



B. Sc. (Zoology) Semester - IV

Paper – I

(Life and Diversity of Animals-Chordates Reptilia, Aves and Mammals)

Unit 1

1.1 **Reptilia**- Classification based on temporal vacuities

<https://youtu.be/1FmaT5XVz68?si=ZRWqybbba6O0KKhfV>

1.2 Poison apparatus, biting mechanism , snake venom and its importance

<https://youtu.be/3cJxI1D19Dk?si=gDK3jHqXffWd05SX>

https://youtu.be/jLW6fr2BXb0?si=Cmn6vDWa_hUPnYfh

1.3 **Aves** – Comparison of Ratitae and Caranitae, Flight adaptations and migration

<https://youtu.be/ubKIaFZNoM4?si=DlvQOGesaPmA4Drv>

<https://youtu.be/PmBIH23QJi0?si=JnBkXxkdZYwGKSGf>

<https://youtu.be/sazLRiTvk4?si=F6rPRGW99ptvm2o4>

https://youtu.be/BXBKO4cD6NE?si=33N_xBzU8vSj6Ydk

1.4 **Mammals** – General characters of Prototheria, Metatheria and Eutheria

https://youtu.be/jTDOYalJbAk?si=gnWcdx_5eaXqsl2C

https://youtu.be/Xr6QYx4qZ7g?si=JKStgmLNq_cIFFOE

Unit 2

Modern theories of evolution : Darwinism and Neo-Darwinism

<https://www.youtube.com/watch?v=5pzdId1DFs0&pp=ygU6TW9kZXJuIHRoZW9yaWVzIG9mIGV2b2x1dGlvbiA6IERhcnRhcndpbmlzSBhbmQgTmVvLURhcnRhcndpbmlzQ%3D%3D>

<https://www.youtube.com/watch?v=bPLD3hSTDeI&pp=ygU6TW9kZXJuIHRoZW9yaWVzIG9mIGV2b2x1dGlvbiA6IERhcnRhcndpbmlzSBhbmQgTmVvLURhcnRhcndpbmlzQ%3D%3D>

<https://www.youtube.com/watch?v=bPLD3hSTDeI&pp=ygU6TW9kZXJuIHRoZW9yaWVzIG9mIGV2b2x1dGlvbiA6IERhcnRhcndpbmlzSBhbmQgTmVvLURhcnRhcndpbmlzQ%3D%3D>

<https://www.youtube.com/watch?v=bPLD3hSTDeI&pp=ygU6TW9kZXJuIHRoZW9yaWVzIG9mIGV2b2x1dGlvbiA6IERhcnRhcndpbmlzSBhbmQgTmVvLURhcnRhcndpbmlzQ%3D%3D>

Adaptations – Cursorial, Aquatic, Terrestrial, Fossorial and Volant

<https://www.youtube.com/watch?v=z3-RjM88FNA&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=z3-RjM88FNA&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=z3-RjM88FNA&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=z3-RjM88FNA&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=z3-RjM88FNA&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=z3-RjM88FNA&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=z3-RjM88FNA&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=z3-RjM88FNA&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=z3-RjM88FNA&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=UXiWK-Kdfa8&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=UXiWK-Kdfa8&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=UXiWK-Kdfa8&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=UXiWK-Kdfa8&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=UXiWK-Kdfa8&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=UXiWK-Kdfa8&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=UXiWK-Kdfa8&pp=ygVFQWRhcHRhdGlvbnMg4oCTIEN1cnNvcmlhbCwgQXF1YXRpYywgVG9yVzdHJpYWwIEZvc3NvcmlhbCBhbmQgVm9sYW50>

<https://www.youtube.com/watch?v=k3dRmDFY4bc&pp=ygUMUmFjZXMgaW4gTWFu>



Unit –III

3.1 Comparative account of aortic arches and heart in Reptiles, Birds and Mammals

<https://youtu.be/453OVTUK3aE?si=ZTbHquqMRxveoUKJ>

<https://youtu.be/A7qhhUgOYKI?si=6K7LMmDQmTGxsHyk>

<https://youtu.be/r2j9T93Yq70?si=hDT4dXJsahsrSllg>

3.2 Structure of hen's egg

<https://youtu.be/kHSRW5pX2po?si=kdAwksxW8uZQtnbK>

3.3 Development of chick up to primitive streak stage

https://youtu.be/rkqR823vmHw?si=kguXH_ry8Ix8owiJ

3.4 Development of extra embryonic membranes in chick and function

<https://youtu.be/3TASWBfBeAw?si=OCGKQKI-ABynjDtQ>

Unit –IV

4.1 Blastocyst and implantation in Mammals; Types of placenta on the basis of morphological and histological structure; functions of placenta

<https://youtu.be/phB64kTQCRo?si=pYzOod1Y1g4aMxjc>

<https://youtu.be/sbZY1PNYKR?si=lmWKdTp6pxwFJq5v>

<https://youtu.be/pg7yOt1b1Go?si=gMwTexekutHkoBzY>

4.2 Stem cells : Sources, types and their use in human welfare

<https://youtu.be/0rCoiqDUSjY?si=PF8fNRaEhYIZUgYc>

<https://youtu.be/936WkmwRiDw?si=nxx13N2ag8rc5vfA>

https://youtu.be/93Y7Ob0PmlU?si=ky3GdibHGwft_bUD

4.3 Biological clock : Diurnal and rhythmic behavior in birds and mammals

https://youtu.be/v_gftlEZijw?si=LipCEZP1oFFzRaCA

https://www.youtube.com/watch?v=_5jRed28BYY&pp=ygVVGQmlvbG9naWNhbCBjbG9jayA6IERpdXJuYWwgYW5kIHJoeXRobWljIGJlaGF2aW9yIGluIGJpcmRzIGFuZCBtYW1tYWxzIA%3D%3D

<https://www.youtube.com/watch?v=52Hn5hkFNZ8&pp=ygVVGQmlvbG9naWNhbCBjbG9jayA6IERpdXJuYWwgYW5kIHJoeXRobWljIGJlaGF2aW9yIGluIGJpcmRzIGFuZCBtYW1tYWxzIA%3D%3D>

4.4 Role of pheromones in reproductive behavior

<https://www.youtube.com/watch?v=IXmADH7tm18&pp=ygUrUm9sZSBvZiBwaGVyb21vbWVzIGluIHJlcHJvZHVjdG12ZSBiZWVhdmlvcg%3D%3D>

<https://youtu.be/8KdzicTkPpY?si=RjlzQy4RPP8uU5mm>