**Daffodil International University**

**Department of Pharmacy**

**Faculty of Allied Health Sciences**

**Midterm Examination: Fall - 2018**

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| **Course Code:** | **BPH-215** | **Time: 1 hour 30 mins** |
| **Course Title:** | **Pharmaceutical Microbiology-1** | **Full Marks: 25** |
| **Course Teacher:** | **Sharifa Sultana (SS), Aklima Akter (AA)** |  |

**(Answer any 10 questions of the following) 10X2.5=25**

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| 1 | What are the subject areas of microbiology? List the common characteristics of biological system. | 1.25+1.25 |
| 2 | Differentiate between prokaryotic and eukaryotic cell based on cell membrane and cytoplasmic content. | 1.25+1.25 |
| 3 | Briefly describe the characteristics and importance of fungi. | 2.5 |
| 4 | What is germ theory of disease? Mention the Koch’s postulates. | 1+1.5 |
| 5 | What is pure culture? How can you prepare pure culture? | 0.5+2 |
| 6 | Make comparison between gram positive and gram negative bacteria. | 2.5 |
| 7 | Describe the bacterial structure according to cytoplasmic component. | 2.5 |
| 8 | What are the essential elements required for the growth of bacteria? Describe any five with their functions. | 1+1.5 |
| 9 | What is decline phase? Show the diagram of growth curve and explain bacterial numbers increase exponentially. | 0.5+1+1 |
| 10 | How does lyophilization can be done? Describe merits of this process. | 1.25+1.25 |
| 11 | What are the growth factors of bacteria? Describe cryopreservation technique. | 1+1.5 |
| 12 | Write short note on:   1. Biogenesis b) Virulence c) Phototrophs d) Lithotrophs e) Autotrophs | 0.5x5 |