Reg. No…….. Name…… **18U649**

B.Sc. DEGREE END SEMESTER EXAMINATION MARCH 2018

SEMESTER **– 6: BOTANY (CHOICE BASED CORE COURSE)**

COURSE: **15U6CRBOT13EL: PHYTOCHEMISTRY AND PHARMACOGNOSY**

(For Regular - 2015 Admission)

Time: Three Hours Max. Marks: 75

PART A

I. Answer ***ALL*** questions; each question carries ***1*** mark.

1. What is an organoleptic part?
2. What is Ethnobotany?
3. Write down the scientific name of Pome-granate
4. Name any solvent used in solvent extraction process.
5. Name any one active principle seen in *Acorus calamus*.
6. Give the binomial of the plant from which Taxol is obtained.
7. What are secondary metabolites?
8. Expand HPLC.
9. What is Pharmacognosy?
10. What are Naphthaquinones? (1 x 10 = 10)

PART B

II. Answer ***ANY EIGHT*** questions; each question carries ***2*** marks.

11. Write down any two pharmacological action of *Datura stramonium?*
12. Mention any two properties of alkaloids
13. What is the use of Column Chromatography?
14. Compare the starch grains of Maize and Wheat
15. Write down any two diagnostic anatomical characters of the officinal part of *Kaempheria galanga*
16. What are Phenolics? Mention any two categories of Phenolics you have studied.
17. Write down any two phytochemical constituents seen in *Aloe vera*.
18. Give the binomial of Khus khus plant.
19. What is Rf value?
20. What is the pharmacological action of artimesinin? (2 x 8 = 16)

PART C

III. Answer ***ANY FIVE*** questions; each question carries ***5*** marks.

21. Explain how microscopy is useful in the detection of adulterants.
22. Explain the pharmacological action of *Adhatoda vasica* and mention any two ayurvedic formulations from it.
23. How HPTLC is different from TLC?

24. How phenolics are important in pharmacology?
25. Differentiate the starch grains seen in rice and potato.
26. Briefly explain the extraction of volatile oil from *Cymbopogon.*
27. What is Mass Spectrometry? Mention how it is used in characterization. (5 x 5 = 25)

PART D

IV. Answer ***ANY TWO*** questions; each question carries ***12*** marks

28. Explain the principle and applications of TLC and GC

OR

29. Describe the properties, occurrence, classification and functions of Triterpenoids.

30. Describe the organoleptic, anatomical, chemical evaluation and pharmacological action of *Papaver somniferum and Asparagus racemosus.*

OR

31. Explain the method of volatile oil extraction from *Syzygium aromaticum and Santalam album*

(12 x 2 = 24)

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