)*

**PART A: GENERAL INFORMATION AND ACADEMIC BACKGROUND**

1. Name (in Block Letters) : **Dr. LATTHE SANJAY SUBHASH**
2. Father's Name : **LATTHE SUBHASH KALLAPPA**
3. Department : **PHYSICS**
4. Current Designation & Grade Pay : **ASSISTANT PROFESSOR 6000 AGP**
5. Date of last Promotion :
6. Position and Grade Pay applied under CAS: **ASSISTANT PROFESSOR 7000 AGP**
7. Date of eligibility for promotion : **15/06/2020**
8. Date and Place of Birth : **01/06/1985, Billur, Tal: Jath – 416404,  
DIST: Sangli**
9. Sex : **Male**
10. Marital Status : **Married**
11. Nationality : **Indian**
12. Indicate category and sub category (if reserved): **OPEN (Hindu - Lingayat)**
13. Address for Correspondence (with Pin Code) :  
Department of Physics,  
Raje Ramrao Mahavidyalaya, Jath,  
Palace Road, Tal: Jath – 416404, Dist: Sangli, MH, India
14. Permanent Address (with Pin Code) :  
Subhlaxmi Niwas, In front of Sangola College, Sangola,  
A/P: Sangola, Tal: Sangola – 413307, Dist: Solapur, MH, India.  
Contact No.: 7030310947, E-mail: latthes@gmail.com

**15. Academic Qualification (S.S.C. till post-graduation):**

Examination	Name of the University	Year of Passing	% of marks obtained	Division/Class	Subject
S.S.C.	Pune Board, Pune, India	2000	62.00	First Class	ALL
H.S.C.	Pune Board, Pune, India	2002	66.00	First Class	ALL
B. Sc.	Shivaji University Kolhapur, India	2005	76.17	First class with Distinction	Physics
M. Sc.	Shivaji University Kolhapur, India	2007	67.21	First class	Physics

**16. Research Degree(s):**

Degree	Title	Date award	of	University
Ph. D.	Sol-gel Synthesis and Physico-chemical Properties of Silica based Hydrophobic Coatings	14/09/2010		Shivaji University, Kolhapur.
Post-Doctorate	Thermo-responsive polymer coatings	2010 – 2012		Koc University, Istanbul, Turkey
Post-Doctorate	Superhydrophobic membranes for oil-water separation	2012 – 2013		Korea University, Seoul, South Korea
Post-Doctorate	Photocatalytic TiO <sub>2</sub> coatings on polycarbonate for self-cleaning applications	2013 – 2015		Tokyo University of Science, Tokyo, Japan

**17. Appointments held prior to joining this institution:**

Designation	Name of Employer	Date of Joining		Salary with Grade	Reason of leaving
		Joining	Leaving		
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**18. Posts held after appointment at this institution:**

Designation	Department	Date of joining		Grade pay
		From	To	
Assistant Professor	Physics	15/06/2016	Till Date	6000/-

19. Period of teaching experience :

a) P. G. Classes (in year) : **03 Years**

b) U.G. Classes (in year) : **03 Years**

20. Research Experience excluding years spent in M. Phil/Ph.D. (In years): **10 Years**

21. Fields of Specialization under the Subject/Discipline:

**a) Solid State Physics**

**b) Materials Science**

22. Academic Staff College Orientation / Refresher Course/ ISTE - AICTE Sponsored STTP/SBP attended so far.:

Name of the Course/ Summer School	Place	Duration	Sponsoring Agency
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**PART B: ACADEMIC PERFORMANCE INDICATORS**

**CATEGORY I: TEACHING, LEARNING AND EVALUATION RELATED ACTIVITIES.**

**a. Direct teaching Maximum Score 70, for Assistant Professor, Maximum Score 60 for Associate Professor & Professor.**

**a. i. Classroom teaching lectures, seminar (As per allocation)**

Sr. No.	Course / Paper	Level	Mode of Teaching*	No. of periods/ Hours allotted		No. of periods / Hours engaged per Annum	Actual Score (Actual hours spent per academic year _ 7.5/7.75/7.75)
				Per Week	Per annum		
1	B.Sc.	UG	Lectures	4	98	98	71.20
			Practicals	16	436	436	

