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Seat No : _____

No. of Printed Pages : 02

SARDAR PATEL UNIVERSITY

S. Y. B.Sc. 3RD SEMESTER EXAMINATION

27th November, 2019, Wednesday

Ecology and Water Resource (US03CENV22)

Total Marks: 70

Time : 02.00 PM to 05.00 PM

Q.1 Write the correct answer in given answer sheet

(10)

1. _____ pyramid indicates low percentage of young individuals.
(a) Bell-shaped (b) Urn-shaped (c) Broad base (d) Round shape
2. _____ is the theoretical maximum production of new individuals under ideal condition.
(a) Maximum natality (b) Ecological natality (c) Specific density (d) Realised natality
3. The directional change in community development with time is called _____.
(a) Competition (b) Stratification (c) Procession (d) Succession
4. The plant whose buds are situated 30 meter high up on plants are called _____ phanerophytes
(a) Mega (b) Meso (c) Micro (d) Nano
5. _____ is the general appearance of vegetation determined by growth form of dominant sp.
(a) Physiognamy (b) Phenology (c) Abundance (d) Vitality
6. Melting point of water is _____ °F
(a) 26 (b) 28 (c) 30 (d) 32
7. Occurrence of Azonal groundwater is caused by _____ condition
(a) hydrogeological (b) physiological (c) meteorological (d) none of above
8. Ground water is accessed by _____.
(a) Drilling wells (b) Drip irrigation (c) Check Dams (d) Canals
9. On _____ river sardar sarovar dam has been constructed.
(a) Mahi (b) Sabarmati (c) Tapi (d) Narmada
10. _____ river is called as Dakshin Ganga.
(a) Krishna (b) Mahanadi (c) Kaveri (d) Ymuna

(20)

Q.2 Answer in brief (Any 10)

1. Explain crude density and specific density.
2. Enlist population characteristics.
3. Explain natality with its types.
4. Explain Phenology
5. Draw Raunkier's Normal Biological spectrum
6. What is Ecological succession ?
7. Enlist factors affecting infiltration
8. Discuss Atmospheric Water
9. Which are the types of Runoff?
10. Explain factors affecting water demand.
11. What is integrates water resource management?
12. What are aquifers?

(1)

(P.T.O)

- Q.3 (a) Explain age structure and draw the hypothetical diagram showing different types of age group. (06)
(b) Write a note dispersion pattern in population. (04)

OR

- Q.3 (a) Describe different types of survivorship curves on the basis of survivors and age. (06)
(b) Discuss regulation of population density. (04)

- Q.4 (a) Discuss the Qualitative characters of Community (06)
(b) Write the Physiognamic methods for studying community (04)

OR

- Q.4 (a) Write the Quantitative characters of community (06)
(b) Explain The Quadrat method in detail (04)

- Q.5 (a) Discuss Evaporation in detail (06)
(b) Write a note on water table (04)

OR

- Q.5 (a) Explain water cycle with appropriate diagram (06)
(b) Which are the forms of Precipitation? (04)

- Q.6 (a) Write in detail about any six hot spots of surface water. (06)
(b) Describe causes depletion of ground water resources. (04)

OR

- Q.6 (a) Discuss the need of water conservation and write about rain water harvesting. (06)
(b) Write about the management aspect of integrated water resource management (04)