

U.G. 5th Semester Examination - 2021**BOTANY****[HONOURS]****Discipline Specific Elective (DSE)****Course Code : BOTH-DSE-P-02****[PRACTICAL]****(Stress Biology)**

Full Marks : 20

Time : 2 Hours

The figures in the right-hand margin indicate marks.

1. Answer any **one** of the following questions: 7
- a) If you got a stressed plant and asked to estimate proline content of the plant what procedure you will follow? If you got the following data from different dilutions of proline solution, then prepare a standard curve of the metabolite:

Concentration of protein (ppm)	OD at experimental wavelength
20	0.133
40	0.262
60	0.391
80	0.526
100	0.651

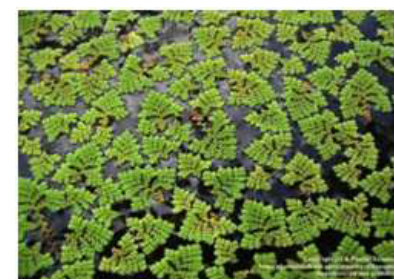
3+4=7
[Turn over]

- b) If you are asked to compare the catalase activities of two lots of seedling—one grown under salinity stress and other in normal unstressed condition, what would be your requirements? How will you extract the enzyme? After extraction what procedure you will follow to assay the enzyme? 2+2+3=7
2. Identify any one of the following plants and write its role in phytoremediation: 1+2=3

a)



b)



3. Laboratory Note Book 5
4. Viva voce 5