

FY -4026

FIRST YEAR HIGHER SECONDARY
SECOND TERMINAL EXAMINATION, DECEMBER 2025
ZOOLOGY ANSWER KEY

I Answer any 3 questions from 1 to 5. Each carries 1 score

Qn No.	Scoring Key	Score
1	Nephridia	1
2	Respiratory rate increases/ Blood Oxygen Saturation decreases	1
3	a) Birds/Class Aves b) Spongocoel	$\frac{1}{2}$ $\frac{1}{2}$
4	97%	1
5	Chondrichthyes: Trygon Osteichthyes: Exocoetus	$\frac{1}{2}$ $\frac{1}{2}$

II Answer any 9 questions from 6 to 16. Each carries 2 score

6	a) Malpighian tubule b) Agnatha	1 1
7	a) A-Quaternary structure of protein B-Alpha- Helix/Secondary structure of protein B) A-Haemoglobin B-Keratin /Any other example/ not mentioned in text book	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$
8	Operculum-Osteichthyes Hairs-Mammalia Radula-Mollusca Choanocyte- Porifera	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$
9	a) False, during aestivation and hibernation gaseous exchange takes place through skin b) True c) True	1 $\frac{1}{2}$ $\frac{1}{2}$
10	a) Oxygen dissociation curve b) 20mmHg	1 1
11	a) It protects them while in water b) for swimming	1 1
12	1. Biological names are generally in Latin and written in italics. They are Latinised or derived from Latin irrespective of their origin. 2. The first word in a biological name represents the genus while the second component denotes the specific epithet. 3. Both the words in a biological name, when handwritten, are separately underlined, or printed in italics to indicate their Latin origin. 4. The first word denoting the genus starts with a capital letter while the	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$

	specific epithet starts with a small letter. It can be illustrated with the example of <i>Mangifera indica</i>			½
13	a)The T-wave represents the return of the ventricles from excited to normal state/Repolarisation of ventricle			1
	b) By counting the number of QRS complexes that occur in a given time period, one can determine the heart beat rate of an individual.			1
14	a)Inspiration is initiated by the contraction of diaphragm which increases the volume of thoracic chamber in the antero-posterior axis. The contraction of external inter-costal muscles lifts up the ribs and the sternum causing an increase in the volume of the thoracic chamber in the dorso-ventral axis. The overall increase in the thoracic volume causes a similar increase in pulmonary volume. An increase in pulmonary volume decreases the intrapulmonary pressure to less than the atmospheric pressure which forces the air from outside to move into the lungs, i.e., inspiration			1½
	b)Spirometer			½
15	Blood group	Antigens on RBC	Antibodies in Plasma	½
	AA.....	Anti B	½
	BB.....Anti A.....	½
	AB	A,B	nil	½
	O	NilAnti A and ,Anti B.....	½
16	A-Glomerulus			½
	B-Bowman's capsule			½
	C-Efferent arteriole			½
	D-Collecting duct			½
III Answer any 3 questions from 17 to 20.Each carries 3 score				
17	a)A) Coelomate			½
	B) Pseudocoelomate			½
	C) Acoelomate			½
	b) A) Coelomate Eg: Annelida to Chordata (Write any one phylum)			½
	B) Pseudocoelomate-Eg.Aschelminthes			½
	C) Acoelomate-Platyhelminthes			½
18	a) Catalytic activity is lost when the co-factor is removed from the enzyme			1
	b) Prosthetic groups, Co-enzymes, metal ion (Write any two)			½+½
	c)Any short notes on co factor and prosthetic group			½+½
19	a) Coronary Artery Disease (CAD)/Atherosclerosis			½
	b) Angina/Angina pectoris			½
	c)Heart failure			½

	d)Heart attack e)Cardiac arrest f)Hypertension/High Blood Pressure	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$
20	a)Radial symmetry b)Phylum Ctenophora c)Write any two salient feature	1 1 $\frac{1}{2} + \frac{1}{2}$