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SUBJECT CODE NO: - SS-6521
FACULTY OF SCIENCE AND TECHNOLOGY
M.Sc. (Zoology) (Sem-IV)
Examination May / June - 2023
Evolution and Behaviour ZOO-401

[Time: 3:00 Hours]

[Max. Marks: 80]

Please check whether you have got the right question paper.

N. B

- i) All questions carry equal marks
- ii) Draw well labelled diagram whenever necessary

PART – A

Q.1 Attempt the following multiple-choice questions.

20

- i) The force that initiates evolution is _____.
 - a) Variation b) Mutation c) Extinction d) Adaptation
- ii) Which condition can be explained by Lamarekism?
 - a) How giraffes got their long neck
 - b) How human lost their tail
 - c) How humans become bipedal
 - d) All of the above.
- iii) An example of convergent evolution is _____.
 - a) Wing of Hawkmoths, the wing of Hawks
 - b) Teeth of domestic dog, teeth of a wolf.
 - c) Wings of Geospiza magnirostris, wings of G. fortis.
 - d) None of the above.
- iv) Being able to adapt to change in the environment is refferd to as what?
 - a) Natural selection b) evolution c) Versatility d) survival of fittest
- v) Mutations is change in _____.
 - a) Behaviour b) DNA c) Bones d) wings
- vi) _____ Are the all alleles of the populations are genes?
 - a) Allelic Frequency b) Gene pool c) Genetics d) Equilibrium.

- vii) _____ are the types of Natural selection.
- Stabilizing selection
 - Directional selection
 - Disruptive selection
 - All of these
- viii) Fission-fusion social groups are characteristic of _____
- colobus monkeys
 - chimpanzees.
 - Ring-tailed lemurs
 - orangutans
- ix) The reproductive organs of Osteichthyes are called _____, and the sperm/egg cells are the _____
- Testes: sex cells
 - Gonads: sex cells
 - spawning: Gonads
 - sex cells: Gonads
- x) The modern approach to studying primate behaviour involves _____.
- studies carried out on primate groups in zoos.
 - observing primates in laboratory settings.
 - studies of primates social groups in natural.
 - Random Selection of primate groups for observation.

PART 'B'
(Attempt any five)

- Q.2** Describe the concept of evolution & theory of Darwinism. **12**
- Q.3** What are the patterns of change in nucleotides and amino acid sequences. **12**
- Q.4** Write the mechanism of evolution of genes families. **12**
- Q.5** Describe the concept, scope & limitation of ethology. **12**
- Q.6** Give an account on mating and courtship behaviour in primates. **12**
- Q.7** Explain reproductive behaviour in fish. **12**
- Q.8** Write a note on following (any two) **12**
- Pheromones in behaviour
 - Allopatric speciation
 - Mimicry and coloration