

## Department of Biochemical Engineering and Biotechnology

### Minutes of the Departmental Faculty Board Meeting

(DFB-01/2021-2022)

July 26, 2021

The first meeting of the *Departmental Faculty Board* for the academic session 2021-2022 was held on **July 26, 2021** through video conferencing (Microsoft Teams in the *DBEB FB channel*).

The following members were present:

Prof. D. Sundar	Chairman
Prof. Sunil Nath	Member
Prof. T.R. Sreekrishnan	Member
Prof. Prashant Mishra	Member
Prof. Atul Narang	Member
Prof. Shilpi Sharma	Member
Prof. K.J. Mukherjee	Member
Prof. Preeti Srivastava	Member
Prof. Ziauddin Shaikh Ahammad	Member
Prof. Ravikrishnan Elangovan	Member
Prof. Ashish Misra	Member
Prof. Rohan Jain	Member
Prof. Madhuresh Sumit	Member
Prof. Ritu Kulshreshtha	Convener

#### **1. Confirmation of the minutes of the 7<sup>th</sup> meeting of the DFB for the session 2020-2021 held on June 07, 2021.**

The minutes of the meeting was confirmed as circulated.

#### **2. Matters arising out of the minutes of the above meetings**

None.

#### **3. B.Tech Major Project Part 1 (BBD451) – Student Project Allocation**

The HoD briefed the members about the model used for student project allocation by Prof. Ishaan Gupta, the BTP Coordinator. After deliberation, the board approved the student project allocation as given in **Annexure - 1**.

#### **4. Core Laboratory courses / practical component of core courses**

The board discussed the core courses for which the practical component were not offered in Sem 1, 2020-2021 and the feasibility of offering the practical component to the students registered for Sem 1, 2021-2022. After deliberation, the board decided to offer the practical component for certain courses (**Annexure - 2**). The schedule for BBL737 course was also finalized (**Annexure - 3**).

## **5. Nomination for BOSS Award.**

The Board considered the recommendations of the Departmental Selection Committee. In the light of the original contributions to the design and implementation of the project objectives, the board approved the recommendations for BOSS award (2020-2021) to be forwarded to Dean (Academics).

## **6. Proposal to start a new M.Tech program in Biomolecular and Bioprocess Engineering.**

The Board discussed the feedback received from the Expert Committee formed to review the proposed M.Tech program. It was decided to share the final version of proposal with the Expert Committee and seek their comments before sending it to Dean (Academics).

## **7. Departmental representatives to Institute bodies, constitution of DRC, and nomination of faculty for handling various departmental responsibilities.**

The board made the recommendations for the session 2021-2022 as given in **Annexure - 4**.

## **8. Status of purchases from funds allocated under IoE grant**

The concerned buyers reported the issues associated with the purchases of the following items (1). Sensors for existing reactors [Rs. 60 lacs] (2). Microbioreactor (Rs. 60 lacs) and (3). Multiplexed GC-MS (Rs. 50 lacs). After careful deliberations, the board recommended that the revised plan for reallocation of budget, along with justification, be forwarded to competent authority for favorable consideration.

*(Action: Prof. KJ Mukherjee and other concerned buyers/experts to prepare a revised proposal with justification)*

## **9. Budget (PLN03, NPN05 and PLN03F)**

The board recommended the expenses to be met from the Institute budget heads as given in **Annexure - 5**.

## **10. To form a policy for the PhD supervision and Project PI-ship of sponsored projects by retiring faculty**

The proposal of HoD to form a policy on the subject was placed before the board for deliberations. After careful evaluation of the matter and the overly informal situation that currently is in practice, the board recommended that this should be handled at the departmental level. The recommendations are placed in **Annexure - 6**.

## **11. Matters for information of the DFB.**

- a) The HoD informed the board that Prof. Saroj Mishra's tenure of reemployment after superannuation ended on June 30, 2021 and she has now joined the Department as a Visiting Faculty for one year from July 01, 2021 onwards.

