

# JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

(Established by H.P. State Legislature vide Act No. 14 of 2002)

Date:15.01.2025

## Department of Biotechnology and Bioinformatics

A meeting of Board of Studies (BoS) of the **Department of Biotechnology and Bioinformatics** was held as per the following schedule :

<b>Meeting Name:</b>	Board of Studies –Department of Biotechnology and Bioinformatics		
<b>Date of Meeting:</b>	14.01.2025	<b>Time:3:00-4:30 PM</b>	
<b>Chairman:</b>	Prof. (Dr.) Sudhir Kumar	<b>Location:</b> <b>Board Room and Online</b>	

### **1. Meeting Objective: BoS meeting of Deptt of Biotechnology and Bioinformatics**

#### **2(a). Meeting Attendees: The following members were present**

Prof. Sudhir Kumar, HOD, Department of Biotechnology and Bioinformatics	Chairman
Prof. Anil Kant, Professor, Department of Biotechnology and Bioinformatics	Coordinator
Prof. T.C. Bhalla Ex-Professor Emeritus Department of Biotechnology HPU Shimla	External Member (Academic)
Prof. G.P.S. Raghava, Prof and Head, Deptt of Computational Biology, IIIT-Dehli	External Member (Academic)
Prof. Sunil Kumar Khah, Incharge IQAC, JUIT	Member
Prof. Shruti Jain, Professor Deptt. of Electronics and Communications	Member
Prof. Tiratha Raj Singh, Professor, Department of Biotechnology and Bioinformatics	Member

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Prof. Jata Shankar, Professor, Department of Biotechnology and Bioinformatics	Member
Prof. Rahul Shrivastava, Professor, Department of Biotechnology and Bioinformatics	Member
Prof. Hemant Sood, Professor, Department of Biotechnology and Bioinformatics	Member
Dr Udaybanu M, Associate Prof, Department of Biotechnology and Bioinformatics	Member
Dr Poonam Sharma, Associate Prof, Department of Biotechnology and Bioinformatics	Member
Dr Jitendraa Vashist, Associate Prof, Department of Biotechnology and Bioinformatics	Member
Dr Saurabh Bansal, Associate Prof, Department of Biotechnology and Bioinformatics	Member
Dr. Garlapati Vijay Kumar, Associate Prof, Department of Biotechnology and Bioinformatics	Member
Dr Ashok Kumar Nadda, Assistant Prof., Department of Biotechnology and Bioinformatics	Member
<b>2 (b). Leave of Absence: The following members were granted leave of absence by the Chairman, BOS</b>	
Mr. Aditya Sahni, JUIT Alumni, Founder of ELEM, India (Industry Expert)	External Member (JUIT Alumni)
Prof. Gopal Singh Bisht, Professor, Department of Biotechnology and Bioinformatics	Member

Prof. Anil Kant offered a welcome note to the members, Prof. Sudhir Kumar addressed the house and welcomed all the members of BoS. Prof. Anil Kant presented the overview of the agenda items and



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invited respected programs coordinators/ course coordinators to present the details of agenda items pertaining to their respective program courses.