Lecture (L), Seminar (S)

**a. ii. Classroom teaching (including lectures, seminar) in excess of UGC norms (as per allocation)**

Sr. No.	Course/ Paper	Level	Mode of Teaching*	Hours / Periods per academic year engaged	Actual Score (Actual hours spent per academic year _ 7.5/7.75/7.75)
1	B.Sc.	UG	Practical's	75	10.00

\* Lecture (L), Seminar (S)

**a. iii. Tutorials and Practicals, Field work, Project Supervision (Actual as per student attendance register)**

Sr. No.	Course/ Paper	Tutorials/ Practical/ Field work/ Project supervision	Hours / Periods per academic year engaged	Actual Score (Actual hours spent per academic year _ 7.5/7.75/7.75)
		Tutorials	20	2.6
		Seminar	25	3.3
		Project Supervision	45	6.0
Total			80	10.5

**Sub Total a. Direct Teaching Max. Score 70/60 Actual Score – a i+ii+iii = 71.20+10.40+10.50 = 92.10**

b. **Examination duties** - Maximum Score 20, for Assistant Professor& Associate Professor, Maximum Score 10 for Professor.

Sr. No.	Type of Duties	Dates from – to	Actual Hours spent	Actual Score (Actual hours spent per academic year 10)
Invigilation Supervision	Jr. supervisor	04/10/17 To 03/11/17 & 22/03/18 To 05/05/18	20 27	<b>22.26</b>
	Sr. supervisor	07/05/18To 20/05/18	120	
	Flying squad	-----	-----	
Custodian	-----			
CAP Director/Asst. director	-----	-----	-----	-----
Unfair menace committee	-----	-----	-----	-----
Lapses committee	-----	-----	-----	-----
Internal assessment	B.Sc.-I Paper assessment	04/05/17-07/05/17 02/11/17-05/11/17	21 15	<b>12.0</b>
	B.Sc.-I Practical examiner	02/03/18-10/03/18	54	
External assessment	B.Sc.-II Paper assessment	19/11/18-20/11/18	12	<b>14.8</b>
	B.Sc.-III Practical examiner	14/04/17-22/04/17 16/02/18-19/02/18	54 24	
	B.Sc.-II Practical examiner	15/03/17-21/03/17	21	
	re evaluation	-----		
<b>Total Actual Score</b>				<b>49.06</b>

c. **Innovative Teaching**-Maximum Score 10 for Assistant Professor, Maximum Score 15 for Associate Professor, Maximum Score 20 for Professor.

Sr. No.	Nature of Activity	Max Score	Actual hours spent per academic year	Actual Score (Actual hours spent per academic year 10)
1	<b>Learning Methodologies</b>			
2	Use of innovative methodologies for teaching –		<b>60</b>	<b>6</b>

	( Use Charts and Model)			
3	Use of ICT		20	2
4	Updating of subject content (Use of Internet Facility and Reference Books)		30	3
5	Course improvement	-		
6	Preparation of study material		80	08
7	Interaction with entrepreneur / social worker	-		
8	Mentoring		35	3.5
9	Participative teaching		20	2
10	Role playing	-		
	<b>Subtotal (max score 10)</b>	10/15/20		<b>24.5</b>
	<b>Total of Category 1 Max score</b>	100/95/90		<b>165.66</b>
	<b>Minimum API score required for Category I *</b>	80/75/70		

**Note :** \* Assistant Professor Stage 1 to 2 = 80, Stage 2 to 3 = 80,  
Assistant Professor to Associate Professor Stage 3 to 4 = 75,  
Associate Professor to Professor Stage 4 to 5 = 70  
Professor Stage 5 to 6 = 70

