

<b>PRN. No.</b>		
<b>Seat No.</b>	<b>Student's Signature</b>	<b>Supervisor's Sign</b>

**SHIVAJI UNIVERSITY, KOLHAPUR**

**B.Sc Part I (Sem II)**

**Examination Oct/Nov 2020**

**Subject: Zoology Paper III**

**(Cell Biology and Evolutionary Biology)**

**Subject Code: 72846**

**Day & Date: Saturday, 17/04/2021**

**Time: 2:30PM to 3:30 PM**

<b>Marks Obtained</b>	
<b>Max.Marks</b>	<b>50</b>
<b>Examiner's Signature</b>	

**Instructions: 1. All questions are compulsory**

**2. Each question carries 2 marks**

**3. Write the correct code of answer (A, B, C or D) in the box provided**

**In front of each question.**

Q. 1 The prebiotic earth in the beginning was-----

A. Marshy B. Gaseous C. Sandy D. Rocky

Q.2 The first compound microscope was built by -----

A. Galileo B. Robert Hook C. Leeuwenhoek D. Loewy

Q.3 ----- of the following gas was absent in the reducing environment of Earth.

A. Hydrogen B. Oxygen C. Ammonia D. Nitrogen

Q.4 The cell theory was formulated by-----

A. Leeuwenhoek B. Galileo C. Robert Hook D. Schleiden & Schawnn

Q.5 Use and Disuse theory of organic evolution was put forth by -----

A. Darwin B. Wallace C. Lamarck D. De Vries

Q.6 Smallest cell belongs to the genus-----

A. Mycoplasma B. Amoeba C. Ascaris D. Asterias

Q.7 The theory of Inheritance of acquired characters for the organic evolution is also called as-----

A. Mutation theory B. Natural selection theory

C. Neo-Darwinism theory D. Use and Disuse theory

Q.8.----- is called as heart of the cell.

A. Nucleus B. Mitochondria C. Golgi bodies D. Ribosomes

Q.9 Fossilised foot prints are the types of-----

A. Petrification B. Ichnofossils C. Casts D. Moulds

Q.10 The outer and inner membrane of the nucleus are separated by -----

A. Perinuclear chromatin B. Internucleolar chromatin

C. Perinuclear space D. Nuclear envelope

Q.11 Vishnu rock is a name given to a rock layer, which is found in -----

A. Badrikedar B. Grand canyon (U.S.A.) C. Gangotri D. Kailas

Q.12 ----- are filamentous or thread like or rod shaped bodies present in the nucleus.

A. Nucleous B. Chromosomes C. Genes D. Mitochondria

Q.13 The term great dying is used for -----

A. Permian-Triassic extinction B. Devonian extinction

C. Extinction dinosaurs D. K-T extinction

Q.14 Chromosomes were 1<sup>st</sup> time observed by-----.

A. Waldeyer B. Anthony C. Michaelis D. Hofmeister

Q.15 Deccan trap formation is supposed to be due to-----

A. Earthquake B. Storms C. Tsunamies D. Flood basalt lava

Q.16 ----- chromosomes exhibit swelling (puffs).

A. Salivary gland B. Malpighian tubules C. Gut cells D. All of these

Q.17----- The early cell types which were formed on the earth are-----

A. Aerobic, Autotrophic B. Anaerobic, Autotrophic

C. Anaerobic, Heterotrophic D. Aerobic, Heterotrophic

Q.18 ----- number of chromosomes are present in human.

A. 44 B. 45 C. 46 D. 23

Q.19 ----- of the following gave experimental proof to the theory of chemical evolution.

A. Lamarck B. Mendel C. Darwin D. Stanley Miller

Q.20 Presence of whole set of chromosomes is called----

A. Haploids B. Euploidy C. Triploids D. Diploids

Q.21 Which of the following energy source was not available in prebiotic atmosphere.

A. UV radiation B. ATP

C. Lightning D. Radiation heat from centre of the earth

Q.22 Nuclear membrane is made up of-----membranes

A. One B. Three C. Four D. Two

Q.23 The plant *O. lamarkiana* was studied by-----

A. Lamarck B. Mendel C. De Vries D. Darwin

Q.24 ----- is the membrane bound cell organelle, having the genetic material and various proteins.

