GOVERNOR'S SECRETARIAT, BIHAR
RAJ BHAVAN, PATNA-800022

Letter No. VKSU (Regulation)-24/2010- /GS(I),
Dated-

From,

A.L. Srivastava
Officer on Special Duty. (Judl)

To,

The Vice Chancellor
V.K.S. University,
Ara.

Sub:- Regarding approval of Admission Ordinance and Regulations of three years Degree Honours Course in Biotechnology of V.K.S. University, Ara.

Sir,

I am directed to invite a reference to the University’s letter no. CCDC/911/Estab/14, dated 31.10.2014 on the subject noted above and to inform that Hon’ble Chancellor after due consideration of the proposal for approval of Admission Ordinance and Regulations of three years Degree Honours Course in Biotechnology of the University, advice of the Advisory Committee and in exercise of the power vested in him under Section 38(2) and 39(2) (ii) of the Bihar State Universities Act, 1976, as amended up to date, has been pleased to approve the Admission Ordinance and Regulations of three years Degree Honours Course in Biotechnology (copy enclosed), to be effective from the session 2014-15.

Further necessary action may kindly be taken accordingly.

Yours faithfully,

Sd/-

(A.L. Srivastava)
Officer on Special Duty. (Judl)

Memo No. VKSU (Regulation)-24/2010-

Copy alongwith copy of approved Admission Ordinance and Regulations of three years Degree Honours Course in Biotechnology forwarded to the Principal Secretary, Education Department, Govt. of Bihar for information and necessary action.

Encl.: As above

Sd/-

(A.L. Srivastava)
Officer on Special Duty. (Judl)

Memo No. VKSU (Regulation)-24/2010- 70

Copy alongwith copy of approved Admission Ordinance and Regulations of three years Degree Honours Course in Biotechnology forwarded to Scientist-D, In-Charge Computer Cell, Raj Bhavan, Patna for uploading on the website of Raj Bhavan/Guard File of Regulations and Ordinance of VKS University, Ara.

Encl.: As above

(A.L. Srivastava)
Officer on Special Duty. (Judl)
Ordinance for Admission to B.Sc. (Vocational) Hons Course in Biotechnology.

1.0 Admission:
1.1 Admission to B.Sc. (Vocational) Hons Course in Biotechnology shall be open to students from all over the country and shall be done through a Competitive Entrance Test to be conducted by the University.
1.2 Candidates seeking admission to B.Sc. (Vocational) Hons Course in Biotechnology must have passed the Intermediate or 10+2 Examination of a Board or University as is established by law or equivalent examination thereto.
1.3 Candidates must have passed the qualifying Intermediate or 10+2 examination with Physics, Chemistry and Biology as main subjects. Candidates, having passed with Physics, Chemistry and Maths as main subjects may also apply provided they have Biology as their extra subject at the Intermediate or 10+2 examination.
1.4 Admission to B.Sc. (Vocational) Hons Course in Biotechnology shall be made on the basis of a Competitive Entrance Test of 100 marks to be taken by the University at the beginning of each academic session. The date and venue of the test shall be announced by the University through newspapers. The test shall consist of 100 objective type questions, each of one mark.
1.5 Candidates appearing for the Test shall have to pay Rs. 1000/- towards cost of the admission form and other expenses to be incurred in connection with the conduct of the aforesaid Test.

2.0 Number of Seats:
2.1 Number of seats in B.Sc. (Vocational) Hons Course in Biotechnology shall be 40 (forty) only.
2.2 Out of the above 40 seats, 5 seats shall be reserved for NRIs (Non-Resident Indians) provided they pay $ 1000 as Course fee and another $ 100 as examination fee per year in foreign exchange.
2.3 Admission to NRI students shall be made on the basis of the same Competitive Test as is mentioned in clause 1.4 above. The University will prepare a separate merit list of NRI candidates based on the result of the said test and admit candidates as per their merit.

3.0 Duration of the Course:
Duration of the Course shall be of three academic Years.

4.0 Reservation:
Reservation of seats for SC/ST/OBC etc. shall be as per rules of the State Government of Bihar.
5.0 Fee Structure:

5.1 Fee structure of the course shall be as follows:

(a) Admission ........................................ Rs. 200.00 (One time)
(b) Registration ..................................... Rs. 200.00 (One time)
(c) Tuition Fee ........................................ Rs. 8000.00 (Each Year)
(d) Lab Charges ..................................... Rs. 3000.00 (Each Year)
(e) Library ............................................. Rs. 3000.00 (One time)
(f) Electricity- Water charges .................. Rs. 500.00 (Each Year)
(g) Examination Fee ............................... Rs. 1000.00 (Each Year)

5.2 Fee may be paid in two equal installments i.e. in July and January of each academic year.

5.3 Fee structure may be reviewed after every three years and revised after obtaining prior approval of the Chancellor.

[Signature]

[Name]

[Institution]
Regulations for Admission to B.Sc. (Vocational) Hons Course in Biotechnology.