### 3. Action Items / Instructions: Following decisions were taken/approved by the members of BoS.

1. Introduction of 03 new courses for Ph D. students and approval of their syllabi
    - i) Laboratory Techniques of Genomics and Proteomics (2 Credits) (0-0-4)
    - ii) Biochemical Calculations (2 credits) (2-0-0)
    - iii) Biosafety and Disaster Management Lab. (0-0-2)
  - Dr. VK Garlapati told about the genesis of the introduction of three new courses for Ph.D. Biotechnology and Bioinformatics students and presented the details of the syllabus of one of the proposed course - Laboratory Techniques of Genomics and Proteomics (0-0-4)
  - Prof G.P.S.Raghava was of the view that going through the syllabus it seems to be the course of basic techniques of molecular biology and to justify the title some advanced techniques like sequencing technologies, whole genome sequencing should be included, Prof. Anil Kant said that since it is a laboratory course so could not be possible to include such advanced techniques. Dr Jitendraa Vashhitt explained that understanding and hands-on practice on basic molecular biology techniques set at stage to learn and develop understanding about the suggested advanced methods which nowadays are mostly outsourced to the service providing specialist companies. In such a case Prof. G.P.S.Raghava suggested changing the name of the proposed course to “ Laboratory techniques of Molecular Biology”. All the members agreed to the suggestion and the proposed course was approved with the name ““ Laboratory techniques of Molecular Biology”.
  - Dr Poonam presented the detailed syllabus of the proposed course “Biochemical Calculations”. Prof Sudhir pointed out that students even after Completing face difficulties in basic calculations related to chemical formulations, solutions and reactions and this course has been proposed to help the students in this area. Prof. T.C. Bhalla enquired whether enzyme based calculations are included in the syllabus, and Dr Poonam informed and showed that the topic is included in one of the Unit. Prof. Anil Kant brought forward the observation of Dean A & R that a full course on calculations looks a little odd and suggested to have deliberation on it. It was said in the meeting that there are many books available with the same title and similar courses are running in many universities. Prof. T.C. Bhalla was of the opinion that such a course for the Ph.D. students of Biotechnology and Bioinformatics is good and he does not see any serious objection with the title or content. All the members including Prof. GPS Raghav agreed to the opinion and the course was approved as proposed.
  - Prof. Sudhir Kumar presented the syllabus of the course “Biosafety and Disaster Management Lab.” Prof. Bhalla and Prof. Raghava approved the course and Prof. Bhalla further added that this course covered all required modules of safety, biosafety and disaster management and said that course is well framed. Prof. Sunil Khah and Prof Sudhir deliberated about the subject matter and process of evaluation and target students of this course. Prof Khah was of the opinion that laboratory safety is of paramount importance and this course should be made compulsory to the students who have experimental work in their Ph.D. Programs. The course and its detailed syllabus was approved by all the members as it was proposed.
2. To modify Ph.D. entrance examination syllabus with two separate sections for Biotechnology and Bioinformatics streams:-



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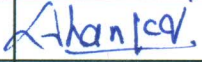
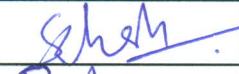
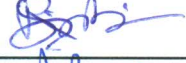

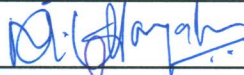






- Prof. Anil Kant presented the rationale of proposing the separate sections of Biotechnology and Bioinformatics in the Ph.D. entrance test. The existing syllabus is heavily loaded with Biotechnology oriented topics and aspirants appearing for Ph.D. Bioinformatics find it difficult as the Bioinformatics portion is underrepresented.
  - In the new proposed syllabus the Biotechnology and Bioinformatics sections are separated and students will be given a choice to attempt either Biotechnology or Bioinformatics section depending upon their qualifying PG degrees. Prof. GPS Raghava suggested including a unit on the topic therapeutics and vaccines in the bioinformatic section which was agreed by all the members. Prof. Raghava also suggested some more programming principles and inclusion of web development technologies for bioinformatics.
  - Another important point raised by Prof. Raghava was about the eligibility criteria for admitting students in PhD. He suggested that it is really difficult to get good students for PhD nowadays and we should be a bit relaxed in eligibility conditions. This should be applicable as per the subjects and specializations however students interest can also be considered while having the relevant background.
  - Prof Khah suggested passing on the proposed syllabus to the external experts for suggestion and comments.
  - The proposed syllabus was approved by the BoS with a caviate that observation and suggestions later on by the experts if any will be included.
3. Any other item brought up for consideration during the meeting
- a) Revision of Course - Virology (20B1WBI831) of M.Sc.-Microbiology Program:
- Prof. Rahul Shrivastava presented the reason that the course syllabus of Virology (20B1WBI831) offered to M.Sc. Microbiology first Semester students is of 42 lectures (suitable for a three-credit course), while the course is of 2 credits. A two-credit course should contain syllabi which may be covered in 28 lectures. Hence, It is proposed to trim down the syllabus which may be covered in 28 lectures. The revised syllabus along with the changes proposed was also put forward.
  - All members approved the proposal and the revised syllabus.
- b) Prof Sudhir Kumar asked about the opinion, suggestions and experience of the members about provisions having Co-guides of PhD students from Universities and Institutes of foreign origin with whom JUIT is having MOUs. He proposed to share Ph.D. students with faculties of foreign universities/institutes which already have active MoU and collaborations. Prof. Bhalla enquired how it is going to be beneficial to the students as it was not a practice in HPU. Prof. G.P.S. Raghava informed the members that this practice is going on in IIIT Delhi and they share Ph.D. students with the foreign guides and also support their expenses to visit these guides. He also was of the view that this is a good practice and students get good exposure, however this can be adapted with flexibility and without any compulsion. Few members were having apprehensions about IPR issues. Prof. Sudhir infomed the members that this will be as per term and conditions of our MOU and Ph.D. ordinance. Prof. Sudhir further added that this will bring more internationalization to our Ph.D. program. Lastly all the members agreed that the practice of including Co-guides, guides can be adopted with the consent of competent authorities.