- b) The HoD informed about the request of CSC to have a separate access for the server room currently located in I-221. It was informed that the proposal of CSC to have a separate door is being forwarded to the Infrastructure unit.
- c) The DRC Chair informed about the PG Orientation scheduled on August 02, 2021 at 3 PM and further details will be soon circulated to all faculty.
- d) The board was informed about the new HoD selection scheduled on August 04, 2021 and the faculty were requested to participate in the interaction with DDO and DDSP as per the time slot chosen by them.

**12. Any other item with the permission of the Chair.**

- a) The board discussed to the request of Prof. Shilpi Sharma to relocate the -80°C freezer from her individual lab to the Instrumentation Lab. Prof. Sharma was requested to inspect the space and present the possibility in the next meeting.
- b) The request of Prof. Ritu Kulshreshtha for few instruments from the erstwhile Plant Cell Lab was discussed and the Board deferred the discussion to a future meeting when there is a clarity on space allocation.

The meeting ended with a vote of thanks to the Chair.

**Ritu Kulshreshtha**  
Convener, DFB

**Distribution**

All Faculty (by email)

**Department of Biochemical Engineering and Biotechnology**

**Semester 1, 2021-2022**

**BBD451 – B.Tech Major Project Part 1 – Student Project Allocation**

Sl. No.	Entry Number	Student	Faculty Mentor
1	bb1180001	Abhay Kumar	Prof. Shilpi Sharma
2	bb1180002	Adarsh Vrindam	Prof. Sunil Nath
3	bb1160026	Aditya Prasad	Prof. Atul Narang
4	bb1180003	Agrima Deedwania	Prof. Preeti Srivastava
5	bb1180005	Amit Kumar	Prof. T.R. Sreekrishnan
6	bb1180006	Anahad Sharma	Prof. Ishaan Gupta
7	bb1180007	Anima Mandwariya	Prof. Shilpi Sharma
8	bb1180008	Animesh Parihar	Prof. Prashant Mishra
9	bb1180009	Anish Singh Rajawat	Prof. Ziauddin S. Ahammad
10	bb1180010	Anshul Rohilla	Prof. Ravikrishnan Elangovan
11	bb1180011	Barri Bhavya	Prof. Saroj Mishra
12	bb1180012	D Payal	Prof. T.R. Sreekrishnan
13	bb1180013	Deepanshu Goel	Prof. Prashant Mishra
14	bb1180014	Esha Singh	Prof. Ritu Kulshreshtha
15	bb1180015	Geeta Kole Vishwanath	Prof. Preeti Srivastava
16	bb1180016	Harit Kumar Kohli	Prof. Shilpi Sharma
17	bb1180017	Harsh Dutta	Prof. Preeti Srivastava
18	bb1180018	Harshit Gupta	Prof. Rohan Jain
19	bb1180038	Harshit Kumar Singh	Prof. Rohan Jain
20	bb1180020	Himanshu Singh	Prof. D. Sundar
21	bb1180019	Himanshu Bhargava	Prof. Sunil Nath
22	bb1180021	Ishank Agrawal	Prof. Ishaan Gupta
23	bb1180022	Kavya Parnami	Prof. Saroj Mishra
24	bb1180023	Mahesh Regar	Prof. T.R. Sreekrishnan
25	bb1180024	Mayank Singh	Prof. Sunil Nath
26	bb1180026	Naveen Saharan	Prof. D. Sundar
27	bb1180027	Nehal Chachan	Prof. Ritu Kulshreshtha
28	bb1180004	Omkar Shivaji Doifode	Prof. Madhuresh Sumit
29	bb1180028	Pranjal Singh	Prof. Rohan Jain
30	bb1180029	Pratiyush Mishra	Prof. Ziauddin S. Ahammad
31	bb1180030	Prem Prakash Mahar	Prof. K.J. Mukherjee
32	bb1180031	Pushpit Srivastava	Prof. Ritu Kulshreshtha
33	bb1180033	Rahul Sahu	Prof. Atul Narang
34	bb1180034	Ravinder	Prof. Saroj Mishra
35	bb1180036	Roopesh Dobwal	Prof. K.J. Mukherjee
36	bb1180037	Ruchika Kumari	Prof. Prashant Mishra
37	bb1180040	Sanaz Agarwal	Prof. Ishaan Gupta
38	bb1180042	Sanidhya Jain	Prof. Ravikrishnan Elangovan
39	bb1160045	Sanjay Singh Poonia	Prof. Ashish Misra
40	bb1180041	Sarthak Gupta	Prof. Ziauddin S. Ahammad
41	bb1180043	Shrey	Prof. Ravikrishnan Elangovan
42	bb1180044	Shubham Kumar	Prof. Madhuresh Sumit
43	bb1180046	Vikesh Saini	Prof. Ashish Misra