1. **Preamble:**
   These regulations shall come into force from the academic year 2009-10 or such later date is notified by the Vice-Chancellor of the University. However, students admitted to B.Sc. (Vocational) Hons Course in Biotechnology in earlier sessions shall be governed as regulations of the University in force during the relevant sessions. If there were no such regulations in force during the relevant period, the University shall draft special enable provisions to cover such students and obtain Chancellor's approval in them so that future these students is not jeopardised.

2. **Duration of the Course:**
   The Bachelor of Science (Vocational) Hons course in Biotechnology shall be covered three academic sessions and shall be known in the first years of the study as B.Sc. (Vocational) Hons Course in Biotechnology Part-I, in the second year as B.Sc. (Vocational) Hons Course in Biotechnology Part-II, and the third years as B.Sc. (Vocational) Hons Course in Biotechnology Part-III.

3. **Eligibility for Admission:**
   3.1 To be eligible for admission of B.Sc. (Vocational) Hons Course in Biotechnology candidates must have:
   (a) passed the Intermediate or 10+2 Examination of a Board or University established incorporated by law or equivalent examination thereto with Physics, Chemistry and Biology as main subjects having secured at least 55 percent marks in aggregate 55 percent marks in aggregate may also apply provided they have Biology as the extra subject at the Intermediate or 10+2 examination. and
   (b) must have qualified at the Entrance Test to be conducted by the University to be admitted to this course.

4. **Entrance Test and Reservation:**
   4.1 Admission to B.Sc. (Vocational) Hons Course in Biotechnology shall be made purely on the basis of the marks obtained by the candidates in the Entrance Test. The Entrance Test shall be conducted by the University at the beginning of each academic session and shall consist of 100 marks, of which 75 marks shall be kept earmarked for questions to be set from Science subjects of Intermediate standard and 25 marks shall be kept apart for questions to be asked from General Knowledge including Environment.

   4.2 Reservation of seats shall be as per reservation policy of the State Government as applicable to educational institutions.
5. **Structure of the Course:**

Candidate for B.Sc. (Vocational) Hons Course in Biotechnology shall be required to office and be examined in 26 papers as follows:

<table>
<thead>
<tr>
<th>Year of Examination</th>
<th>Honours Papers</th>
<th>Subsidiary Papers</th>
<th>Compulsory Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.Sc. (Vocational) Hons Course in Biotechnology Part-I</td>
<td>8 Papers</td>
<td>2 Papers (Paper-I from each of the two subsidiary subjects)</td>
<td>-</td>
</tr>
<tr>
<td>B.Sc. (Vocational) Hons Course in Biotechnology Part-II</td>
<td>8 Papers</td>
<td>2 Papers (Paper-II from each of the two subsidiary subjects)</td>
<td>-</td>
</tr>
<tr>
<td>B.Sc. (Vocational) Hons Course in Biotechnology Part-III</td>
<td>5 Papers (including Project work)</td>
<td>-</td>
<td>1 Paper</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>21 Papers</strong></td>
<td><strong>4 Papers</strong></td>
<td><strong>1 Paper</strong></td>
</tr>
</tbody>
</table>

6. **Syllabus of the Course:**

The syllabus of the Vocational (Hons) Course in Biotechnology shall be as follows:

6.1 **Honours Papers:**

(a) There shall be 21 Honours papers in all distributed in the three years of study as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Course Title</th>
<th>Total Marks</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year</td>
<td>1. Biochemistry</td>
<td>100</td>
<td>Theory Paper</td>
</tr>
<tr>
<td></td>
<td>2. Mathematics &amp; Practical Computers</td>
<td>100</td>
<td>Theory Paper</td>
</tr>
<tr>
<td></td>
<td>3. Cell Biology</td>
<td>100</td>
<td>Theory Paper</td>
</tr>
<tr>
<td></td>
<td>4. Genetics</td>
<td>100</td>
<td>Theory Paper</td>
</tr>
<tr>
<td></td>
<td>5. Microbiology</td>
<td>100</td>
<td>Theory Paper</td>
</tr>
<tr>
<td></td>
<td>6. Biochemical Techniques</td>
<td>75</td>
<td>Practical Paper</td>
</tr>
<tr>
<td></td>
<td>7. Microbiological Techniques</td>
<td>75</td>
<td>Practical Paper</td>
</tr>
<tr>
<td></td>
<td>8. 1st Summer Job Training followed by Project Work</td>
<td>50</td>
<td>Job Training</td>
</tr>
</tbody>
</table>