**CATEGORY: II PROFESSIONAL DEVELOPMENT, CO-CURRICULAR AND EXTENSION ACTIVITIES**

Category II	Nature of Activity	Maximum API Score	Actual score
a.	Student related co-curricular, extension and field based activities. (i) Discipline related co-curricular activities (e.g. remedial classes, career counselling, study visit, student seminar and other events.) (ii) Other co-curricular activities (Cultural, Sports, NSS, NCC etc.) (iii) Extension and dissemination activities (public /popular lectures/talks/seminars etc.)	15	Actual hours spent per academic year ÷ 10
b	Contribution to corporate life and management of the department and institution through participation in academic and administrative committees and responsibilities. i). Administrative responsibility (including as Dean / Principal / Chairperson / Convener / Teacher-in-charge/similar other duties that require regular office hrs for its discharge) (ii). Participation in Board of Studies, Academic and Administrative Committees	15	Actual hours spent per academic year ÷ 10

c	<b>Professional Development activities (such as participation in seminars, conferences, short term training courses, industrial experience, talks, lectures in refresher / faculty development courses, dissemination and general articles and any other contribution)</b>	15	Actual hours spent per academic year ÷ 10
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Category II	Nature of Activity	Maximum API	Score Actual score	Verified API Score	Page No.
A	<b>Student related co-curricular, extension and field based activities.</b>				
	<b>i. Discipline related co-curricular activities organized</b>		40÷10 =04		
	• Student seminar	15	20÷10 =02		
	• Remedial classes		10÷10 =01		
	• Career counselling		20÷10 =02		
	• NET/SET/GETT/Workshop (1 week)				
	• Quiz, debate, elocution, (on subject )				
	• Essay competition on subject				
	• Exhibition		06÷10 =0.6		
	• Subject / faculty day celebration		04÷10 =0.4		
	• Survey conduction				
	• Subject association activity (Evidence to be provided.) Observer for M.Sc.-I admission round		06÷10 =0.6		
	<b>ii. Other co-curricular activities</b>		15		
• Cultural prog. coordinator					
• NSS, NCC officer/ Assit officer	100÷10 =10				
• Eradication of superstitions					
• Tree plantation	04÷10 =0.4				
• AIDS / Awareness	06÷10 =0.6				
• Blood donation camp					
• Student welfare officer					
• Placement committee member	06÷10 =0.6				
• Sports Committee (Evidence to be provided.)	08÷10 =0.8				
<b>iii. Extension and dissemination activities</b>	15				
Positions held / Leadership role played in organization linked with Extension work					

	<ul style="list-style-type: none"> <li>• Community work such as—National integration, human Right, peace,Scientific temper flood/ drought relief</li> </ul>				
	<ul style="list-style-type: none"> <li>• Public lectures delivered (Related to subject)</li> </ul>				
	<ul style="list-style-type: none"> <li>• Talks delivered in a programme as chief guest</li> </ul>				
	<ul style="list-style-type: none"> <li>• Seminars in public interest</li> </ul>				
	<ul style="list-style-type: none"> <li>• General awareness activities</li> </ul>		15÷10 =1.5		
	<ul style="list-style-type: none"> <li>• Organizing subject related event like lecturer on special topics</li> </ul>		05÷10 =0.5		
	<ul style="list-style-type: none"> <li>• Popular writings not covered under( III) (Evidence to be provided.)</li> </ul>				
<b>B</b>	<p><b>Contribution to corporate life and management of the department and institution through participation in academic and administrative committees and responsibilities.</b></p> <p><b>i. Administrative responsibility</b></p> <ul style="list-style-type: none"> <li>• Dean, Principal, management council member</li> </ul>	<b>15</b>			
	<ul style="list-style-type: none"> <li>• Director of school/institute</li> </ul>				
	<ul style="list-style-type: none"> <li>• IQAC coordinator,Member of IQAC (Criterion III chairman)</li> </ul>		70÷10 =7		
	<ul style="list-style-type: none"> <li>• Refresher/orientation coordinator</li> </ul>				
	<ul style="list-style-type: none"> <li>• Head of Department/ P.G. Co-ordinator</li> </ul>		<b>180</b> ÷10=18		
	<ul style="list-style-type: none"> <li>• Chairperson/ Convener (Secretary)</li> </ul>				
	<ul style="list-style-type: none"> <li>• Teacher-in-charge or similar duties that require regular office hours for its discharge) per duty</li> </ul>				
	<p><b>ii. Participation in</b></p> <ul style="list-style-type: none"> <li>• BOS/ Faculty / Academic Council /</li> </ul>	<b>15</b>			
	<ul style="list-style-type: none"> <li>• Senate/ any other University Committee</li> </ul>				
	<ul style="list-style-type: none"> <li>• Chairman for subject related event like. Ph.D. Open Defense Session.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Various Scrutiny meeting</li> </ul>				
	<ul style="list-style-type: none"> <li>• Resource Person/ Speaker for subject related event</li> </ul>				
	<ul style="list-style-type: none"> <li>• Referee/ Judge for subject related event etc.</li> </ul>				
	<ul style="list-style-type: none"> <li>• Administrative Committees</li> </ul>				
	<ul style="list-style-type: none"> <li>• Editorial Board</li> </ul>				
	<ul style="list-style-type: none"> <li>• Local management committee</li> </ul>				
	<ul style="list-style-type: none"> <li>• Admission committee</li> </ul>		70÷10 =7		
	<ul style="list-style-type: none"> <li>• Campus development</li> </ul>				



