

Zalā-2. t²lvu²t²q² kālāwāvçānāsā Zās² S² lā S² r² t²avāh² n

Describe different types of scales found in fish.

OR

s²m t²q² kālāwāvçānāx²cyq²S² r²t²avāh² n

Write about the poisonous snakes found in India.

Zalā-3. i²g²v²lā lā S² u² i² a²lā N² q²ā ; q²lāwāwā kāwā S² av² s²jy Zās²
i²g²v²m N²pcNā

What is the meaning of adaptation? How birds are adapted to aerial life?

OR

u²n²fu²a² Y²bt²l²ne²u² t²i² h²E avāh² n

Write difference between Eutheria and Metatheria.

Zalā-4. Dq²Et²k²ayy S²l Zās²u² S² w²lā S²l²k² n

Describe process of spermatogenesis.

OR

t²S² S² a²l²u² S²l h²b² S²l²b²S²ym aj² lā r²l²c² n

Draw a well labelled diagram of vertical section of Gastrula of frog.

Zalā-5. "y²R²l²" q²E a²l²o avāh² n

Write an essay on "Organizer".

OR

t²l S² i²b²S²l h²b² S²l²b²S²ym aj² lā r²l²c² n

Draw a well labelled diagram of vertical section of Hen's egg.

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Code No. : B-214(B)

Annual Examination - 2017

B.Sc.-I

ZOOLOGY

Paper - II

VERTEBRATE AND EMBRYOLOGY

Max.Marks : 50

Min Marks : 17

Time : 3 Hrs.

1²lq B h²p²'i² t²l²y i² mvi²l² Zalā N² ak²M²N² S²E² ; h²l²u²eN² h²p²'r² t²l²v²l²
Zalā h²p²'y² t²A²ai² eE²l²au Zalā N² h²p²'i² S²acyryc²N²v²C²N² S²l²

Note: Section 'A' , containing 10 very short answer type questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.

h²p²'i² (Section-'A')

zalāS²ym i² mvi²l²au Zalā S² E² F²S² u² A²w²u²t²A² n
(Answer the following very short-answer-type questions in one or two sentences) (1x10=10)

Zalā-1. ZalāS²o²l² kāmāS²ja² Y²S² f²A²N²h²A²k² n

Give one example of Protochordata.

Zalā-2. F²l²l² j²yy S² s²jy i² p²t²Y²l²b²l²v² q²u² k² N²

Endostyle is present in which organ of Amphioxus?

Zalā-3. q²as² E²l² N²as²y² h²E t²l²a² S²l²b²q² k²ncN²

Which male fish has brood pouch for parental care?

Zalā-4. a²l² u²l²l²va S² S² f²A²N²h²A²k² n

Give one example from order Urodeла.

Zalā-5. i kæ ſja wæzalasý Aat avahy ñ

Write scientific name of python.

Zalā-6. yav̄l̄v̄v̄l̄v̄l̄y Zalā ſja aivxAlm ֆjy yqetbqala kama ñ?

In which snake Solenoglyphous type of fang is found ?

Zalā-7. tç̄l̄n̄eua kāmäſja Ÿſy EÀñE½ Aäk½ ñ

Give one example of Metatheria.

Zalā-8. l̄v̄l̄l̄l̄ ſy t̄l̄ Ŧnm ՚alā ſja Aat avahy ñ

Name the cavity present in blastula.

Zalā-9. al̄at̄l̄l̄l̄ Ŧl̄ ſja q̄fwoala ՚gymlači p̄b̄t̄b̄q̄z̄z̄N̄ma ñ?

In how many hours is the development of primitive streak completed ?

Zalā-10. yÖat̄ma ſyl̄ i wođ½ ſy kâſy ſyal̄ n?

Who propounded the concept of competence?

h̄b̄-r'(Section-'B')

al̄aansym vi a eüeau Zalā ſy EÜE 150-200 TaA-yata t̄ Aþi

(Answer the following short-answer type questions with word limit
150-200) **(5x3=15)**

Zalā-1. yli ſjøph t̄yatalu vÖdla avahy ñ

Give general characters of phylum Chordata.

OR

qç̄l̄t̄uak̄la Ÿwb̄t̄l̄ k̄la t̄; h̄E avahy ñ

Give difference between Petromyzon and Mixine.

Zalā-2. t̄l̄v̄uab̄t̄ ſy l̄p̄t̄y Zalāy q̄ ՚l̄q̄½ avahy ñ

Write a note on catadromous migration in fish.

OR

Y' k̄aȳl̄v̄ v̄v̄v̄v̄q̄ ՚l̄q̄½ avahy ñ

Write a note on Exolotl larva.

Zalā-3. i æſcuaře y ſy yEaȳ w̄w̄v̄v̄v̄ avahy ñ

Write reptilian characters of Archeopteryx.

OR

l̄m̄l̄l̄ ſu ſy yatalu vÖdla Ÿwb̄E AñE½ avahy ñ

Give general characters and example of Prototheria.

Zalā-4. t̄m̄ ſy Añd̄l̄l̄ ſy l̄p̄ ſy ait̄s̄ym aj ūa r̄l̄c̄y ñ

Draw a well labelled diagram of V.S. Blastula of frog.

OR

Äj̄l̄l̄ ſt̄ck̄la Ÿwb̄y ՚l̄j̄l̄ ſt̄ck̄la q̄ ՚l̄q̄½ avahy ñ

Write a note on fertilizine and antifertilizine.

Zalā-5. i q̄l̄ ſyl̄ q̄fſaða avahy mn̄a i q̄l̄ ſy ſyueavahy ñ

Define placenta. What are it's functions?

OR

Y'lañi ala ſja alat̄la Ÿwb̄E y ſy ſyueavahy ñ

Explain formation and functions of Amnion.

h̄b̄-y'(Section-'C')

al̄aansym Aai e Eüeau Zalā ſy EÜE 300-350 TaA-yata t̄ Aþi

(Answer the following long-answer type questions with word limit
300-350) **(5x5=25)**

Zalā-1. Y'lañi ayy ſy Äç̄p̄y Ÿwb̄Eyyç̄yraom Ej̄l̄i ab̄ſja yaj ūa w̄l̄ ſyl̄ak̄y ñ

Describe pharynx of Amphioxus and structures related to it. Support the answer with appropriate figures.

OR

Y'lañi ayy ſy E³ykl̄a i ūa ſja w̄l̄ ſyl̄ak̄y ñ

Describe excretory organ of Amphioxus.