| 2nd Year | | 100 | Theory Paper |
| 1. Bio-Physics | | | |
| 2. Molecular Biology | | 100 | Theory Paper |
| 3. Immunology | | 100 | Theory Paper |
| 4. Animal Cell Cultures | | 100 | Theory Paper |
| 5. Recombinant DNA Technology | | 100 | Theory Paper |
| 6. Methods in Molecular & Cellular Biology | | 75 | Practical Paper |
| 7. Immunological Methods | | 75 | Practical Paper |
| 8. 2nd Summer Job Training followed by Project Report | | 50 | Job Training |

| 3rd Year | | 100 | Theory Paper |
| 1. Animal Cell Biology | | | |
| 2. Plant Bio-technology | | 100 | Theory Paper |
| 3. Environmental Biochemistry | | 100 | Theory Paper |
| 4. Culture Methods | | 100 | Practical Paper |
| 5. Project Report | | 100 | Project Report |

| **Total** | **21 Papers** | **1900** | Theory Papers-13 Practical Papers-5 Job Training & Project Report-3 |
6.2 Subsidiary Papers:
A candidate admitted to B.Sc. (Vocational) Honours Course in Biotechnology shall be required to offer two subsidiary subject from out of the following:
(i) Either Botany or Zoology
(ii) Chemistry
Each subsidiary subject will consist of two papers, each of 100 marks. Paper-I of the each subsidiary subject shall be offered and be taught in the first year of the course; while paper-II will be taught in the 2nd year.

6.3 Compulsory Paper:
A candidate admitted to B.Sc. (Vocational) Honours Course in Biotechnology shall be required to offer and be examined in one compulsory paper of Entrepreneurship Development in the 3rd year of study. The paper will consist of 100 marks.

7. Attendance:
A candidate appearing as a regular student at any Part of the examination shall be required to attend at least 75% of the lectures delivered in theoretical classes and also of practical classes separately in each paper in order to be eligible to appear at the examination provided that a shortfall in attendance upto 15% can be condoned as per rules of the University.

8. Examination:
There shall be University Examination at the end of the first, second and third year of the study to be known as B.Sc. (Vocational) Honours examination in Biotechnology Part-I, Part-II, and Part-III. A student shall have to pass separately in each paper (both theory & practical/project work) in order to pass in each part of the examination. In other words a student shall not be promoted to Part-II or Part-III of the course unless he/she has passed Part-I or Part-II of the course as the case may be.

9. Mode of Examination:
9.1 There shall be written examination for each of the theory papers, spread over a three period of three hours.
9.2 Internal Assessment/Practical/Project work examination shall be as per existing rules of the University.
10. **Pass Marks**:

10.1 It will be necessary to secure at least 45% marks in each Hons paper (both theory & practical) and 33% marks in each subsidiary/compulsory paper to pass the examination.

10.2 If a candidate has cleared one part of the examination he/she will not be permitted to re-appear in that part of the examination to improve his/her marks.

11. **Award of Division**:

No division shall be awarded at the end of Part-I & Part-II of the examination. A student passing Part-I or Part-II shall be simply promoted to Part-II or Part-III of the course as the case may be. Students clearing all the three parts of the examination shall be awarded divisions taking the aggregate of the marks obtained in all the three parts as follows:

1- 75% and above  

First Division with distinction

2- Less than 75% but not less than 60%- 

First Division

3- 45% or more but less than 60%- 

Second Division

4- Less than 45% 

Failed

12. **Award of Degree**:

Each successful candidate shall receive a degree in the prescribed format specifying the name of the College and the class in which he/she was placed, in token of his/her having passed the examination.

13. **Savings**:

Provisions not covered under these Regulations shall be governed by the Regulation for B.Sc. (Three Year Degree Course) of V.K.S. University, Ara.

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विषेष कार

राज्यपाल साधनालय

बिहार, पटना