## Status of Core Laboratory courses / practical component of core courses

Sl	Course Number	Course Title	L - T - P Structure			Credits	Sem 1, 2020-21	Sem 1, 2021-22	Virtual Labs in 1 cycle (ANs : 13:00 – 18:00)
			L	T	P				
1	BBL131P	Principles of Biochemistry	3	0	3	4.5	PM	PM	F
2	BBL132P	General Microbiology	3	0	3	4.5	SS	SS	
3	BBL231P	Molecular Biology and Genetics	3	0	3	4.5	PS	PS	
4	BBP332	Bioprocess Engineering Lab	0	0	3	1.5	ZAS	AN *	M
5	BBL850P	Advanced Biochemical Engg	3	0	4	5	KJ	ZAS	M
6	BBL731	Bioseparation Engineering	3	0	3	4.5	RJ	RJ	Tu
7	BBL732	Bioprocess Plant Design	3	0	2	4	TRS	TRS	W
8	BBL733	Recombinant DNA Technology	2	0	3	3.5	RK	RK	Th
9	BBL735	Genomics and Proteomics	2	0	2	3	IG	IG	M
10	BBL737	Instrumentation and Analytical Methods in Bioengineering	2	0	2	3	DS	DS	F
11	BBL744	Animal Cell Technology	3	0	2	4		MS	M

\* the option to offer the practical component in the online mode will be explored by the Course Coordinator and decided soon (Action: Prof. Atul Narang)

	Practical component NOT offered in Sem 1, 2020-2021 and/or will NOT be offered in Sem 1, 2021-2022
	Practical component was offered in Sem 1, 2020-2021 and/or will be offered in Sem 1, 2021-2022

## Department of Biochemical Engineering and Biotechnology

## Semester 1, 2021-2022

Course Code	<b>BBL737</b>
Course Name	Instrumentation and Analytical Methods in Bioengineering
LTP Structure	2-0-2
Slot	E
Lecture hours	10 – 10:50 AM on Wednesdays and Fridays
Lab hours	3 - 5 PM on Fridays
Course Coordinator	D. Sundar
Course Email Group	BBL737@courses.iitd.ac.in
Mode of Course Offering	through video conferencing mode via Microsoft Teams
Course Evaluation Policy	<b>Minor Test</b> (30 marks), <b>Major Test</b> (50 marks). <b>Lab</b> (20 marks)
Remarks	Course-related information will be emailed ONLY on official course group email ID

# AUGUST 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

## BBL737 Schedule

**Lectures** Wed and Fri  
(10 – 10:50 AM)

**Lab** Fri AN

**Aug 11, 12** **Ritu Kulshreshtha**  
(RT-PCR)

**Aug 18, 20** **Ravikrishnan Elangovan**  
(Microscopy)

**Aug 25, 27** **Ashish Misra**  
(GC with FID & TCD)

**BBL737 Schedule**

SEPTEMBER 2021						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	1	2	3	4
5	7	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2

**Sep 08, 10 Prashant Mishra**  
(Spectrofluorimeter)

**Sep 17 Sunil Nath**  
(LC-MS)

**Sep 24, 29 Shilpi Sharma**  
(DNA Fingerprinting)

**Sep 19 - 23 Minor Test / Evaluations**  
(to be conducted by RK, RE, AM, PM and SN)



# OCTOBER 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

## BBL737 Schedule

Oct 06, 23 **Preeti Srivastava**  
(2-D Gel Electrophoresis)

Oct 13, 15 **Saroj Mishra**  
(FPLC)

Oct 13, 15 **Ziauddin S. Ahammad**  
(Elemental Analyzer)

