

ESKPIX-XXVI (I)

SSC-(P-I)

BIOLOGY – 9th

Time: 2 Hours 40 Minutes

SECTION "B"

Marks: 32

Q.2. Attempt any EIGHT (08) questions. All questions carry equal marks.

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| i. Write any two differences between an organ and an organ system. | 1+1+1+1 |
| ii. In between bacteria and Euglena, which organism will be placed in Kingdom Monera? Justify your answer with three valid points. | 1+3 |
| iii. Distinguish between ribosomes and chromosomes in terms of location, composition, structure and function. | 1+1+1+1 |
| iv. Briefly describe the given terms;
a) Diffusion
b) Osmosis
c) Filtration
d) Facilitated diffusion | 1+1+1+1 |
| v. List any four differences between G ₁ -phase and S-phase. | 1+1+1+1 |
| vi. What are haploid spores. Also describe the role of meiosis and mitosis in production of new diploid plants. | 2+2 |
| vii. State the optimum pH value at which most enzymes work. Also state the pH value at which pepsin works. | 2+2 |
| viii. State how are photosynthesis and respiration different in terms of reactants and products. | 2+2 |
| ix. Briefly describe the term villus, microvillus and lacteals. Also state their role in absorption of nutrients. | 1+1+1+0.5+0.5 |
| x. Define stent. How does it help in treating myocardial infarction? | 2+2 |
| xi. Define thrombocytes. Also describe the role of platelets in blood clotting. | 2+2 |

SECTION "C"

Marks: 21

Note: Attempt any THREE (03) questions. All questions carry equal marks.

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| Q.3. a) Outline the types of nucleic acids found in viruses and show their role in viral reproduction. | 2+2 |
| b) State the rule relating to the products of extremes and means. Explain how is the fourth proportional value determined when three values are known. | 1.5+1.5 |
| Q.4. a) Outline epithelial tissue, connective tissue, muscular tissue and nervous tissue as a type of animal tissues. | 1+1+1+1 |
| b) Briefly describe apoptosis and necrosis as type of cell death. | 1.5+1.5 |
| Q.5. a) Define aerobic respiration. Also state the site of occurrence of glycolysis and Krebs cycle. | 2+1+1 |
| b) Describe the sequence of any three events of lock and key model. | 1+1+1 |
| Q.6. a) Name the blood cells which increase and those which decrease in leukemia. | 2+2 |
| b) List any three causes of ulcer. | 1+1+1 |