



**Government College Rajahmundry**

An Autonomous Institution since 2000  
Affiliated to Adikavi Nannaya University

**NAAC**  
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## **DEPARTMENT OF BIOTECHNOLOGY**

### **PREPARATION OF 3D MODELS SEMESTER-1 PAPER APPLIED BIOLOGY & CLASSICAL BIOLOGY.**

**COURSE 1&2 ACADEMIC YEAR 2024-2025-OCTOBER BATCH-2024-2027.**

**DETAILED REPORT ON THE ACTIVITY FOCUSING ON**

#### **OBJECTIVE:**

3D projects have numerous applications that can benefit students by enhancing learning, creativity, and technical skills. Here are some key uses of 3D projects for students:

#### **1. Visualization of Complex Concepts**

Science: 3D models of molecules, organs, or the solar system help in understanding complex structures.

Mathematics: Geometric shapes and graphs in 3D improve spatial understanding.

Engineering: Visualizing mechanical parts and systems.

#### **2. Hands-On Learning**

Allows students to interact with and manipulate objects virtually or physically (using 3D printing), making abstract concepts more tangible.

#### **3. Creativity and Innovation**

Encourages students to design and innovate, whether it's creating art, architectural models, or prototypes for projects.

#### **SUMMARY:**

##### **1. Concept and Planning**

Define the project's purpose (e.g., game design, architectural visualization, animation, product design).

Create a storyboard, sketches, or mood boards to visualize ideas.

Gather references and set project goals, timelines, and deliverables.

## 2. Modeling

Create 3D objects or environments by sculpting or constructing them using geometry (e.g., polygons, curves).

Apply techniques like low-poly or high-poly modeling based on the project's needs.

## 3. Texturing and Materials

Add colors, patterns, or surface details to the models using textures and materials.

Use tools like Substance Painter or Photoshop for detailed texture creation.

Work with UV mapping to align textures properly.

If this is for a specific 3D project, let me know its focus (e.g., animation, game asset, product design) for a more tailored summary!

### **FEEDBACK:**

#### Visual Quality

**Modeling:** Is the geometry clean, detailed, and well-constructed? Are there unnecessary polygons or issues with topology?

**Textures and Materials:** Do the textures align properly? Are the materials realistic or appropriate for the style of the project?

**Lighting:** Does the lighting enhance the scene or model? Is it realistic, dynamic, or atmospheric, as required?

#### Functionality

If it's an interactive project, like in a game or app:

### **TITLE OF THE PROJECT:**

### **LIFE CYCLE OF NON FLOWERING PLANTS**



**STUDENTS NAMES : V. divya, P. divya, G. jyothika, M. Jahnvi, P. bhinu, K. jayanthi, K. jyothirmayi**

**M. kasu, K. sravanthi, J. charan teja, D. anil kumar, K. pravallika, K. bhuvaneshwari, P. rajalakshmi**

**LIFE CYCLE OF FLOWERING PLANTS:**



**STUDENTS NAMES :D.heemalatha,M.sumana,J.divya pavani,Y.balalokesh,B.poorna,S.sasikumari,**

**M.sneha latha,L.manjusha divya,K.chandu,G.guna Ramesh,M.surekha,V.sravani,K.surya teja,**

**G.pravallika,V.nagadevi.**

**PREPARATION OF PROKARYOTIC CELL & 3D ,2D:**



### **STUDENTS NAMES**

:K.aparanjeetha, Y.sai,D.naveen,P.harithra, Y.susmitha,K.harini,K.hyma Priya,

K.anjali,A.tejaswini,K.gowtham,A.jayadurga,M.abhinavaram,P.mounika,S.tane swaridevi.

### **PREPARATION EUKARYOTIC CELL IN 2D&3D:**



**STUDENTS NAMES:**M.indhu,G.chandini,B.bhagya  
raju,D.raviraja,A.harshini,N.sai Lalitha,S.eswari

K.santhosh,K.kavya sri,R.V.sree siri,K.vijay kumar Y.vijay durga  
prasad.K.arun,U.lahari,Y.mahalakshmi.

## **APPLIED BIOLOGY PROJECT**

**GROUP1: TRANSGENIC ANIMAL [COW]& TANSGENIC PLANTS[ TABACCO]:**



STUDENTS NAMES:

P.divya,J.divya.P.harithra,Y.susmitha,K.jyothirmayi,Y.sai,M.kasu,G.jyotjika,M.surekha,M.ram  
ya

D.anil kumar,J.charan teja,P.bhindu.

**GROUP2:TANSGENIC ANIMAL[ SHEEP]& TANSGENIC PLANT [MANGO]:**





STUDENT NAMES:s.priya,V.sravani,M.sneh latha,K.hyma Priya,K.anjali,L.manjusha divya,K.aparanjeetha,K.anjali,V.naga devi,G.jyothika.

**GROUP3:TRANSGENIC ANIMAL[MICE]&TRANSGENIC PLANT:**



STUDENT NAMES:V. lilly rani,U.Lahari,P.Divya ,D.Anilkumar,M.kasuratnam,G.Gunaramesh,K.Surya teja,K.Santhosh.

## GROUP 4: TRANSGENIC PLANT [TOMATO]:



STUDENT NAMES:K.Vijay kumar,K.Gowtham,D.Anil kumar,J.Charan teja,K.santhosh ,Y.Vijay,Y.Lokesh,D.Naveen,k.suresh,P.Harithra,Y.Susmitha,D.Hemalatha.