	• Library committee		70÷10 =7		
	• Standing Committee				
	• Sexual Harassment &Prevention Committee etc.				
	• Membership / participation in State /				
	Central bodies/committees on education research				
<b>C</b>	Professional Development activities • <b>participation in seminars, conferences,</b>	<b>15</b>	42÷10 =4.2		
	• Short term training courses,				
	• Industrial experience,				
	• Talks,				
	• Lectures in refresher / faculty development courses,				
	• Dissemination and general articles and any other contribution				
	<b>Total of Category II Max score</b>	<b>45</b>	<b>67.20</b>		
	<b>Minimum API score required for Category II (for Assessment period)</b>	*50/50/ 50 /50/100			

Stage 1 to 2 = 50,  
Stage 2 to 3 = 50,  
Stage 3 to 4 = 50,  
Stage 4 to 5 = 50,  
Stage 5 to 6 = 100

\* Teachers may score the balance of points from either Category II or Category III to achieve the minimum score required under Category II + III.

**VERIFIABLE CRITERIA:**

- 1) Academic Dairy,
- 2) Bio Metric Generated Slips.
- 3) Attendance sheets,
- 4) Certification by HOD / Principal,
- 5) Supporting Documents

**CATEGORY: III. RESEARCH, PUBLICATIONS AND ACADEMIC CONTRIBUTIONS**

**III A) (i) Published Papers in Referred Journals\* (25 points per publication)**

Sr. No	Title with page Nos.	Journal	ISSN/ ISBN NO.	Impact Factor, if any	No. of co-Autho-rs	Whether principal author/ corresponding author / Guide	Self Appraisal score	API score Verified	Page No. of relevant documents
1	“Polyelectrolyte-assisted soft reduced process for Pt-Cu nanoclusters with enhanced electrocatalytic activity for the methanol oxidation reaction”	Journal of Physics and Chemistry of Solids, 2019, 124, 361-366.	ISSN: 0022-3697	IF = 3.44	Li, S. Li, Y. Liu, T. Ochiai, S. S. Latthe, K. Nakata, R. Xing, S. Liu	No	3		
2	“Self-cleaning superhydrophobic coatings: Potential industrial applications”	Progress in Organic Coatings, 2019, 128, 52-58. (IF = 2.97).	ISSN: 0300-9440	IF = 4.46	S. S. Latthe, R. S. Sutar, V. S. Kodag, A. K. Bhosale, A. M. Kumar, K. K. Sadasivuni, R. Xing, S. Liu	Yes	5		
3	“Superhydrophobic Leaf Mesh Decorated with SiO <sub>2</sub> Nanoparticle-Polystyrene Nanocomposite for Oil-Water Separation”	ACS Appl. Nano Mater., 2019, 2 (2), pp 799-805.	ISSN: 2574-0970	IF = 4.5	S. S. Latthe, R. S. Sutar, T. B. Shinde, S. B. Pawar, T. M. Khot, A. K. Bhosale, R. Xing, L. Mao, S. Liu	Yes	5		
4	“CoS <sub>2</sub> nanodots anchored into heteroatom-	Journal of Power Sources 2019,	ISSN: 0378-7753	IF = 8.24	B. Li, R. Xing, S. V. Mohite, S.	No	3		

doped carbon layer via a biomimetic strategy: Boosting the oxygen evolution and supercapacitor performance”	436, 226862.				S. Latthe, A. Fujishima, S. Liu, and Y. Zhou				
<b>Sub Total A (i)</b>							<b>16</b>		

