



Date:05/11/24

MONTHLY TEST-02 (2024-25)

Max marks:20

Grade:XI

BIOLOGY(044)

Time:50min

General Instructions:

1. There are 9 questions in the question paper. All questions are compulsory.

Qn. No	SECTION A	Marks allocated
1	What will happen if the diameter of the afferent arteriole is less than efferent arteriole? a) Dilute urine b) Concentrated urine c) No ultrafiltration d) Black urine	1
2	Which hormone regulates the reabsorption of water in the distal tubules and collecting ducts of the nephron? a. Insulin b. Thyroxine c. Antidiuretic hormone (ADH) d. Aldosterone	1
3	What will be the immediate effect if the chordae tendineae of the tricuspid valve of the human heart is partially non – functional due to some injury? (a) The flow of blood into the aorta will be slowed down	1

	<p>(b) The 'pacemaker' will stop working</p> <p>(c) The blood will tend to flow back into the left atrium</p> <p>(d) The flow of blood into the pulmonary artery will be reduced</p>	
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4	<ol style="list-style-type: none"> 1. Both <i>A</i> and <i>B</i> are true and the <i>B</i> is the correct explanation of <i>A</i> 2. Both <i>A</i> and <i>B</i> are true but the <i>B</i> is not the correct explanation of <i>A</i> 3. <i>A</i> is true but <i>B</i> is false 4. Both <i>A</i> and <i>B</i> are false <p>Assertion: Aldosterone is a steroid hormone and is important in the control of sodium and potassium ion concentration in mammals.Â</p> <p>Reason: It upgrades sodium ion concentration in the ECF by promoting reabsorption of sodium ions from renal tubules and excretion of potassium ions in urine</p>	1
	SECTION B	
5	What is the remedial measure advised for the correction of acute renal failure? Explain briefly.	2
6	Give reason why aquatic animals are mostly ammonotelic in nature whereas terrestrial forms are not.	3
7	State the functions of the following in blood. <ul style="list-style-type: none"> • Fibrinogen • Globulin • Neutrophils • Lymphocytes 	3
8	<p>a) What is the significance of the AV node and AV bundle in the functioning of the heart?</p> <p>b) Why do we call our heart myogenic?</p> <p>c) Explain the consequences of a situation in which blood does not coagulate.</p>	3

SECTION C		5
9	<p>a) Describe the role of Renin-Angiotensin in the management of Kidney function</p> <p>b) Expand the following excretory functions:</p> <p>a) ANF b) ADH c) GFR d) DCT</p> <p>c) What is the role of tubular secretion in maintaining acid-base and ionic balance in the body fluids?</p>	