**IV B. Pharmacy II Semester Adv.Supplementary Examinations, July - 2017**
**BIOPHARMACEUTICS AND PHARMACOKINETICS**

Time: 3 hours                                                                                     Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B)**
2. Answering the question in **Part-A** is Compulsory
3. Answer any **THREE** Questions from **Part-B**

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## PART –A

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| 1. | a) | Write about characteristics of active transport. | (4M) |
| | b) | Discuss about plasma protein binding sites. | (3M) |
| | c) | Give a brief account on Loo-riegleman method. | (4M) |
| | d) | What are Non-linear kinetics? Give suitable examples. | (4M) |
| | e) | What are clinical pharmacokinetics? Give its significance. | (3M) |
| | f) | Compare single dose vs multiple dose BA-BE studies. | (4M) |

## PART -B

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| 2. | a) | Discuss about dosageform factors influencing on drug absorption. | (10M) |
| | b) | Explain passive diffusion of drugs. | (6M) |
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| 3. | a) | Explain role of physiological barriers in drug distribution | (12M) |
| | b) | What is the influence of various diseases states on plasma protein levels and drug binding? | (4M) |
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| 4. | a) | Explain about Wagner-Nelson method. | (10M) |
| | b) | Define apparent volume of distribution.  Give its significance. | (6M) |
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| 5. | a) | Give an account on Michales-Menten equation. | (8M) |
| | b) | What criteria is necessary for obtaining valid urinary excretion data? Compare sigma minus and rate excretion method. | (8M) |
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| 6. | a) | Discuss about dose adjustment in patients with renal failure. | (8M) |
| | b) | Write short notes on pharmacokinetic drug interactions affecting drug absorption. | (8M) |
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| 7. | a) | Write about Bioavailability study designs. | (10M) |
| | b) | Give a brief account on invitro-invivo correlations. | (6M) |