



শাহরপুর বিশ্ববিদ্যালয়
JADAVPUR UNIVERSITY

B.PHARMACY 1ST YEAR 1ST SEM Exam 2019

Pharmaceutical Biology-I

Time: 3 hours

Full Marks: 100

Group code: Pharm/T/112

Answer any five of the following questions: (20 X 5 = 100)

1. What are the major findings of Urey Miller experiment? What are the differences between Lamarckism and Darwinism in the light of their respective evolution theory? How survival for fittest can lead to natural selection and speciation? What are the different modes of speciation? (4+ 5+ 6 + 5)
2. Describe the physiological mechanism of absorption and metabolism? Describe how the respiratory and circulatory physiology are interconnected. What are the components of respiratory system. State their individual function. Give the route map flowchart of the blood flowing through and out of the heart. (5+ 5 + 3+ 4 + 3)
3. Explain three laws of Mendel? State the name of two Mendelian disorders. Write in brief about functions of different brain lobes. What are afferent and efferent nervous system? (8 + 2 + 6 + 4)
4. Describe the life cycle of *Plasmodium* in details briefing on the liver and blood stage and also the phase of it within the mosquito. What is host pathogen interaction? Write on the disease, symptoms and treatment caused by *Ascaris*. (10 + 4+ 6)
5. Describe the structure of a typical bacteria. Why anti-viral treatment is not so much successful as that of antibacterial treatment. How comparative anatomy and fossil records can guide us to trace the evolutionary process. What is the major differences between lytic and lysogenic cycle of bacteria? (4 + 3 + 8 + 5)
6. Write short notes: a) Blood vessel types b) Incomplete dominance c) Spinal cord d) sympathetic and parasympathetic nervous system (5 X 4= 20)