**(\*\*15 points for publication + 5 points for index**

**Published Papers in Other Reputed Journals as notified by the UGC\* (10 points per publication)**

Sr. No.	Title with page Nos.	Journal	ISSN/ ISBN NO.	Impact Factor, if any	No. of co-Authors	Whether principal author/ corresponding author / Guide	Self Appraisal score	API score Verified	Page No. of relevant documents
Nil									

**III B) Publications other than journal articles (books, chapters in books)**

**(i) Text/Reference, Books published by International Publishers, with ISBN/ISSN number as approved by the University and posted on its website. The List will be intimated to UGC. (30 Points per Book for Single Author)**

Sr. No.	Title with page Nos.	Type of Book & Authors hip	Publisher & ISSN/ ISBN No.	Whether peer reviewed	No. of co-Authors	Whether principal author/ corresponding author / Guide	Self Appraisal score	API score Verified	Page No. of relevant documents
1	“Lotus Effect-based Superhydrophobic Surfaces: Candle Soot a promising class of Nanoparticles for Self-cleaning and Oil-water	Surface Coatings and Adhesives: Sustainable Technologies and Applications, 2019, Royal Society of Chemistry (RSC), 92-119.	978-1-78262-994-8	Yes	S. S. Latthe, Kazuya Nakata, Rainer Höfer, Akira Fujishima, Chiaki Terashima,	No	3		

Separation Applications									
<b>Sub Total B (i)</b>							<b>3</b>		

**(ii) Subject Books, published by National level publishers, with ISBN/ISSN number or State / Central Govt. Publications as approved by the University and posted on its website. The List will be intimated to UGC. (20 Points per Book for Single Author)**

Sr. No.	Title with page Nos.	Type of Book & Authorship	Publisher & ISSN/ ISBN No.	Whether peer reviewed	No. of co-authors	Whether principal author/ corresponding author / Guide	Self Appraisal score	API score Verified	Page No. of relevant documents
Nil									
<b>Sub Total B (ii)</b>									

**(iii) Subject Books, published by other local publishers, with ISBN/ISSN number as approved by the University and posted on its website. The List will be intimated to UGC. (15 Points per Book for Single Author)**

Sr. No.	Title with page Nos.	Type of Book & Authorship	Publisher & ISSN/ ISBN No.	Whether peer reviewed	No. of co-authors	Whether principal author/ corresponding author / Guide	Self Appraisal score	API score Verified	Page No. of relevant documents
Nil									
<b>Sub Total B (iii)</b>									

**(iv) Chapters in Books, published by National and International level publishers, with ISBN/ISSN number as approved by the University and posted on its website. The List will be intimated to UGC. (International -10 points per Chapter National – 5 Points per Chapter)**

Sr. No.	Title with page Nos.	Type of Book & Authorship	Publisher & ISSN/ ISBN No.	Whether peer reviewed	No. of co-authors	Whether principal author/ corresponding author / Guide	Self Appraisal score	API score Verified	Page No. of relevant documents
NIL									
<b>Sub Total B (iv)</b>							<b>0</b>		
<b>Total B( i+ii+iii+iv)</b>							<b>19</b>		

**III C) Research Projects:****III C (i) Sponsored Projects**

Sr. No	Type of project	Title	Agency	Year of completion	Whether Co-PI	Grant (Rs. Lakh)	Self appraisal Score	API score Verified	Page No. of relevant documents
Nil									
<b>Sub Total C (i)</b>									

**III C (ii) Consultancy Projects** (Amount mobilized with minimum Rs.10 lakhs for Engineering/ sciences & minimum of Rs.2 lakhs for others, 10 points for every Rs 10 lakhs & Rs. 2 lakhs. respectively)

Sr No	Type of project	Title	Agency	Year of completion	Whether Co-PI	Grant (Rs. Lakh)	Self appraisal Score	API score Verified	Page No. of relevant documents
Nil									
<b>Sub Total C (ii)</b>									

**III C (iii) Projects Outcome/Output:****Patent / Technology transfer / Product process**

Major Policy document prepared for international bodies like WHO/UNO/UNESCO/UNICEF etc.