A. Lysosome B. Endoplasmic reticulum C. Nucleus D. Ribosomes

Q.25 Darwin's finches are found on-----

A. Andman island

B.Nicobar island

C. Sri lankan island

D..Galapgos island

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Q.1 Which of the following appear L shaped and have two unequal arms.

A. Metacentric B. Acrocentric C. Sub metacentric D. Telocentric

Q.2 Radioactive carbon  $^{14}\text{C}$  decays into----

A. Nitrogen B. Cobalt C. Calcium D. Uranium

Q.3 Each chromosome consist of two symmetrical spirally coiled and filamentous structure called as -----

A. Telomere B. Chromomeres C. Chromatids D. Centromeres

Q.4 In igneous rock generally which one of the following is not found?—

A. Strontium B. Uranium C. Potassium D. Radioactive carbon

Q.5----- is the basic structural and functional unit of all living organisms.

A. Tissue B. Organ C. Cell D. Bone

Q.6 The theory of Natural selection for organic evolution put forth by----

A.Darwin B.Lamarck C.Mendel D.De vries

Q.7 ----- are two units of measurement of cell sizes

A.Milligram and Microgram B. Microgram and Kilogram

C. Micron and Angstrom D. Meter and Kilometer

Q.8 Asteroid impact theory for K-T mass extinction is put forward by-----

A. Alvarez B.Mendel C. Darwin D.Wegner

Q.9. Which of the following organelle shows extracellular digestion?.

A. Mitochondria B. Nucleus C.Endoplasmic reticulum D.Lysosome

Q.10 Which of the following theories explain the origin of life----

A.Theory of special creation B.Theory of Panspermia

C Theory of Chemical evolution D.All of these

Q.11 ----- organelle play important role in the formation of acrosome during spermiogenesis.

A. Nucleus B.Golgi bodies C. Mitochondria D. Endoplasmic reticulum

Q.12 Spark discharge apparatus was used to conduct experiment of-----

A.Darwin B.Mendel C.Oparin-Haldane D.Lamarck

Q.13 The fluid mosaic model of plasma membrane was proposed by ----

A.Robert Hook B. Mendel C. Cook D. Singer and Nicolson

Q.14 Which of the following represent example of Lamarckism---

A.Evolution of Giraffe B.Evolution of Snakes

C.Vestigial organs in Human D.All of these

Q.15 ----- are referred as power house of the cell.

A. Lysosome B.Mitochondria C. Golgi bodies D. Nucleus

Q.16 Which of the following points were put forth by Charles Darwin in his theory of “Natural selection”---

- A.Struggle for existence      B.Prodigality of Production  
C.Survival of the fittest      D.All of these

Q.17 ----- is called as suicide bag.

- A.Lysosome    B.Mitochondria    C.Chloroplast    D.Golgi bodies

Q.18 The place “Chicxulub” is famous for-----

- A.Mountain    B. Crater    C. River    D.Valley

Q.19 Which of the following organelle is referred as heart of the cell?

- A.Nucleus    B.Mitochondria    C.Golgi bodies    D.Ribosomes

Q.20 The dinosaurs ruled the earth during period-----

- A.Cambrian    B.Permian    C.Jurassic    D.Devonian

Q.21 Condition in which the chromosomes set are present in multiples of n is called as -----

- A.Aneuploidy    B.Polyploidy    C.Triploidy    D.Tetraploidy

Q.22 “Mutation theory” was put forth by-----

- A.Darwin    B.Hugo De Vries    C.Lamarck    D.Miller

Q.23----- is the formation of one or more new species from an existing species

- A.Adaptation    B.Evolution    C.Speciation    D.Specification

Q.24 ----- is main center of RNA synthesis.

- A.Mitochondris    B.Nucleolus    C.Centrosome    D.Cytoplasm

Q.25----- is the connecting link between reptiles and Aves

- A.Wooly mammoth    B.Horse    C.Archaeopteryx    D.Giraffe

