**Question Bank**

**Q 1\ Correct underline word from the following sentences:(18 mark)**

1. *Actinomyces* spp. are the principal agents that decompose cellulose and lignin.
2. *Ganoderma lucidum* is an example that is cultivated even today for its reputed good taste

 **3**-The infection will occur below the skin, but will remain localized calledsystematic infection**.**

 4-In simple septum, the sepal pore cap may be perforate or imperforate.

5- In most of the true fungi these vesicles are tightly clustered with some other structure to form a unique and dynamic structure called the

Appressorium.

6**-** *Synchytrium endobioticum* is example ofHemibiotrophs.

7- Branched or lobed vacuoles are common in fungi.

8- The sex organs of fungi are generally called sporangium

**9-** Anton de Bary (1885) broke the tradition of a three – kingdom system of classification.

10- Centriole are organelles capable of the anaerobic metabolism of hexoses to acetic and formic acids.

11-Compoun microscope requires less specimen preparation and allows high – resolution observation of external or exposed inner surface structures

12- The accumulation of Sirenine tends to suppress the formation of asexual reproductive structures and induces the formation of sexual reproduction.

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**Q 2\ Complete the following sentences: (10mark)**

1. **---------------------** the asci produce inside a completely closed ascocarp.
2. The fungus *Neurospora* sp. produce the conidia like male sex cell called **-------------**---- are formed in flask shaped cavities called **---------------------.**
3. *Saccharomyces* have two similar gametangia fuse and forming the **----------------------------------.**
4. Order Glomales belong to phylum **----------------------------.**

**5**-**--------------------------------** are short, delicate filaments that contain protoplasm but no nuclei.

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 **Q3 / Answer the following questions: (12mark)**

1-What are the differences between polyphyly classification and phylogenetic systematic.

2-How heterokaryosis may originate in a fungal thallus? explain.

3- The significance of sexual reproduction:

4-Write about Biotrophs cell.

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**Q 4 / Draw and label the following (10 mark)**

1- Sexual reproduction in Ascomycota.

2- Micro and macrosporangium of fungus *Thamnidium* sp.

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Assistant Prof.: Fareed Matti Toma GOOD LUCK

**Typical answers of Question Bank**

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**Q 1\ Correct underline word from the following sentences:(18 mark)**

1- **Fungi** are the principal agents that decompose cellulose and lignin.

2-Ganoderma lucidum is an example that is cultivated even today for its reputed **medical benefits.**

 3-The infection will occur below the skin, but will remain localized called **Subcutaneous mycoses**.

 4**- In complex septum** involved, the sepal pore cap may be perforate or imperforate.

5- In most of the true fungi these vesicles are tightly clustered with some other structure to form a unique and dynamic structure called the **spitzenkorper**.

6- ***Colletotrichium*** sp. is example of Hemibiotrophs.

7- Branched or lobed **mitochondria** are common in fungi.

8- The sex organs of fungi are generally called gametangia.

9- **Whittaker (1969)** broke the tradition of a three – kingdom system of classification.

10- **Hydrogenosomes** are organelles capable of the anaerobic metabolism of hexoses to acetic and formic acids.

11-**Scanning electron microscopy** requires less specimen preparation and allows high – resolution observation of external or exposed inner surface structures

12- The accumulation of **trisporic acid** tends to suppress the formation of asexual reproductive structures and induces the formation of zygomorphes

**Q 2\ Complete the following sentences: (10mark)**

1. **Cleistothecium** the asci produce inside a completely closed ascocarp.

2. The fungus *Neurospora* sp. produce the conidia like male sex cell called **spermatia** are formed in flask shaped cavities called **spermagonia.**

3. In *Saccharomyces* in which two similar gametangia isogamous fuse and forming the **ascus.**

4. Order Glomales belong to phylum **Zygomycota.**

5-**Rhizoids** are short, delicate filaments that contain protoplasm but no nuclei

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**Q3 / Answer the following questions: (12mark)**

1- **What are the differences between polyphyly classification and phylogenetic systematic.**

A classification based on evolutionary relationships is known as a phylogenetic classification, and taxa (sing. taxon) the names of groups of organisms, all correspond to monophyletic lineages, although organisms can polyphyletic; groups do not share a close common ancestor. The old concept of "fungi "including Oomycota and slime molds is clearly polyphyletic.be classified on the basis of arbitrary criteria.

**2- How heterokaryosis may originate in a fungal thallus? explain**

1- Mutation, (2) Anastomosis i.e., fusion between genetically-different hyphae, and (3) Diploidization-fusion between haploid nuclei to form diploid nuclei.

**3- The significance of sexual reproduction.**

It results in a very high incidence of recombination and formation of new genotypes; this enables fungi to adapt readily to a multitude of environmental conditions.

 **4-Write about Biotrophs organism.**

 are ecologically obligate parasites and in vivo obtain nutrients only from living host cells. the hyphae of most biotrophs grow primarily between host cells and given rise to specialized hyphal branches that penetrate the host cell plasma membrane without killing the cell. These branches are known as haustoria and are thought to be involved in the uptake of nutrients from the host cell.

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**Q 4 / Draw and label the following (10 mark)**

1- Sexual reproduction in Ascomycota.





