

**Institute of Applied Sciences & Humanities  
Department of Biotechnology**

**Agenda for 6<sup>th</sup> Meeting of Board of Studies**

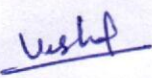
Date- 15-06-2016

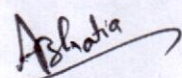
Time- 10:00 AM

Venue- Chamber of HOD Biotechnology, GLAIPS, Second Floor VI Block

**Agenda Items-**

1. To consider and approve the minutes of last meeting of BOS.
2. To consider & approve the modified syllabi of B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. (Microbiology & Immunology) programs.
3. Approval of courses imparting employability/entrepreneurship/skill development in the B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. (Microbiology & Immunology) programs.
4. To consider and approve introduction of new course in the M.Sc. (Microbiology & Immunology) program.
5. Any agenda with permission of the chair.

  
(Vishal Khandelwal & Dr. Alok Bharadwaj)  
Secretary

  
(Prof. A.K. Bhatia)  
Chairman



**Institute of Applied Sciences & Humanities  
Department of Biotechnology**

**Minutes of the 6<sup>th</sup> Meeting of Board of Studies**

Date- 15.06.2016

Time- 10:00 AM

Venue- Chamber of HOD Biotechnology, GLAIPS, Second Floor VI Block

**Members Present-**

- Prof. A.K. Bhatia, HOD & Chairman BOS
- Dr. Uttam K Pati, Dean School of Biotechnology, JNU, New Delhi
- Dr. Om Parkash, Dy. Director, Scientist F, JALMA, Agra
- Prof. Meenakshi Bhajpai, HOD, IPR
- Mr. Vishal Khandelwal, Assistant Professor, Member & Secretary BOS Biotechnology
- Dr. Anjna Goel, Associate Professor, Member BOS
- Dr. Alok Bhardwaj, Assistant Professor, Member & Secretary BOS Microbiology
- Dr. Rama Sharma, Assistant Professor, Member BOS
- Mr. Aditya Saxena, Assistant Professor, Member BOS
- Mr. Nitin Wahi, Assistant Professor, Member BOS

**Sub.: Meeting of Board of Studies B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. Microbiology & Immunology).**

Sir,

It is to inform you that the meeting of Board of Studies in the subject of B.Sc. (Hons.) Biotechnology and M.Sc. (Biotechnology) and M.Sc. (Microbiology & Immunology) has been fixed on 15<sup>th</sup> June, 2016 at 11:00 am in the Chamber of undersigned.

The agenda in meeting will include:

1. To consider and approve the minutes of last meeting of BOS.
2. To consider & approve the modified syllabi of B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. (Microbiology & Immunology) programs.



3. Approval of courses imparting employability/entrepreneurship/skill development in the B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. (Microbiology & Immunology) programs.
4. To consider and approve introduction of new course in the M.Sc. (Microbiology & Immunology) program.
5. Any agenda with permission of chair.

#### **Discussion & Suggestions:**

##### **Agenda No.1**

To confirm and approve the minutes of last meeting of BOS.

##### **Agenda No. 2**

#### **Approval of modified syllabi of B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. (Microbiology & Immunology) programs.**

On the basis of various feedbacks received from different stakeholders (Employer, Student, Faculty and Alumni) the revision/up gradation/modification in syllabus of existing courses in various programs is proposed as follows:

| <b>Programme</b>                  | <b>No. of Courses under consideration for revision</b> | <b>Name of the Courses under consideration for revision</b>   |
|-----------------------------------|--|---|
| B.Sc. (H) Biotechnology           | 6  | <ul style="list-style-type: none"> <li>• Developmental Biology</li> <li>• Biomolecules</li> <li>• Molecular Biology</li> <li>• Evolution and Ecology</li> <li>• Environmental Science</li> <li>• Fermentation Technology</li> </ul> |
| M.Sc.(Biotechnology)              | 5  | <ul style="list-style-type: none"> <li>• Biochemistry</li> <li>• Biophysical Techniques</li> <li>• Bioinformatics</li> <li>• Immunology</li> <li>• Animal Biotechnology</li> </ul>  |
| M.Sc. (Microbiology & Immunology) | 6  | <ul style="list-style-type: none"> <li>• Biochemistry</li> <li>• Biophysical Techniques</li> <li>• General Microbiology</li> <li>• Bioinformatics</li> <li>• Immunology</li> <li>• Environmental Microbiology</li> </ul>            |

The member considered and approved the same.

