

FIRST YEAR HIGHER SECONDARY EXAMINATION MARCH 2019

SUBJECT : BIOLOGY - ZOOLOGY

CODE. NO: FY 26 B

| Qn No | Sub Qns | Answer Key/Value Points | Score | Total |
|-------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------|
| 1 | | Carolus Linnaeus / Linnaeus | 1 | 1 |
| 2, | | Dense regular | 1 | 1 |
| 3, | | Collagen | 1 | 1 |
| 4, | | Yes, In Vertebrates the notochord is replaced by vertebral column. (correct justification carries full mark) | 1 1 | 2 |
| 5. | a | <u>Tidal Volume</u> - volume of air inspired / expired during <u>normal</u> respiration / approx. 500ml <u>Residual Volume</u> - Volume of air remaining in the lungs even after a <u>forcible</u> expiration / 1100 ml to, 1200 ml. | 1/2 1/2 | 2 |
| | b. | <u>Vital Capacity</u> - Maximum vol of air a person can breathe in after a forced expiration / $ERV + TV + IRV$ / the maximum vol of air a person can breathe out after a forced inspiration / value | 1/2 | |
| | | <u>Total lung Capacity</u> - Total vol of air accommodated in the lungs at the end of forced inspiration / $RV + ERV + TV + IRV$ / vital capacity + residual volume / value | 1/2 | |

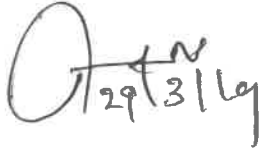
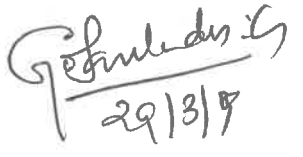
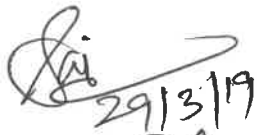





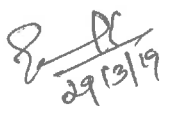
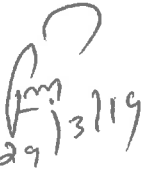
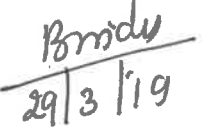
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|-------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------|
| 6 | (a) (b) (c) | Hippocampus / sea horse class Osteichthyes / Bony fishes Any two salient features of class Osteichthyes | $\frac{1}{2}$ $\frac{1}{2}$ 1 | 2 |
| 7 | (a) (b) | (i) Salivary amylase / ptyaline / amylase (ii) lysozyme (i) Intestine (ii) Stomach | $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ | 2 |
| 8, | (a) (b) | Persons with AB group can accept blood from other blood groups / AB blood group lacks antibodies / Presence of AB antigen only Any two correct disorders related with Circulatory system | 1 1 | 2 |
| 9, | a, b, c, d, | Gnathostomata Cyclostomata Tetrapoda Osteichthyes | $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ | 2 |
| 10, | (a) (b) | (i) Glycosuria (ii) Ketonuria Diabetes melitus / Diabetes | $\frac{1}{2}$ $\frac{1}{2}$ 1 | 2 |
| 11, | (a) (b) | A - Actin B - Myosin Actin - G-actin / F-actin / tropomyosin / Troponin Myosin - Heavy meromyosin (HMM) / Light meromyosin (LMM) / Meromyosin / Head / tail | $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{4}$ | 2 |

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|--------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------|------------|-------------|---------|----------|--------------------|------------------------|-------|--|---|
| 12 | (a) (b) | Glucagon dwarfism | 1 1 | 2 | | | | | | | | | |
| 13 | (a) (b) | A - Secondary structure of protein B - Tertiary structure of protein Primary structure of protein and Quaternary structure of protein | $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ | 2 | | | | | | | | | |
| 14 | | <table border="1"> <thead> <tr> <th>Ammonotelic</th> <th>Ureotelic</th> <th>Uricotelic</th> </tr> </thead> <tbody> <tr> <td>Bony fishes</td> <td>Mammals</td> <td>Reptiles</td> </tr> <tr> <td>Aquatic amphibians</td> <td>Terrestrial amphibians</td> <td>Birds</td> </tr> </tbody> </table> <p>(Any four correct response)</p> | Ammonotelic | Ureotelic | Uricotelic | Bony fishes | Mammals | Reptiles | Aquatic amphibians | Terrestrial amphibians | Birds | | 2 |
| Ammonotelic | Ureotelic | Uricotelic | | | | | | | | | | | |
| Bony fishes | Mammals | Reptiles | | | | | | | | | | | |
| Aquatic amphibians | Terrestrial amphibians | Birds | | | | | | | | | | | |
| 15 | (a) (b) (c) | odd one with correct response Saw fish Saw fish - class Chondrichthyes / cartilaginous fishes / remainings are osteichthyes / Bonyfishes. Sea hare Sea hare - Phylum Mollusca / remaining ones - phylum Echinodermata (Any two correct response carries full mark) | 1 $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ | 3 | | | | | | | | | |

