

**B.Sc Examination March April – 2015**  
**Semester VI**

Paper Name : 601 Fundamental Biochemistry

Paper Code: 4643

Time : 2.30 hrs

Total Marks : 70

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**Instructions :** (a) Figures to the right indicates total marks of respective questions  
(b) Draw neat, clean and labeled diagram wherever necessary

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|-----------|--|-------------|
| 1         | (a) Explain the role of ATP in metabolism<br>(b) SN : Laws of thermodynamics   | (10)<br>(4) |
| <b>OR</b> |  |             |
| 4         | (a) Explain Oxidation – Reduction Reactions<br>(b) Explain Free Energy   | (10)<br>(4) |
| 2         | (a) What are antimicrobial agents? Explain mechanism of action Polymyxins.<br>(b) Explain Chemotherapy                     | (10)<br>(4) |
| <b>OR</b> |  |             |
| 2         | (a) Explain Inhibition of Cell wall Synthesis mechanism<br>(b) Explain Principle of Microbial Control                      | (10)<br>(4) |
| 3         | (a) What is Antibiotic Sensitivity? Explain Kirby-Bauer Disc Diffusion<br>(b) Explain Stokes Disc diffusion test           | (10)<br>(4) |
| <b>OR</b> |  |             |
| 3         | (a) Explain broth dilution Method<br>(b) SN : Antifungal Antibiotics   | (10)<br>(4) |
| 4         | (a) Explain standard reduction potential<br>(b) What is energy? Explain role of various high energy compounds              | (10)<br>(4) |
| <b>OR</b> |  |             |
| 4         | (a) Explain various drugs with the mechanism of action to inhibit DNA synthesis<br>(b) Explain Primary disc diffusion test | (10)<br>(4) |
| 5         | (a) Explain various biochemical system affected by antimicrobial agents<br>(b) SN: Agar dilution Method                    | (10)<br>(4) |
| <b>OR</b> |  |             |
| 5         | (a) Explain role of antifungal antibiotics<br>(b) Explain PABA   | (10)<br>(4) |