Syllabi of above courses are enclosed as Annexure-I.



**Agenda No. 3:**

**Approval of courses imparting employability/entrepreneurship/skill development in the B.Sc. (Hons.) Biotechnology, M.Sc. (Biotechnology) and M.Sc. (Microbiology & Immunology) programs.**

Members considered and approve the same. Details enclosed as Annexure II.

**Agenda No. 4**

**To consider and approve introduction of new course in the M.Sc. (Microbiology & Immunology) program.**


On the basis of feedback obtained from various stakeholders (Student, Faculty, Employer and Alumni) department presented detail of new course to be introduced. After thorough discussion BOS approved the same. Details enclosed as Annexure III.

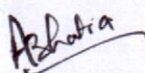
**Agenda No. 5**

**Any agenda with permission of chair.**

Seeing the importance of computer Science & IPR (Intellectual Property Right), both these courses have been introduced in B.Sc. (H) Biotechnology - I semester & B.Sc. (H) Biotechnology - VI Semester respectively. Committee discussed over it & approved it.

The meeting ended with the vote of thanks to the chair.

  
(Vishal Khandelwal & Dr. Alok Bharadwaj)  
Secretary

  
(Prof. A.K. Bhatia)  
Chairman



**List of courses having focus on employability/ entrepreneurship/ skill development offered by the Department (2016-17)**

| S.No. | Name of the Course   | Focus on Employability/          |
|-------|--|----------------------------------|
| 1     | Computers Fundamentals and applications                      | Skill development                |
| 2     | Chemistry- I   | Employability                    |
| 3     | Cell Biology and Environmental Science Lab                   | Skill development                |
| 4     | Computer Fundamentals Practical                              | Skill development                |
| 5     | Chemistry -I Lab   | Employability, Skill development |
| 6     | Human Physiology   | Employability                    |
| 7     | Developmental Biology  | Employability                    |
| 8     | Chemistry – II   | Employability                    |
| 9     | Biomolecules   | Skill development                |
| 10    | Plant Science – I  | Skill development                |
| 11    | English In Practice I  | Employability                    |
| 12    | Chemistry-II Lab   | Employability                    |
| 13    | Biomolecules, Human Physiology and Developmental Biology Lab | Skill development                |
| 14    | Plant Science -I Lab   | Skill development                |
| 15    | Genetics   | Employability                    |
| 16    | Molecular Biology  | Employability, Skill development |
| 17    | Evolution and Ecology  | Employability                    |
| 18    | Chemistry – III  | Employability                    |
| 19    | Plant Science - II   | Employability                    |
| 20    | Genetics and Molecular Biology Lab                           | Skill development                |
| 21    | Chemistry – III Lab  | Skill development                |
| 22    | Plant Science -II and Evolution & Ecology Lab                | Skill development                |
| 23    | Microbiology   | Employability, Skill development |
| 24    | Environmental Biotechnology                                  | Employability, Skill development |
| 25    | Fermentation Technology                                      | Employability, Skill development |
| 26    | Bio – Informatics  | Employability, Skill development |
| 27    | Instrumentation and Bio - Analytical Techniques              | Skill development                |
| 28    | Microbiology Lab   | Employability, Skill development |
| 29    | Environmental Biotechnology and Fermentation Technology Lab  | Employability, Skill development |
| 30    | Bio-Informatics Lab  | Skill development                |
| 31    | Instrumentation and Bio - Analytical Techniques Lab          | Employability, Skill development |
| 32    | Biochemistry   | Employability                    |
| 33    | Plant Biotechnology  | Employability                    |
| 34    | Food and Industrial Biotechnology                            | Employability, Skill development |
| 35    | Immunology   | Employability                    |
| 36    | Recombinant DNA Technology (RDT)                             | Employability, Skill development |
| 37    | Biochemistry Lab   | Employability, Skill development |