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|-------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------|
| 16 | | <p style="text-align: center;">Brain</p> <pre> graph TD Brain --> Forebrain Brain --> Midbrain Brain --> Hindbrain Forebrain --> Cerebrum Forebrain --> Thalamus Forebrain --> Hypothalamus Midbrain --> Corporaquadrigemina Hindbrain --> Pons Hindbrain --> Cerebellum Hindbrain --> Medulla </pre> <p>or (Any other correct response regarding six parts of brain given in the box)</p> | 6 x 1/2 | 3 |
| 17 | (a) (b) (c) | <p>Electrocardiograph / electrocardiogram</p> <p>P wave - Atrial depolarisation / atrial systole / electrical excitation of atrium / auricular contraction</p> <p>T. wave - Ventricular repolarisation, diastole / Ventricular relaxation / End of systole</p> <p>Diagnosis of Heart diseases / disorders</p> | 1 1/2 1/2 1 | 3 |
| 18 | | <p>(a) found in the walls of blood vessels / and air sacs of lungs</p> <p>(b) cuboidal epithelium</p> <p>(c) Secretion / absorption</p> <p>(d) lining of stomach / Intestine</p> <p>(e) ciliated epithelium</p> <p>(f) Movement / transport</p> | 1/2 1/2 1/2 1/2 1/2 | 3 |

First Year Higher Secondary Examinations
March - 2019

Sub: Zoology.

1. John George. C St. Joseph's BHSS
Kozhikode  29/3/19
2. Gokuladas. G GGHSS Nemmar
Palakkad  29/3/19
3. SAJIV. C. D NIRMALAH. S. S, CHEMPERI
KANNUR  29/3/19
4. Johnson. A St. Mary's H. S. S, Viskunjam
Trivandrum  29/3/19
5. Jiji THOMAS EJHSS, Chennad
Kasaragod 
6. SHAJINA. M WOHSS PINANCODE
WAYANAD 
7. ROSNI B H. S. S Kandamangalam
Kadakkarappally
Alappuzha 
8. MARY JOSEPH STBC HSS
CHENGARoor
MALLAPPALLY
PATHANAMTHITTA 
9. Abdul Razak. N. HMYHSS Manjeri.
Malappuram.  29/3/19
10. Pradeep. B NVT in Biology
PMSAVHSS Chappemangan
Malappuram.  29/3/19
11. Bindu. S V NVT in Zoology
VHSS For girls,
Thruvallom  29/3/19

12. E. J. THOMAS

ST. GEORGE'S VHS
CHOWALLOOR

Spencer
29/3/2019

13. Rekha.k

R.M. HSS - FLOOR
THRISSUR

R. K. K.
29/3/19

14. Sheena Paul .

S.K.M.H.S.S Kumanakom
Kottayam

Sheena
29/3/19

15. V. Lissy Mole

HSS For Boys
Punalur .

Lissy

16. JAYASREE. G

SNHSS Thrikkannarvattom
Cochi-18, Ernakulam

Jayasree
29/3/19

17. Shyjan . P.

Govt: HSS
Pozumallee
Idukki.

Shyjan
29/3/19

18. BOBYS

SNUVHSS
Angadabekal South
PTA (Disth.)

Bobys
29/3/19

19. Kurian Jacob.R.

SSMVAHSS -
Edakkazhiyur
ThriSSur

Kurian
29/3/19