Oct 20, 22 **Rohan Jain**

Oct 27, 29 **Madhuresh Sumit**

# NOVEMBER 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

## BBL737 Schedule

**Nov 03, 10 Ishaan Gupta**  
(Genomic Analysis Techniques)

**Nov 15 - 24 Major Test / Evaluations**  
(to be conducted by SS, PS, SM, ZAS, RJ, MS and IG)

**Nov 15 - 24 Lab Exam**  
(to be conducted by RK, RE, AM, PM, SS, PS, SM, ZAS, RJ, MS and IG)

Last updated: July 26, 2021

**Departmental representatives to Institute bodies, constitution of DRC and nomination of faculty for handling various departmental responsibilities.**

The faculty board made the following recommendations for the session 2021-2022

**Departmental responsibilities – Faculty in-charge(s)**

Faculty Board Convener	Ritu Kulshreshtha
Program Coordinator (PhD)	Rohan Jain
Program Coordinator (MSR)	Rohan Jain
Program Coordinator (UG)	Ravikrishnan Elangovan
Coordinator, Major Term Project (MTP)	Ritu Kulshreshtha
Coordinator, Major Term Project (BTP)	Ishaan Gupta
Postdoc Faculty Mentor	Ishaan Gupta
Time Table in-charge	Preeti Srivastava
Departmental Stores (including signing on Form-C/NC of Institute/IRD/FITT projects)	HoD
Lectures and Seminars	Ritu Kulshreshtha and Madhuresh Sumit
Departmental Library	Prashant Mishra
Departmental Reports	HoD
Departmental Society (BETA – Biochemical Engineers and Technologists Association)	Ravikrishnan Elangovan and Madhuresh Sumit
Department website	HoD
Coordinator of DBT HRD Grant (MI02019)	PI – Shilpi Sharma Co-PI – Ravikrishnan Elangovan
Coordinator of DST FIST Grant (RP03103)	PI – Atul Narang Co-PI – Ziauddin Shaikh Ahammad
Chairman, IRD Selection Committees	T.R. Sreekrishnan
Inventory control for items purchased from Institute funds	1) Concerned faculty member, in case the inventory item is housed in their own lab space 2) Staff member, in case the item is housed in the shared space of the department

**Departmental nominees to Institute Bodies**

Board of Academic Programs (BAP)	T. R. Sreekrishnan and Preeti Srivastava
Board for Industrial Research & Development (BIRD)	D. Sundar
Academic Interaction Council (AIC)	T. R. Sreekrishnan
Computer Users Committee (CUC)	Ashish Misra
High Performance Computing (HPC) facility	Ishaan Gupta
Advisory Committee of Library (ACL)	Atul Narang
Alumni Affairs	Rohan Jain

Coordinator for Training and Placement (TnP)	Ravikrishnan Elangovan and Rohan Jain
Faculty Affairs	Rohan Jain and Madhuresh Sumit
Environmental Health and Safety Unit (EHLSU)	Ziauddin Shaikh Ahammad
Safety and Disaster Management Committee	Ziauddin Shaikh Ahammad
Institutional Biosafety Committee (IBSC)	Ritu Kulshreshtha (Internal Expert) Preeti Srivastava (Member Secretary)
Institute Website Committee	Ashish Misra
Institute course on Introduction to Engineering (NIN100)	T.R. Sreekrishnan
Institute course on Professional Ethics and Social Responsibility (NEN100 and NEN101)	Ravikrishnan Elangovan
Annual Convocation 2021	Ritu Kulshreshtha, Ishaan Gupta and Madhuresh Sumit
SURA Evaluation Committee of IRD	Sunil Nath
Counseling process for female candidates	Ritu Kulshreshtha and Preeti Srivastava
Credit equivalence for exchange students	Preeti Srivastava (TT in-charge)
Open House 2022	Ishaan Gupta and Madhuresh Sumit
Tryst 2022	Ishaan Gupta and Madhuresh Sumit
Nomination to Senate for special knowledge	Ravikrishnan Elangovan

