



AAI-003-001633 Seat No. _____

Third Year B. Sc. (CBCS) (Sem. VI) Examination

April / May - 2016

Microbiology : MB - 603

(Environmental Science) (New Course)

Faculty Code : 003

Subject Code : 001633

Time : $2\frac{1}{2}$ Hours]

[Total Marks : **70**

Instructions :

- (1) All questions are compulsory.
- (2) Figures on right side indicate marks.

SECTION - I

1 MCQS : **20**

- (1) The full form of BNHS is
 - (A) Bombay Natural History Society
 - (B) Biology and Nuclear Hazards in System
 - (C) Biological Neighbourhood Sustainance
 - (D) None

- (2) The following is not Natural Resource.
 - (A) Water
 - (B) House
 - (C) Metals
 - (D) Soil

(3) Black Lung Disease is found in workers working in
(A) Airforce (B) Mines
(C) Industry (D) None

(4) Ideally the following is the % of forests which should be in India.
(A) 10% (B) 60%
(C) 50% (D) 33%

(5) Some species if eliminated, seriously affect ecosystem.
(A) Keystone species (B) Milestone species
(C) Native species (D) None

(6) Islands are considered as
(A) Aquatic ecosystem (B) Terrestrial ecosystem
(C) A & B both (D) None

(7) Herbivores are food for
(A) Nectarivores (B) Frijuvores
(C) Carnivores (D) None

(8) Nitrogen gas is converted into water soluble nitrate in the soil by ?
(A) Protozoa (B) Nematodes
(C) A & B both (D) Bacteria

(9) The total number of known and documented species by the scientists in the world is

(A) 1.8 million (B) 2.8 million
(C) 4.8 million (D) None

(10) The following is formed due to diversity of wild species and from which agricultural crops and domestic animals have been developed.

(A) Variation (B) Gene pool
(C) Breeding (D) None

(11) The richest, rarest and most distinctive natural areas of earth's biodiversity are called

(A) Global 1000 (B) Global 470
(C) Global 200 (D) None

(12) Important Endangered animals are charismatic species such as

(A) Lion, Pig and Leopard
(B) Buffalo, bear and elephant
(C) Lion, Zebra and deer
(D) Tiger, elephant and Rhino

(13) The exposure to air containing the following amount of carbon monoxide for several hours can cause collapse, coma and even death

(A) 0.001% (B) 0.005%
(C) 0.08% (D) None

(14) The human eardrum can be physically ruptured by sound level of

(A) 300 dBA (B) 150 dBA
(C) 170 dBA (D) None

(15) The following factors help in minimizing air pollution.

(A) Soil quality and fertility
(B) Length and course of river
(C) Topography and wind directions
(D) None

(16) A major air pollutant remains largely unmaintained and emitted by vehicles is

(A) NH_3 (B) Ozone
(C) CFC_s (D) Lead

(17) The Wild Life Protection Act was passed in India in

(A) 1972 (B) 1978
(C) 1965 (D) 1981

(18) Ozone layer depletion is detected in

(A) Japan and Russia (B) Antarctica and Australia
(C) U.K. and Korea (D) None

(19) The diseases caused by following vectors increase due to climate change.

(A) Rhodants (B) Moths
(C) Mosquitoes and ticks (D) None

(20) The Global average surface temperature has increased by the following over the last century.

(A) $0.8^\circ + 0.2^\circ C$ (B) $0.6^\circ + 0.2^\circ C$
(C) $0.5^\circ + 0.5^\circ C$ (D) $1.2^\circ + 0.5^\circ C$

SECTION - II

2 (a) Answer specifically (Any 3 out of 6) : 06

(1) What is mine safety ?
(2) What is lithosphere ?
(3) What is Biomass energy ?
(4) Enlist components of ecosystem.
(5) What are different parts separated at subglobal level of earth's entire ecosystem ?
(6) What happens if water cycle in ecosystem gets disturbed ?

(b) Answer specifically : : (Any three) **09**

- (1) What is deforestation ?
- (2) What is Nuclear Power ?
- (3) Discuss : Energy flow in ecosystem.
- (4) Discuss : food chain in ecosystem.
- (5) Describe : IPAS.
- (6) Write in detail : Hotspots of Biodiversity.

(c) Write short notes on : (Any two) **10**

- (1) Solar energy.
- (2) Forest Resources.
- (3) Carbon cycle in Nature.
- (4) Degradation of ecosystem.
- (5) India as a Mega Biodiversity Nation.

3 (a) Answer specifically (Any three) : **06**

- (1) Define : Biodiversity.
- (2) Give Biogeographic classification of Biodiversity regions in India.
- (3) Define : Noise pollution.
- (4) Enlist Air pollutants and their sources.
- (5) Define : Acid rain.
- (6) What is Nuclear Holocaust ?

(b) Answer specifically : (Any three) 09

- (1) What is Thermal pollution ?
- (2) What is vermi composting ?
- (3) Describe : soil profile ?
- (4) What is Global warming ?
- (5) What is ozone layer depletion ?
- (6) What is climate change ?

(c) Write short notes on : (Any two) 10

- (1) Endangered and endemic species of India
- (2) Causes of water pollution
- (3) Nuclear hazards
- (4) What can I do to protect environment ?
- (5) The Environment Protection Act.
