2022

M.Sc.

2nd Semester Examination (CCAE)

ZOOLOGY

PAPER—ZOO-295

(*Practical*)

ECOLOGICAL PRINCIPLES, BIOCHEMISTRY & FIELD STUDY

Full Marks : 50

Time : 5 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

1. (a) Draw a colorful community map for grassland with 5 plant species (p, q, r, s, t) upon which draw 10 quadrats of 1 cm^2 size. Note the respective data occurrences from your random samples. Calculate the frequency and relative abundance of the given species as well as the Shanon wiener diversity index — stepwise, mentioning their formulae. Summarize your result.   5+3+2

(Turn Over)

(b) Write down the methodology of estimating the minimum number of quadrats for assessing community structure of a habitat through species area curve method.   5

2. Draw a standard curve from the given data set. Estimate the concentration of protein samples provided. Generate protein denaturation curve from the given sample. Draw and comment on your result.   3+5+5+2

3. Submission of field report.   10

4. Laboratory Note Book.   5

5. Viva-voce.   5

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