#### Departmental Research Committee (DRC)

1	Shilpi Sharma		Chairperson
2	D. Sundar	HoD	Ex-officio member
3	T. R. Sreekrishnan	Departmental representative to BAP	Member
4	Atul Narang		Member
5	Rohan Jain	PhD and MSR Coordinator	Member
6	Ritu Kulshreshtha	MTP Coordinator	Member
7	Ishaan Gupta	BTP Coordinator and Postdoc Faculty Mentor	Member
8	Preeti Srivastava	IBSC/Courses/Time Table in-charge	Member

#### Other Standing Committees of the Department

Faculty Search Committee (FSC)	Atul Narang (Chair), HoD, Shilpi Sharma (Convener), Ashish Misra, Rohan Jain, Ishaan Gupta, Madhuresh Sumit
Standing Selection Committee (SSC) for Postdoctoral Fellows	HoD (Chair), Shilpi Sharma (DRC Chair), Rohan Jain, Madhuresh Sumit, Ishaan Gupta (Postdoc Faculty Mentor)
PhD/MSR recruitment committee	DRC members and all faculty who are interested in hiring students
Design/Practical Experience (DPE) Non-graded Units (NGU) committee	Ashish Misra (Chair and Convener), Ravikrishnan Elangovan, Madhuresh Sumit, Ritu Kulshreshtha
Departmental UnderGraduate Committee (DUGC)	T.R. Sreekrishnan (Chair), HoD, Atul Narang, Ashish Misra, Shilpi Sharma, K.J. Mukherjee, Madhuresh Sumit, Preeti Srivastava (Convener)

Committee for evolving proposal for new M.Tech teaching program	T.R. Sreekrishnan (Chair), HoD, Atul Narang, Ashish Misra, Shilpi Sharma, K.J. Mukherjee, Madhuresh Sumit, Preeti Srivastava (Convener)
Committee for write-off of obsolete/unserviceable stores	Ziauddin Shaikh Ahammad, Rohan Jain, Ishaan Gupta
Space Planning and Utilization (including relocation to the new building 99C1)	HoD, Atul Narang, Rohan Jain, Ashish Misra, Ziauddin Shaikh Ahammad, Preeti Srivastava
Class Committees for B.Tech/Dual Degree (Chairman/Member/Convener)	2017 Entry (DS / RK / RJ) 2018 Entry (TRS / RE / SS) 2019 Entry (AN / TRS / AM) 2020 Entry (PM / SN / PS) 2021 Entry (ZAS / IG / MS)
Special Advisors for weak students (UG)	T.R. Sreekrishnan, Preeti Srivastava, Ravikrishnan Elangovan, Ritu Kulshreshtha
Committee to scrutinize nominations received for B.Tech/M.Tech dual degree Awards to be given during the annual convocation	DRC
Departmental Safety Committee	Ravikrishnan Elangovan, Rohan Jain
MTP evaluation committee	DRC and all MTP mentoring supervisors
BTP evaluation committee	All BTP mentoring supervisors
Employees Welfare and Grievance (for Group B, C and D staff of the department)	T.R. Sreekrishnan, Atul Narang, Preeti Srivastava, Rohan Jain
Covid Monitoring Committee	Ritu Kulshreshtha, Ishaan Gupta, Madhuresh Sumit

#### **In-charges of shared space of the department**

Instrumentation Lab	KJ Mukherjee and Ashish Misra
UG Lab	Preeti Srivastava and Rohan Jain
Bioprocess Lab	Atul Narang and Madhuresh Sumit
Computation Lab – OLD (I-132)	HoD
Computation Lab – NEW (I-231)	Ishaan Gupta
Dark room	Preeti Srivastava
Radioactivity Lab	Atul Narang
Cold room (I-124)	Ziauddin Shaikh Ahammad
Cold room (I-302)	Shilpi Sharma

#### **Other in-charges**

Government e-Marketplace (GeM)	<ul style="list-style-type: none"> <li>• Sumeet Kapoor and Anish Raju for teaching-related purchases</li> <li>• Other regular staff members for purchases related to concerned shared labs</li> <li>• Concerned faculty members, for purchases where they are the buyers</li> </ul>
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**(a) Items approved for purchase from PLN03 budget (Capital Assets) during 2021-2022**

