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| **Daffodil International University**  **Department of Pharmacy**  **Faculty of Allied Health Sciences**  **Midterm Examination: Fall 2018** | | | |
| **Course Code:** | **BPH-212** | **Time: 1 hours 30 mins** | |
| **Course Title:** | **Physical Pharmacy – II** | **Full Marks: 25** | |
| **Course Teacher:** | **Md. Mustafezur Rahman(MMR) & Farhana Israt Jahan(FIJ)** | |  |
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| **(Answer any 10 questions of the following)** | | **10X2.5=25** | |

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| 1. | Define the rate of a reaction. Differentiate between order and molecularity of a reaction. | 0.5+2 |
| 2. | Derive the equation of a first order rate constant | 2.5 |
| 3. | Discuss about collision theory . Why high molecularity reactions are rare ? | 1+1.5 |
| 4. | Briefly describe about major types of physical degradation. | 2.5 |
| 5. | Diagrammatically describe the process of distillation. | 2.5 |
| 6. | Discuss the various methods of heat transfer. Mention some non-thermal drying methods. | 1.5+1 |
| 7. | Discuss the basic principle and method of freeze drying. What are the advantages of this method? | 2+0.5 |
| 8. | State the Faraday’s second law of Electrolysis. Define Electrochemical equivalent according to the First Law. | 1+1.5 |
| 9. | Define strong & weak electrolytes. How can you purify Cu from Cu ore by electrolysis? | 0.5+2 |
| 10. | What is extraction? Mention the factors that affect the evaporation process. | 0.5+2 |
| 11. | What do you understand by filter media and filtrate? Mention different types of centrifugation. | 1+1.5 |
| 12. | Define half life and shelf life. Exemplify pseudomolecular reaction. | 1+1.5 |