



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) Frugivores
- (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

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

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

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|-------------|-------------|
| (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 unmaintored and emitted by vehicles is

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

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

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|----------|----------|
| (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.
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