

## Proposed Activities under DBT Sponsored Star College Scheme

(Academic Session 2020-21)

### Department of Biochemistry

| Proposed Date                   | Proposed activity   |
|---------------------------------|---|
| June 18-July 30, 2020           | Six Week Summer training for the students (online internship on Research Methodology (Inter-college)    |
| August 26-28 2020               | Faculty improvement program : Workshop/Webinar on “ <i>Bioinformatics and Biostatistics</i> ”           |
| August 7, 2020                  | Lecture by Eminent Scientist (Lecture 1)  |
| September 18, 2020              | Outreach activity on Online workshop on “ <i>Maintenance and culturing of Drosophila melanogaster</i> ” |
| September, 2020                 | Lecture by Eminent Scientist (Lecture 2)  |
| October 15, 2020                | International Webinar on “ <i>Innovative modes of examination</i> ”                                     |
| December 24, 2020*              | Outreach activity: Workshop for teachers (Schools)  |
| December 14-18, 2020*           | INSPIRE program   |
| January 15, 2021                | Lecture by Eminent Scientist (Lecture 3)  |
| February 12, 2021*              | Educational trip to Department of Biochemistry, UDSC/NBRC/RCB/JNU/IGIB                                  |
| February 25, 2021               | Annual Academic Festival (Seminar/scientific activities)  |
| Throughout the academic session | Short projects for students (Inter-department)  |
| Throughout the academic session | Additional Experiments (inter-department)   |

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|---------------------------------|---|
| Throughout the academic session | Additional Practicals and Techniques (intra-department) |
| Mid-Sem. Break*                 | Industrial training/visit (DPCC/Mother Diary)           |
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### **Department of Botany**

| <b>MONTH</b>                    | <b>PROPOSED ACTIVITY</b>                             |
|---------------------------------|--|
| July, 2020                      | Summer training for the students (online internship) |
| August, 2020                    | Lecture by Eminent Scientist ((Lecture 1)            |
| September, 2020                 | International Webinar on “Gender and Environment”    |
| October, 2020 *                 | Industrial training/visit                            |
| November/December, 2020*        | INSPIRE Program                                      |
| January, 2021                   | Lecture by Eminent Scientist (Lecture 2)             |
| February, 2021                  | Visits to Institutes in Delhi/ Botanical Excursions  |
| February, 2021                  | Release of Star College Scheme Departmental Magazine |
| Throughout the academic session | Short projects for students                          |
| Throughout the academic session | Additional experiments                               |

### **Department of Chemistry**

| <b>MONTH</b> | <b>PROPOSED ACTIVITY</b>   |
|--------------|--|
| Summer Break | Summer training for the students<br>In-house Training of Analytical Techniques |

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|--------------------------|--|
| August, 2020             | Inter-Disciplinary Experiment<br>1. To synthesize Dibenzalacetone by Claisen-Schmidt condensation reaction   |
| September, 2020          | Inter-Disciplinary Experiment<br>2. To perform a rearrangement reaction of benzyl into benzoic acid.   |
| September, 2020          | Lecture by eminent speaker(Lecture 1)  |
| October, 2020            | Inter-Disciplinary Experiment<br>3. To estimate the concentration of Ca/Mg ions in the commercially available supplement tablets complexometrically by using EDTA as complexing agent. |
| October, 2020            | Lecture by eminent speaker(Lecture 2)  |
| November, 2020           | Inter-Disciplinary Experiment<br>4. Complexometric estimation of $Al^{3+}$ using Eriochrome black-T as indicator.  |
| November, 2020*          | Lecture by eminent speaker ((Lecture 3)  |
| November/December, 2020* | INSPIRE program  |
| January, 2021            | Lab/Institute Visit  |
| February, 2021           | Inter-Disciplinary Experiment<br>5. Estimation of Vitamin C in different brands of packed juices.  |
| February, 2021           | Additional Practicals<br>1. Determination of cholesterol using Liebermann-Burchard reaction.<br>2. Preparation of nail polish  |
| March, 2021              | Inter-Disciplinary Experiment<br>6. Separation of anions by Dowex 21K exchange resin.  |
| March, 2021              | Workshop for students  |
| April, 2021              | Inter-Disciplinary Experiment<br>7. Comparative study of presence of Na, Ca, K in cold drinks and coconut water using flame photometric techniques.                                    |
| April, 2021              | Additional Practicals<br>3. To construct the standard curve of the maltose using DNSA method and determine the activity of   |

|                                 |  |
|---------------------------------|--|
|                                 | $\alpha$ -amylase.<br>4. Separation of a mixture of o- and p-nitrophenol or o- and p-aminophenol by Thin Layer Chromatography (TLC). |
| Throughout the academic session | Short projects for students  |
| Mid-Sem. Break/Winter Break*    | Industrial training  |

### Department of Zoology

| MONTH   | PROPOSED ACTIVITY  |
|---|--|
| 15 <sup>th</sup> June- 26 <sup>th</sup> July 2020<br>(Summer Break) | Online Summer Training “COVID-19: Epidemiology & Impacts” (Online internship for Undergraduate Students)   |
| 9 <sup>th</sup> July 2020   | Lecture by Eminent Scientist (Lecture 1)   |
| 11 <sup>th</sup> July 2020  | Online Workshop /Webinar on Scientific Writing /IPR  |
| 24 <sup>th</sup> September 2020                                     | Webinar on Environment & Public Health   |
| November/December 2020*   | Outreach activity:<br>Workshop for teachers (Schools/College)  |
| November/December 2020*   | INSPIRE program  |
| 6 <sup>th</sup> February 2021                                       | Lecture by Eminent Scientist (Lecture 2)   |
| January/February 2021*  | Educational trip to Molecular Biology Laboratory, Delhi University/ AIIMS/JNU/IGIB/IARI  |
| Throughout the academic session                                     | Short projects for students <ul style="list-style-type: none"> <li>• To study and analyze the microbial diversity at area around Najafgarh drain</li> <li>• Human-Rhesus macaque interface: An ethological study in Delhi-NCR</li> <li>• Developing quantitative approach to biological understanding</li> </ul> |
| Throughout the academic session                                     | Additional experiments   |

\*Subject to change as per Covid-19 situation/ directives issued by competent authority

Event may be added or rescheduled as per the availability of the speakers or resource persons