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|----|---|-------------------------------------|
| 38 | Plant Biotechnology & Food and Industrial Biotechnology Lab   | Employability, Skill development    |
| 39 | Immunology Lab  | Employability, Skill development    |
| 40 | Recombinant DNA Technology (RDT) Lab                          | Employability, Skill development    |
| 41 | Animal Biotechnology  | Employability                       |
| 42 | Genomics and Proteomics                                       | Employability                       |
| 43 | Role of Biotechnology in Forensic science                     | Employability, Skill development    |
| 44 | Drug Discovery & Development                                  | Entrepreneurship, Skill development |
| 45 | IPR, Biosafety and Bioethics                                  | Entrepreneurship, Skill development |
| 46 | Animal Biotechnology Lab                                      | Employability, Skill development    |
| 47 | Genomics and Proteomics Lab                                   | Employability, Skill development    |
| 48 | Project Training  | Skill development                   |
| 49 | Biostatistics and Math  | Skill development                   |
| 50 | Biochemistry  | Employability                       |
| 51 | Bioinformatics  | Employability, Skill development    |
| 52 | Biophysical Techniques  | Employability, Skill development    |
| 53 | Biostatistics & Biochemistry Lab                              | Employability, Skill development    |
| 54 | Bioinformatics Lab  | Employability, Skill development    |
| 55 | Biophysical Techniques & Cell Biology Lab                     | Employability, Skill development    |
| 56 | Microbiology  | Employability                       |
| 57 | Immunology  | Employability                       |
| 58 | Enzyme Technology   | Employability                       |
| 59 | Genetics & Molecular Biology                                  | Employability, Skill development    |
| 60 | Genetic Engineering, Genomics & Proteomics                    | Employability, Skill development    |
| 61 | Microbiology & Immunology Lab                                 | Employability, Skill development    |
| 62 | Enzyme Technology Lab   | Employability, Skill development    |
| 63 | Molecular Biology, RDT, Genomics & Proteomics Lab             | Employability, Skill development    |
| 64 | Plant Biotechnology   | Employability                       |
| 65 | Animal Biotechnology  | Employability                       |
| 66 | Bioprocess Engineering & Fermentation Technology              | Employability, Skill development    |
| 67 | Nanobiotechnology   | Employability                       |
| 68 | Plant Biotechnology and Bioprocess Engineering & Fermentation | Employability, Skill development    |
| 69 | Animal Biotechnology and Environmental Biotechnology Lab      | Employability, Skill development    |
| 70 | Nanobiotechnology Lab   | Employability, Skill development    |
| 71 | IPR, Biosafety and Bioethics                                  | Entrepreneurship, Skill development |
| 72 | Project Work  | Skill development                   |
| 73 | General Microbiology  | Employability                       |
| 74 | General Microbiology & Biostatistics Lab                      | Employability, Skill development    |
| 75 | Bioinformatics Lab  | Employability, Skill development    |
| 76 | Systemic Bacteriology and Mycology                            | Employability                       |
| 77 | Systemic Virology   | Employability                       |

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|----|--|-------------------------------------|
| 78 | Environmental Microbiology                                   | Employability, Skill development    |
| 79 | Immunology, Bacteriology & Mycology Lab                      | Employability, Skill development    |
| 80 | Genetics, Molecular Biology and Virology Lab                 | Employability, Skill development    |
| 81 | Environmental Microbiology Lab                               | Employability, Skill development    |
| 82 | Fermentation Technology and Industrial Microbiology          | Entrepreneurship, Skill development |
| 83 | Food, Dairy and Agricultural Microbiology                    | Employability, Skill development    |
| 84 | RDT, Genomics & Proteomics                                   | Employability, Skill development    |
| 85 | Advanced Immunology  | Employability                       |
| 86 | Fermentation Technology, RDT & Genomics & Proteomics Lab     | Employability, Skill development    |
| 87 | Food, Dairy, Agricultural Microbiology & Advanced Immunology | Employability, Skill development    |
| 88 | Project Work   | Skill development                   |
| 89 | Research Methodology   | Employability, Skill development    |
| 90 | Bioinformatics & Instrumentation                             | Employability, Skill development    |
| 91 | Biological Chemistry   | Employability                       |