SI	Name of Equipment	Amount (in lacs)	Course	No. of Students	Lab name and Location	Buyer
1	Geyser	0.1	all courses (UG lab)	70	UG	PS
2	Microwave	0.2	BBL132/BBL231/BBL733	70	UG	PS
3	Ice machine	2.0	all courses (UG lab)	70	UG	RJ
4	Pipette set	2.5	BBL733	90	UG	PS
5	-80°C Fridge	5.0	BBL735/BBL434	90	UG/MSR/PhD	IG
6	-20°C Fridge	0.7	BBL735/BBL434	90	UG/MSR/PhD	IG
7	Electrochemical workstation (with educational kit)	7.3	BBL737 (Instrumentation)	60	Instrumentation Lab	LED
8	Multiplexer for above electrochemical workstation (to increase capacity)	2.5	BBL737 (Instrumentation)	60	Instrumentation Lab	LED
9	Audio Conference Speakerphone	0.5	For online presentations/seminars		Committee Room	HoD
10	Diaphragm Pump AQU8871	1.0	For Research students		Bioprocess Lab	AN
11	UPS 40 KVA 3 phase output with 30 min & 60 min backup	1.6	For Research students		Instrumentation Lab	AM

Final decision on the purchase of items marked in blue color were not made.

**(B) Items approved for purchase from NPN05 (OH-31) budget during 2021-2022**

SI	Name of Item	Amount (in lacs)	Course	Lab name and Location	Buyer
1	Consumables for electrochemical demonstrations	0.5	BBL737	Instrumentation lab	LED
2	Repair of Sonicator	1.25	Research students	Instrumentation lab	KJ
3	G1369 LAN card for HPLC 1100	0.7	Research students	Instrumentation lab	KJ
4	Repair of Piston Seals of HPLC 1260	0.15	Research students	Instrumentation lab	RE

Final decision on the purchase of items marked in blue color were not made.

**(c) Allocation of PLN03F budget in FY 2021-2022**

Item	Quantity	Beneficiary/Buyer
Laptop	1	Madhuresh Sumit
Laptop	1	K.J. Mukherjee
Laptop	1	Ashish Misra
Laptop	1	Departmental Office

(Action: Concerned Faculty/Buyers to work with the Departmental Stores to initiate the purchase ASAP and settle the purchases within 2 months)

## **Policy for the PhD supervision and Project PI-ship of sponsored projects by retiring faculty of DBEB**

### **Ph.D. supervision**

1. A faculty must have minimum 5 years of remaining service for recruiting independent Ph.D. students, so that the Ph.D. students can submit their thesis well before the faculty's superannuation
2. Faculty who do not have the prescribed time can only be considered as Co-Supervisors (they automatically become Joint Supervisors beyond their superannuation date)
3. The nature and degree of participation of the retiring faculty should be made conditional and agreed upon right at the beginning of the work of the PhD student to avoid future misunderstanding (both for the student and the retiring faculty). Both of them should be well informed about this at the beginning itself.
4. The retiring faculty can continue as a Joint Supervisor. However, the regular (non-retiring faculty) should take the responsibility for research guidance and thesis submission.

### **Sponsored Projects**

1. Ideally, to be the PI of a research project, the age of the faculty should be such that he/she can complete the project prior to superannuation from the Institute.
2. A faculty must have minimum 4 years of remaining service for superannuation at the time of submission of the project. Faculty with less than four years' service before superannuation can become PI provided the project can be completed before his/her superannuation. However, such faculty who do not have the prescribed time can be considered as Co-PI only.
3. It is normally desirable that the faculty must complete the project before superannuation.
4. In cases, where the project is still active beyond the superannuation of the original PI, IRD (in consultation with the funding agency/HoD) may appoint the Co-PI to be responsible for all the assets, pending advances and subsequent transactions under the project as well as to complete the project to the satisfaction of the funding agency. The change in PI may be notified well in advance of the superannuation date of the original PI.
5. The PI should stop issuing POs, signing financial documents, etc. at least 3-4 months before the due date of his/her superannuation in order to facilitate issuance of 'No Dues Certificate' in time.