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**  |