Central / State Govt./Local Bodies(30 for each International / 20 for each national level output or patent.

Major policy document of International bodies - 30 Central Government – 20, State Govt.-10 Local bodies – 5)

Sr No	Name of the Project	Funding Agency	Agency	Whether Co-PI	Amount Mobilized (Rs.)	Self appraisal Score	API score Verified	Page No. of relevant documents
Nil								
<b>Sub Total C (iii)</b>								

<b>Total C( i+ii+iii)</b>	Nil
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**III D Research Guidance** (In the case of joint supervision points are to be equally shared) (For M.Phil. degree awarded 5 points per candidate, Ph.D. degree awarded 15 points per candidate. Ph.D. thesis submitted 10 points per candidate)

Sr. No.	Number Enrolled	Thesis Submitted	Degree awarded	API Score Claimed by the candidate	API Score Verified	Page No. of relevant documents
M. Phil or equivalent						
Ph. D. or equivalent						
<b>Sub Total III D</b>						

**III E Fellowships, Awards and Invited lectures delivered in conferences / seminars**

**III E (i) Fellowships/ Awards.**

Sr. No.	Fellowship / Award	Year	Level International /National / State / University	Awardee Academic Body/ Association	API Score Claimed by the candidate	API Score Verified	Page No. of relevant documents
Nil							
<b>Sub Total E (i)</b>							

**III E (ii) Invited lectures / papers International level 7 per lecture, National level 5 per lecture, State / University level 3 per lecture**

Sr. No.	Title of Lecture /Academic Session	Title of Conference /Seminar etc	Organized by	Whether international /National	API score claimed	API Score Verified	Page No. of relevant documents
<b>Sub Total E (ii)</b>							

**a. Invited lectures**

**(ii) Invited lectures / papers International level 5 per paper, National level 3 per paper, State University level 2 per paper**

**a. Papers presented**

Sr. No.	Title of Lecture /Academic Session	Title of Conference /Seminar etc	Organized by	Whether international /National	API score claimed	API Score Verified	Page No. of relevant documents
NIL							
<b>Sub Total E (ii)</b>					0		
<b>Total E( i+ii)</b>					0		

**III (F) Development of e-learning delivery process/material 10 per module- Nil**

**III SUMMARY OF API SCORES**

Cat.	Criteria	API score claimed	API score Verified	Page No.
I	Teaching, Learning And Evaluation Related Activities	165.66		
II	Professional Development, Co-Curricular and Extension Activities	67.20		
III	Research and Academic Contribution	19.0		
	<b>TOTAL API(I + II + III) (Minimum Score required 90/120/150/180)</b>	<b>251.86</b>		

**LIST OF ENCLOSURES:**

(Please attach, copies of certificates, sanction orders, papers etc. wherever necessary)

1. Exam duty orders
2. Workshop & conference certificates.
3. Syllabus completion report.

4. Exam Supervision order.
5. College examiner attendance certificates.
6. Published Papers.
7. Certificate of paper presented in conference.

### UNDERTAKING

I **Dr. Latthe Sanjay Subhash** undertake that the information provided is correct as per records submitted by me to College / Institute / University and / or documents enclosed along with the duly filled PBAS proforma.

My PBAS based APIs score carries

251.86

Place: Jath  
Date: 30/06/2019



Signature of the faculty  
(**Dr. Latthe Sanjay Subhash**)

Assistant Professor  
**Dr. Sanjay S. Latthe** JSPS Fellow  
Department of Physics,  
Raje Ramrao Mahavidyalaya, Jath  
Dist-Sangli (M.S.) 416 404



Signature

Head of the Department

Place: Jath  
Date: 30/06/2019

**HEAD,**  
Department of Physics,  
Raje Ramrao College, Jath.



Principal

Place: Jath  
Date: 30/06/2019

**I/c. Principal**  
Raje Ramrao Mahavidyalaya, Jath  
Tal-Jath, Dist-Sangli.

N. B.: The individual PBAS proforma duly filled along with all enclosures, submitted for CAS promotions will be duly verified by the college/Institute/university as necessary and placed before the Screening cum Evaluation Committee or Selection Committee for assessment / verification.