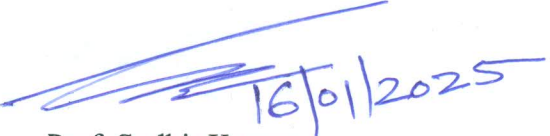


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## ATTENDANCE SHEET: BoS meeting of Deptt of Biotechnology and Bioinformatics held on 14.01.2025

Name and Designation		Signature or consent by email
Prof. Sudhir Kumar, HOD, Department of BT and BI	Chairman	
Prof. Anil Kant, Professor, Deptt of BT and BI	Member	
Prof. T.C. Bhalla Ex, Professor Emeritus Department of Biotechnology HPU Shimla	External Member BoS	Present online and minutes endorsed via attached email
Prof. G .P. S. Raghava, Prof and Head, Deptt of Computational Biology, IIIT-Dehli, (External Member BoS)	External Member BoS	Present online and minutes endorsed via attached email
Prof. Jata Shankar, Professor, Deptt of BT and BI	Member	
Prof. Sunil Kunmar Khajuria, Incharge IQAC, JUIT	Member	
Prof. Tirath Raj Singh, Professor, Deptt of BT and BI	Member	
Prof. Rahul Shrivastava, Professor, Deptt of BT and BI	Member	
Dr Udaybanu M, Associate Prof, Deptt of BT and BI	Member	
Dr Poonam Sharma, Associate Prof, Deptt of BT and BI	Member	
Dr Jiendra Vashist, Associate Prof, Deptt of BT and BI	Member	
Prof. Hemant, Professor, Deptt of BT and BI	Member	
Dr Saurabh Bansal, Associate Prof, Deptt of BT and BI	Member	
Dr V. Garlapati, Associate Prof, Deptt of BT and BI	Member	
Dr Ashok Nadda, Assistant Prof. Deptt of BT and BI	Member	

  
16/01/2025  
Prof. Sudhir Kumar  
Chairman BoS, HOD Department of  
Biotechnology, JUIT Waknaghat

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## Draft minutes of BoS meeting

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Gajendra P.S. Raghava <raghava@iiitd.ac.in>

15 January 2025 at 12:34

To: Anil Kant <anil.thakur@juitsolan.in>

Cc: Tek Chand Bhalla <bhallatc@rediffmail.com>, Tek Chand Bhalla <bhallatek29@gmail.com>, Sudhir Kumar <sudhir.syal@juitsolan.in>

These minutes are fine and approved from my side.

With regards and best wishes

Raghava

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# Prof. Gajendra P. S. Raghava, Department of Computational Biology, #

# Indraprastha Institute of Information Technology (IIIT), Okhla Phase III, #

# New Delhi 110020 ; Phone:+91-11-26907444 #

# ===== #

PS: Former Chief Scientist, CSIR-Institute of Microbial Technology, Chandigarh

Web: <http://webs.iiitd.edu.in/raghava/>

GS: <http://scholar.google.co.in/citations?hl=en&user=XK5GUiYAAA>

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## Draft minutes of BoS meeting

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Tek Chand Bhalla <bhallatc@rediffmail.com>  
To: Anil Kant <anil.thakur@juitsolan.in>

15 January 2025 at 14:43

Dear Prof Anil Kant,

This has reference to your mail on the above cited subject. I have gone through the minutes of the BOS meeting held yesterday along with the appended syllabi. I endorse the minutes and syllabi with following suggestions:

In the Ph.D. Entrance Exam Syllabus in Biotechnology section please add:

1. Plant, Animal and Microbial Diversity section
2. Environment section covering ecosystem, pollution and climate changes

This will make Syllabus little broader giving space for candidates other than biotechnology in life science stream.

Some details in these sections may be included by the faculty having expertise in these areas.

Regards

T C Bhalla

Prof. T. C. Bhalla  
UGC-BSR Faculty Fellow  
Department of Biotechnology  
Himachal Pradesh University  
Summer hill, Shimla-171 005  
INDIA

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