



## Department of biology



## Department of biology

((Microbiology))

stage 2

**Tenth lecture**

## **Diagnosis of Fungal Infection**

**By**

**Msc. Zahraa Jawad Kadhim**



## Department of biology

**Fungal identification** is based frequently on spore morphology such as color, septation, and different methods of spore production. In addition, the nature and morphology of sexual spores and the different spore types involved in the sexual and asexual life cycles are also used for fungal identification.

Diagnosis of fungal infection has relied primarily on methods such as direct microscopic examination of clinical samples, histopathology, and culture

### Specimen:

\*According to the site of infection. For example, skin scales, nails, hair clippings for dermatophyte examination.



### Microscopic examination of these specimens using KOH 10%:

KOH dissolves keratin but does not affect fungi. Branching hyphae are detected among epithelial cells. Fungal stains used. such as lactophenol

### Culture:



## Department of biology



### **Medium :**

- Sabouraud' dextrose agar.
- 4% glucose, 1% peptone, 2% agar and PH 5.5.
- Chloramphenicol + Cycloheximide

### **Technique:**

**Two cultures are incubated separately at:**

- One at the room temperature (25 degree).
- The other at body temperature (37 degree).

### **Duration**

- Most yeasts grow at 37 degree.
- Molds grow at room temperature for up to 4 weeks.