

## **Sample Exam for Medical Microbiology (CLS 212)**

**Student Name:**

**Student No.:**

**Q1: Choose the right answer from the following statements: (0.5 Mark for each)**

**1) Which step of virus replication include removal of the capsid by the host cell:**

- a. Assembly.
- b. Attachment.
- ☒ c. Uncoating.
- d. Penetration.

**2) The scientist who developed methods of culturing, fixing, staining, and photographing bacteria is called:**

- a. Anton van Leeuwenhoek.
- b. Louis Pasteur.
- ☒ c. Robert Koch.
- d. Julius R. Petri.

**3) The TAXA include:**

- a. Kingdom, Divisions, Classes, Species, Orders, Families, Genera.
- b. Kingdom, Classes, Orders, Families, Divisions, Genera, Species.
- c. Kingdom, Families, Divisions, Classes, Orders, Genera, Species.
- ☒ d. Kingdom, Divisions, Classes, Orders, Families, Genera, Species.

**4) Candida spp. are responsible of causing:**

- a. Superficial mycosis.
- ☒ b. Opportunistic mycosis.
- c. Coetaneous mycosis.
- d. Subcoetaneous mycosis.

**5) When two organisms are living together, and both benefit from that. This is called:**

- a. Neutralism
- b. Commensalism.
- ☒ c. Mutualism.
- d. Parasitism.

**Q2: Put true (T) or false (F) after each statement.**

**(0.25 Mark for each)**

1. Anton van Leeuwenhoek is the father of microbiology. ( **T** )
2. Naked viruses will penetrate host cells by fusion to plasma membrane. ( **F** )
3. Bacterial capsule is present in all species of bacteria. ( **F** )
4. *Lactobacilli* will protect the vagina from infection by *Candida albicans*. ( **T** )
5. Drug antagonism is when two drugs work against each other. ( **T** )

**Q3: What are the differences between:**

**(0.25 Mark for each)**

	<b>Eukaryotes</b>	<b>Prokaryotes</b>
<b>Nucleus</b>	<b>Present</b>	<b>Absent</b>
<b>Cell Organelles</b>	<b>Complex</b>	<b>Very few</b>

	<b>Gram Positive Bacteria</b>	<b>Gram Negative Bacteria</b>
<b>Thickness of Peptidoglycan layer</b>	<b>Thick</b>	<b>Thin</b>
<b>Color Under Microscope</b>	<b>Blue-Violet</b>	<b>Red</b>

**Q4: Match the following:**

**(0.25 Mark for each)**

<b>A</b>	<b>Bunsen Burner</b>	<b>Food Preservation</b>	<b>D</b>
<b>B</b>	<b>UV-lamps</b>	<b>Sterilization of heat sensitive materials e.g. vaccines, drugs,..</b>	
<b>C</b>	<b>Alcohol Swabs</b>	<b>Sterilization of wire loops</b>	<b>A</b>
<b>D</b>	<b>Desiccation</b>	<b>Disinfection of operating rooms, nurseries, cafeterias, ..</b>	<b>B</b>
		<b>Disinfection of skin before needle pricking</b>	<b>C</b>

**Q5: Complete the following statements with one of the words listed below: (0.25 Mark for each)**

**Obligate, Pathogen, Mycelium, Oncogenic**

1. A microorganism that can cause disease is called \_\_\_\_ **Pathogen** \_\_\_\_ .
2. Viruses that can cause cancer are called \_ **Oncogenic** \_ .
3. A parasite able to live both free living and parasite living is called \_\_\_\_ **Obligate** \_\_\_\_ .
4. A network of hyphae is called \_\_ **Mycelium** \_\_ .