SECOND YEAR T. D.C.SCIENCE, 2018-19

ENVIRONMENTAL SCIENCES

PRACTICALS

| Duration: 5 Hrs. | | | M.M.:75 |
|------------------|----------------|---------|--------------|
| | | Regular | Ex- Students |
| | | | |
| 1. | Major Exercise | 15 | 25 |
| 2. | Major Exercise | 15 | 15 |
| 3. | Minor Exercise | 10 | 08 |
| 4. | Spots | 20 | 20 |
| 5. | Viva – Voce | 10 | 10 |
| 6. | Record | 05 | |
| | Total : | 75 | 75 |

SECOND YEAR T. D.C.SCIENCE, 2018-19

ENVIRONMENTAL SCIENCES

PRACTICALS

Duration: 5 Hrs. M.M.:75

- 1. Measurement of depth of visibility in a lake or pond with the help of a Secchi disk.
- 2. Studies of water samples for:
 - i) pH
 - ii) Dissolved oxygen
 - iii) Alkalinity
 - iv) Total hardness
 - v) Chlorides
 - vi) Dissolved organic matter
 - vii) Suspended particulates
- 3. Observation of zooplanktons and phytoplankton, benthos, nektons and macrophytes.
- 4. Estimation of primary productivity with the help of dark and light bottle experiment.
- 5. Sampling equipments.
- 6. Analysis of vegetation by line transect method.
- 7. Determination of cover in a grassland community with the help of chart quadrat method.
- 8. Determination of DBH of the tree species in a forest and calculation of the basal area.
- 9. Characteristic adaptation of animals of ecological significance.
- 10. Morpho anatomical characteristics of hydrophytes and xerophytes.
- 11. Study of primary productivity (in terms of chlorophyll) in relation to light.
- 12. Study of animal communities in a terrestrial ecosystem.

SECOND YEAR T. D.C.SCIENCE, 2018-19

ENVIRONMENTAL SCIENCES

BOOKS RECOMMENDED:

- P.D.Sharma: Ecology and Environment, Rastogi Publications, Meerut.
- 2 R.S.Ambasht: Ecology
- 3 Verma and Agarwal: Environmental Biology. S.Chand and Co. Ram Nagar, New Delhi.
- 4 V.B.Rastogi: Animal Ecology, Kedarnath Ramnath, Meerut.

PRACTICAL:

J. Pandey and M.S.Sharma: Environmental Science: Practical and Field Manual, Yash Publications, Bikaner.