Name of the Teacher: Asst prof. Rekhani jyoti pal Class: B.Sc biotechnology 1st semester paper 1

**Lesson Plan**

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| **S No** | **Period** | **Topics to be Covered** | **Academic Activity to be Organized** |
|  | **29 july-31 Aug 2017** | **1) Defination,scope of biotechnology**  **2) Genetic engineering**  **3) Plant and animal tissue culture**  **4) Fermentation technology**  **5) Immobilized enzymes**  **6) Monoclonal antibodies**  **7)Hybridoma technology** | **1) Chalk and board**  **2) Presentation by ppt**  **3) Animated vedios**  **4) Notes**  **5) Group discussion**  **6) Oral and power point presentation by students** |
|  | **01-30 Sept 2017** | **1) Embryo transfer technology**  **2) Gene and genome**  **3) Protein and proteome**  **4) Genetic manipulation(history)**  **5) rDNA, DNA fingerprinting and forensic analysis** | **1) Chalk and board**  **2) Presentation by ppt**  **3) Animated vedios**  **4) Notes**  **5) Group discussion**  **6) Oral and power point presentation by students** |
|  | **01-31 Oct 2017** | **6) Application of biotechnology in agriculture, animal and veterinary science**  **7) Pharmaceutical, food and chemical industry**  **8) Bioremediation and waste treatment**  **9) Biotechnology research in india,**  **10) Ethics in biotechnology**  **11) Biotechnology in context of developing world** | **1) Chalk and board**  **2) Presentation by ppt**  **3) Animated vedios**  **4) Notes**  **5) Group discussion**  **6) Oral and power point presentation by students** |
|  | **01-13 Nov 2017** | **1) Safety guidelines and risk assessment in biotechnology**  **2) Intellectual property rights** | **1) Chalk and board**  **2) Presentation by ppt**  **3) Animated vedios**  **4) Notes**  **5) Group discussion**  **6) Oral and power point presentation by students** |

**Topics of Assignments/ Class Tests to be given to the Students:**

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| **Assignment 1** | **1) Plant and animal tissue culture**  **2) Fermentation technology**  **3) Immobilized enzymes,Monoclonal antibodies**  **4) Hybridoma And Embryo transfer technology**  **5) Gene and genome, Protein and proteome**  **6) Genetic manipulation(history)**  **7) rDNA, DNA fingerprinting and forensic analysis**  **8) Application of biotechnology in agriculture,animal and veterinary science, Pharmaceutical, food and chemical industry**  **9) Bioremediation and waste treatment**  **10) Biotechnology research in india, Ethics in biotechnology**  **11) Biotechnology in context of developing world**  **12) Safety guidelines and risk assessment in biotechnology**  **13) Intellectual property rights**  **14) Defination,scope of biotechnology and Genetic engineering** |
| **Assignment 2** |  |
| **Class Test** | **1) Genetic engineering (steps, vectors, methods)**  **2) Plant tissue culture and animal tissue culture**  **3) Introduction, application and scope of biotechnology** |