(6 pages) Reg. No.: Code No.: 30494 E Sub. Code: CABO 11 B.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2022. First/Third Semester Botany - Allied PLANT DIVERSITY AND MEDICINAL PLANTS (For those who joined in July 2017 onwards) Time: Three hours Maximum: 75 marks PART A — $(10 \times 1 = 10 \text{ marks})$ Answer ALL questions. Choose the correct answer. Common name of Polyporus is 1. Bracket fungi Cup fungi Wood fungi Rock fungi Phycoerythrin pigment is obtained from

Gracilaria

Oedogonium

Volvox

Caulerpa

Usnea is morphologically a Foliose lichen Crustose lichen Squamolose lichen (d) Fruticose lichen In Funaria, the antherozoids are aciliated bicilated multiciliated monociliated Which among the following is called the vascular cryptogams? Bryophyte Algae Pteridophyte Gymnosperm Turpentine is obtained from 6. Pinus Lycopodium Funaria Nostoc Cyathia inflorescence is commonly found in Poaceae (a) Rutaceae

Asclepiadaceae

Page 2 Code No.: 30494 E

Euphorbiaceae

- 8. Gland dotted leaves are the characteristic feature of
 - (a) Asclepiadaceae
- b) Rutaceae
- (c) Poaceae
- (d) Euphorbiaceae
- 9. Vincristine is obtained from
 - (a) Solanum torvum
 - (b) Papaver somniferum
 - (c) Catharanthus roseus
 - (d) Vetiveria zizanoides
- 10. Milagu is the tamil vernacular for the plant
 - (a) Coleus amboinicus
 - (b) Catharanthus roseus
 - (c) Phyllanthus amarus
 - (d) Piper nigrum

PART B - (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the asexual reproduction of volvox.

Or

(b) Highlight the economic uses of fungi.

Page 3 Code No.: 30494 E

12. (a) Examine the internal organization of the thallus of *Usena*.

Or

- (b) Analyse the internal structure of the sporophyte of Funaria.
- 13. (a) Describe the internal structure of leaf of Lycopodium.

Or

- (b) Highlight the internal structure of needle of *Pinus*.
- 14. (a) Identify the merits and demerits of Bentham and Hooker's system of classification.

Or

- (b) Write down the systematic position and key identification characters of Asclepiadaceae.
- 15. (a) List down the phytochemical constituents of *Piper nigrum*.

Or

(b) Evaluate the phytochemical compounds of Aloe Vera.

Page 4 Code No.: 30494 E

[P.T.O.]

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Examine the general characters of algae.

Or

- (b) Describe the vegetative structure of Polyporus.
- (a) Discuss the vegetative and asexual modes of reproduction observed in *Usnea*.

 Or
 - (b) Highlight the structural organization of the female gametophyte of Funaria.
- 18. (a) Write an essay on the general characters of Gymnosperms.

Or

(b) Describe the organization of Strobili in *Lycopodium*.

Page 5 Code No.: 30494 E

19. (a) Discuss, in detail, the salient features of Euphorbiaceae.

Or

- (b) Bring out the diagnostic features of Poaceae.
- 20. (a) Explain the botanical and pharmacological features of *Coleus amboinicus*.

Or

(b) Decipher the phytochemical constituents of Catharanthus roseus.

Page 6 Code No.: 30494 E