Maximum: 75 Marks

PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022

(Fourth Semester)

Branch - ZOOLOGY

EVOLUTION

Time: Three Hours

SECTION-A Answer **ALL** questions **ALL** questions carry **EQUAL** marks $(10 \times 1 = 10 \text{ Marks})$ 1 What is the another name given to abiogenesis? (i) biogenesis (ii) Spontaneous generation (iii)coacervation (iv) organic evolution 2 Who said that Evolution is Decent with modification? (i)Herbert Spencer (ii) Darwin (iii) Huxley (iv) lamark 3 Which era was known as Golden age of Reptiles? (i) mesozoic era (ii) coenozoic era (iii) azoic era (iv) cryptozoic era 4 Name the modern theory of natural selection. (i) neo-darwinism (ii) speciation (iii) coacervation (iv) neo-Lamarckism 5 Which is the main raw material for evolution. (i) genetic drift (ii) neo lamarkism (iii) isolation (iv) variation Instantaneous speciation is also called as ----6 (i) sudden speciation (ii) phyletic speciation (iii) allogenous (iv) autogenous 7 Darwin finches shows -----. (i) adaptive radiation (ii) atavism (iii)convergent evolution (iv) connecting link 8 Marsupials are very good example for ----. (i) Convergent evolution (ii) parallel evolution (iii) atavism (iv) adative radiation 9 Choose the written documents of evolution. protocell (ii) moths (iii) finches (iv) fossils 10 Name the first true man. (ii) Australo pithicans (i) ape man (iii) Homo erectus (iv) Rama pithicans

SECTION - B (35 Marks)

Answer ALL Questions ALL Questions Carry EQUAL Marks (5 x 7 = 35)

11 a Explain in detail about the biogenesis.

(OR)

- b Summarise the physiological evidences for evolution.
- 12 a Narrate the industrial melanism.

(OR)

- b Explain the Lamarckian principles.
- 13 a Compare allopatric speciation and sympatric speciation.

(OR)

- b Comment on ecological isolation.
- 14 a Outline the Convergent evolution.

(OR)

- b Bring out the parallel evolution with suitable examples.
- 15 a Discuss the various phases of cultural evolution of Man.

(OR)

b Compare Eohippus and Equus in Horse evolution.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks $(3 \times 10 = 30)$

- 16 Summarise the molecular evolution of life.
- 17 Enumerate the principles of Natural selection theory.
- 18 Discuss the various sources of Variations.
- Discuss the causes and significance of adaptive radiation.
- Explain in detail about the milestones of cultural evolution of Man.

END