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Seat No:

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SARDAR PATEL UNIVERSITY
B.Sc V SEMESTER EXTERNAL EXAMINATION 2018
Subject/Course Code: US05CMIC05
Subject Title: Microbial Diversity and Ecology

Date: 1/11/2018

Time:10:00 A.M to 01:00 P.M.

Day: Thursday

Total marks:70

N.B: Figures on right indicate marks.

Q.1 Multiple Choice Questions [01-mark each]

[10]

1. Name the enzyme present in the HIV virus.....
a. Restriction endonuclease b. Reverse transcriptase c. Amylase d. Lipase
2. Full form of PSTV.....
a. Potato Spindle tuber viruses b. Plain super tumor viruses c. PSs tumor viruses d. Pure spindle tumor viruses
3. Gram positive filamentous bacteria.....
a. *Bacillus subtilis* b. *Serratia Spp* c. *E coli* d. *Sterptomyces griseus*
4. Family chlorofexaceae exhibitsmotility
a. Gliding b. Tumbling c. Brownian d. Swimming
5. Root like aggregation of somatic hyphae is called
a. Plectenchyma b. Prosenchyma c. Rhizomorph d. None of the above
6. The presence ofin the atmosphere is inhibitory to lichens
a. SO₂ b. CO₂ c. NO₂ d. PO₂
7.is used in baking and brewing industries.
a. *Serratia spp.* b. *Neurospora Spp.* c. *Saccharomyces cerevisiae* d. *Staphylococcus spp.*
8.are produced with the sac like structure in fungi
a. Chlamyospore b. Sporangiospore c. Conidiospore d. Arthrospore
9. The central pore of septa in basidiomycetes bear a pore cap which known as
a. Membrane b. Chromosome c. none of these d. Parenthosome
10. The color of aerobic anoxygenic phototropic bacteria determined by.....pigment.
a. Carotenoid b. Chromophore c. BChl d. none of these

Q.2 Give short answer of the following [Answer any ten]

[20]

- [1] Give the example of disease caused by Prion.
- [2] Draw neat and label diagram of HBV.
- [3] Define ecology and ecosystem.
- [4] Define mycorrhizae and rhizosphere effect.
- [5] Enlist types of Hepatitis viruses.
- [6] What is importance of *Claviceps purpurea* ?
- [7] What is Pseudoparenchymal ?
- [8] What is difference between archaeobacteria and eubacteria ?
- [9] What is eucarpic fungi ?
- [10] Name the cells that are infected by HIV in human body.
- [11] How Does *Rickettsia* differ from chlamydia ?
- [12] What is plasmodium ?

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[P.T.O.]

Q.3 Write short note on:
[a] Mode of nutrition in fungi [05]
[b] Economic importance of fungi [05]

OR
Q.3 Explain asexual reproduction in fungi [10]

Q.4 [a] Describe the morphology of HIV with neat & label diagram. [05]
[b] Discuss one step growth experiment. [05]

OR
Q.4 [a] Write short notes on "POX Viruses" [05]
[b] Write briefly about virioids with suitable example. [05]

Q.5 Write notes on following
[a] Actinomycetes [05]
[b] Characteristic genera spirochaetes [05]

OR
Q.5 Write notes on following
[a] Extreme halophiles and thermoacidophiles [05]
[b] Mycoplasma [05]

Q.6 Discuss in detail about commensalistic relationship among organism with suitable example. [10]

OR
Q.6 Write notes on following
[a] Parasitism [05]
[b] Mutualism [05]

