## Bs/Z00/M3

2. Explain the echigo 2025 theory of origin of Chordates. Add a note or opening concept. 01=2+7

(FYUGP)

(3rd Semester)

..... Classify cyclostomes up to order with

examples,

ZOOLOGY

3. Give the senders (MINOR) eristics of class Chondrichthyes.

Paper Code: ZOO/M3

Diversity of Chordates

innitiations and balance. description time controls Pass Marks: 40% Full Marks: 75

Time: 3 hours and classify up to order. The remains for 10

( PART : B—DESCRIPTIVE )

Ot 315 (Marks: 50) a seton strWe unject

The figures in the margin indicate full marks for the questions

1. Give an outline classification of the phylum Victorioniin, comercial grategorium van trac 10 Chordata.

What are hemichordates? Describe the general characteristics of Hemichordata.

1+9=10

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O. Pager

OI

(Turn Over)

2. Explain the echinoderm theory of origin of Chordates. Add a note on dipleurula concept. 1921177 7+3=10

1 3rd Semester Classify cyclostomes up to order with examples. 10 ZOOLOGY

3. Give the general characteristics of class Chondrichthyes. 10 Paper Code: 200/M3

Give a detailed account on parental care in amphibians.

4. Write the general characteristics of Reptilia and classify up to order. 10

PART - B - DESCRIPTIVE

Write notes on the following:

5+5=10

- (a) Flight adaptations in birds
- (b) Migration in birds
- 5. Give the general characteristics of . Litertheth. OI Mammalia.

Write an account on the affinities of Prototheria. mell la sonsinencia le mara

01=9+1

dandy, to grandle as a standardina surply of heating of which
The part of the same of the sa
(a) Vertebrata (b)
(FYUGP)
(3rd Semester) (and Semester)
(c) Cephalochordata YDOLOOX xxxxxxxx (a)
(d) Urochordata (p) (SOMIM)
Paper Code: ZOO/M3
is babulary (Diversity of Chordates) and to dain'W .E
Paytum Chordata?
(PART: A—OBJECTIVE)
( Marks . 20 )
The figures in the margin indicate full marks for the questions
(c) Cephalochordata I—noitoaza
(d) Echinodermata (51; shrpm)
Put a Tick (✓) mark against the correct answer in the brackets provided:  1×15=15
1. Which of the following is a characteristic of
cephalochordates?  (a) an extinct protochordate (b)
(a) Absence of post-anal tail
(b) Presence of backbone (b)
(c) Persistent notochord throughout life ( )
(d) Sessile adult stage (cest) (d) (d) (d) (d) (d) (d)
Bs/ZOO/M3/129 [ [3 ]   QCI \SM [ P.T.O. 8

		phylum?	orphosis is a	feature of which
	(a)	Vertebrata	2025 ( ) (FYUGP)	
	(b)	Hemichordata		
	(c)	Cephalochordata		
	(d)	Urochordata	(MOKIM)	
		)/M3	sper Code: ZOC	q
3.	Wh:	ch of the followir lum Chordata?	ng subphyla is	
	(a)	Hemichordata		
247	(b)	Urochordata	rgm indiktes),ii	The figures in the ma
	(c)	Cephalochordata	ECTON-	
	(d)	Echinodermata	Marks; J.5	
	Erk			Pur a Tick (*) mark brackets provided :
4. ′	The	term 'dipleurula'	refers to	edr jo visidwy i
	(a)	an extinct protoc	hordate (	cephalochordates
	<i>a</i> \			1 jaj Abscace of p
	ъ) :	a larval form of e	chinoderms	(b) Presince of
(	(c) a	an adult cephaloc	chordate odoo:(	ns v <b>)</b> eteranos (cylistic
(0	d) a	vertebrate ance	stor (Ale)	(d) Sessife editi
Bs/Z00	O/M3	3/129	[ [46]	Bs/ZOO/M3/129

