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FACULTY OF ENGINEERING &  
TECHNOLOGY

**Course: B. Tech Biotechnology**  
**Sub Code: BBT-515**

**Semester: 5th**  
**Sub Name: Plant Biotechnology**

# LECTURE 6

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## Aseptic conditions

- Plant material, nutrient medium, equipments and culture room should be free from contamination.
- Surface sterilization of plant materials should be done to stop the growth of microbes.
- The most common contaminants in culture are fungi and bacteria.



## Sterilization room

- For sterilization of nutrient media, glasswares, scissors, scalp etc., separate sterilization room is desirable.



## Nutrient medium

Defined medium for the growth of plant cell cultures is consist of:

1. Inorganic nutrients: includes macro and micro nutrients
2. Organic nutrients: includes vitamins, carbon sources, amino acids and growth regulators or hormones
3. Other media substances: like protein hydrolysates, solidifying agents and antibiotics.



## Transfer Room

- Provided with laminar flow cabinet for transferring and subsequent sub-culturing.

## Culture room or incubators

- Provided with shelves and incubators with specific conditions of proper temperature, light and aeration.



# QUIZ