313, 121	vertebrates?
(a)	Brain Bony skeleton ( ale) prosty ( ale)
(b)	Notochord ( ) ordesignous skeleto ( ) ()
(c)	Pharynx ( ( ) ) inserting reliable to (e)
(d)	Endostyle ( ) ) stressing mathropol (b)
<b>6.</b> Me	mbers of Agnatha are also known as an abidw .e
(a)	gnathostomes ( ) aiguir (3)
(b)	jawless vertebrates ( ) and (d)
(c)	protochordates ( ) seahorse (Hippocantins)
(d)	amniotes ( ) ( ) nomina (b)
Ost	ich of the following fishes belongs to the class ceichthyes?
(a)	Scoliodon ( ) ( ) ( )
	Trygon ( )
(c)	(c) it shows prindfive repulled features unchan over millions of years ( , ) , osdal
(d)	Torpedo (()) the interpretates annually (())
Bs/Z00/1	M3/129 [ 5 ] est(cm)([P.T.O.

Chondrichthyes?
(a) Bony skeleton ( ) ( ) ( ) ( ) ( )
(b) Cartilaginous skeleton ) ( ) rodocioli (d)
(c) Air bladder present (())
(d) Operculum present ( () ) elyzobra (b)
9. Which fish shows male parental care by brood pouch?
(a) gnathostomes ( ) see aigaliT (a)
(b) jawless vertebrates (d)
(c) Seahorse (Hippocampus)
(d) Salmon ( ) ( ) setoinme (b)
10. Sphenodon is often called a 'living fossil' because
(a) it is extinct (b) it has mammalian forty
(b) it has mammalian features (c) it shows primitive as the
(c) it shows primitive reptilian features unchanged over millions of years
(d) it migrates annually (()) obsquot (b)
Bs/Z00/M3/129 [6] QSI\EM\OOS\#8

11. Archaeopteryx is considered a connecting link between
(a) amphibians and reptiles mol class (b)
(b) birds and reptiles ( )
(c) mammals and birds ( )
(d) fishes and amphibians of different species from a continuo (a)
ancestor ( )
12. The venom in snakes is produced by
(d) sudden extinction ( ) sugnot (a)
(b) salivary glands ( )
(c) maxillary glands ( )
15. The Australian realm is unique for the presence (b)
(a) placental mamraals ( )
13. Which order includes egg-laying mammals?
(b) marsupials and mor(otre)nes ailaiqueram (d)
(b) Placentalia ( )
(c) Prototheria ( )  (c) Prototheria ( )
(d) Carnivora ( ) ( ) sətalugnu (b)
Bs/ZOO/M3/129 [ 7 ] @EI\EM\C[P.T.O.

14.	The	term 'adaptive radiation' refers to unsupposition'. If
	(a)	adaptation to temperature bus some (1814) demas (19)
		(b) birds and reptiles (mag) as equipment
	(b)	radiation energy in organisms ()  ship (()) ship bus element (2)
	(c)	evolution of different species from a common ancestor ( )
. P.	Win	13. The venom in shakes is produced by
	(d)	sudden extinction ( ) eugnot (a)
	W.	(b) selivary glands ( ), herebuch
	li aji	(c) maxillary glands and any and seronard
15.	The	Australian realm is unique for the presence of
** ***	(a)	placental mammals ( )
		13. Which order includes egg-leying mammals?
		marsupials and monotremes Bild(que) am (p)
		(b) Placentalle ( )
	(c)	large primates ( )
	(d)	ungulates (i.e.) (iii) is successed (b)
Bs/70	O/M	3/129 [ 8 ] PSINGM GOSVA

SECTION TO I BLOOM DVISSOR OF THE SECTION TO I BE SECTION TO I

( Marks: 10 )

Write short notes on any five of the following:  $2\times5=10$ 

1. Cephalochordata

## 2. Retrogressive metamorphosis

( Marks: 10)

Write short notes on any five of the following reals 2x5=10

- 1. Cephalochordata
- is codiation carry in organical
- And the commence of Albertain parties which have been such
- A the same

18. The As Seven

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State State

3. Agnatha

4. Osmoregulation in fishes

## 4. Osmoregulation in fishes

5. Archaeopteryx amount of the vinite restaments.

6. Mammalian affinity with Prototheria

7. Osmoregulation

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