

Bot PG 4th Sem

PAPER-XVIII (ECONOMIC BOTANY, BIOSTATISTICS, EVOLUTION)

SHORT NOTES/ Short questions

1. Use of aromatic plants

- 2 Name the plants used as avenue trees for shade,, pollution control and aesthetics.**
- 3 What is Beverage? Give example.**
- 4 Write the scientific name and family of tea of Commerce.**
- 5 Name the major operations necessary for processing of black tea.**
- 6 What is Essential oil? Give an example.**
- 7 What is fatty oil? Give an example.**
- 8 What is drying oil? Give example.**
- 9 Give the scientific name and family of coconut.**
- 10 Write the scientific name and family of soybean.**
- 11 Give two uses of soybean oil.**
- 12 Give the scientific name and family of mustard.**
- 13 State two uses of mustard oil.**
- 14 Mention two uses of coconut oil.**
- 15 Distinguish between Timber and lumber?**
- 16 What is Silviculture?**
- 17 Give the scientific name and family of Sal.**
- 18 Give the scientific name and family of teak .**
- 19 What is wood?**
- 20 . What are sap wood and heart wood?**
- 21 Give the scientific name and family of cotton.**
- 22 What is lint?**
- 23 What is the scientific name and family of jute?**
- 24 What is the botanical name and family of plant yielding quinine?**

- 25 Give the scientific name of Cinchona and mention its parts used.
- 26 Name the alkaloids present in the bark of Cinchona.
- 27 Name the species and family where from tobacco is obtained.
- 28 Give the scientific name and family of plant where from “charas” is obtained.
- 29 Name the drug and drug plant used for heart diseases.
- 30 What is the name of the plant and family where from opium is collected.
- 31 State the extraction and uses of cotton.
- 32 Describe the process of retting and extraction of jute.
- 33 Describe how fibres are classified according to their utilisation.
- 34 Describe the processing of Black tea.
- 35 Discuss the processing followed for the manufacture of brick tea.
- 36 Describe in brief the process of extraction and uses of soybean oil.
- 37 Write a note on fatty oil.
- 38 State the process of extraction and uses of mustard.
- 39 Explain the process of extraction and parts used of coconut.
- 40 Give the health implication of mustard and coconut.
- 41 Give the botanical name, family and uses of Sal.
- 42 Give the botanical name, family and uses of Teak.
- 43 Write a note on distribution of Teak in India and its cultivation.
- 44 Write a note on distribution of Sal in India and its cultivation process.
- 45 Describe the processing and uses of Cinchona.
- 46 Describe the processing of tobacco.
- 47 Describe the uses and health hazards of tobacco.
- 48 Discuss the health hazards of Cannabis.
- 49 Discuss the morphology and processing of Cannabis.
- 50 Describe the morphology and uses of Digitalis.
- 51 Explain the morphology and uses of Papavar.
- 52 Define mean, mode and median,
- 53 Define Mean deviations & coefficient of variance (CV).
- 54 Define Standard deviations & standard error of mean (SEM),
- 55 What do u mean by probability distribution

- 56 Mean**
- 57 Mode**
- 58 Median**
- 59 Coefficient of variance**
- 60 What is degree of freedom**
- 61 SEM**
- 62 Standard deviation**
- 63 Coevolution**
- 64 Sexual selection**
- 65 Convergent evolution**
- 66 Allopatricity**
- 67 Sympatricity**
- 68 Speciation**
- 69 Anagenesis**
- 70 Cladogenesis**
- 71 Parapatric speciation**
- 72 Isolating mechanisms**
- 73 Geographic isolation**
- 74 Adaptive radiation**
- 75 Assumptions for Hardy-Weinberg Law**
- 76 Gene pool**
- 77 Allelic frequency**
- 78 Genotypic frequency**
- 79 Gene frequency**
- 80 Darwin's concept of variation**
- 81 Vavilov centres of cultivated plants**
- 82 Commercial importance of coconut**

Broad Answer Type Questions: (10 Marks)-

- 1. Describe the morphology, extraction and uses of cotton.**
- 2. Discuss the morphology of *Corchorus capsularis*. State the process of extraction of jute fibres after harvesting**
- 3. Describe the process of extraction of jute and state its uses.**
- 4. How Timber is different from Lumber? Give a general account on morphology, cultivation and uses of teak plant.**
- 5. What is silviculture? Give a general account on morphology, cultivation and uses of Sal.
2+3+3+2**
- 6. What is beverage? Describe the morphology and processing of tea. 2+4+4**
- 7. Give a comparative account of Essential oil and Fatty oil. Explain how fatty oils are classified? 6+4**
- 8. Describe the different methods of extraction of Essential oil. State the uses of Essential oil. 7+3**
- 9. Give the scientific name, family, extraction, uses and health implication of mustard.
1+1+3+3+2**
- 10. Give the botanical name, family, extraction and uses of coconut. 1+1+4+4**
- 11. Discuss the scientific name, family, parts used, extraction and uses of soybean oil.
1+1+2+2+4**
- 12. Describe the morphology of any one species of Cinchona. Write a note on processing and it's main uses. 4+4+2**
- 13. Describe the processing of tobacco and mention it's uses. 6+4**
- 14. Describe the morphology of tobacco and comment on its relation to health hazards in human. 5+5**

- 15. Describe the morphology and processing of Cannabis. 5+5**
- 16. Describe the uses of Cannabis and health hazards due to its consumption.5+5**
- 17. Describe the morphology, processing and uses of Digitalis. 4+3+3**
- 18. Discuss the morphology, uses and health hazards of Papavar.**
- 19 What is a secondary data? What are the sources of it?**
- 20. What is median of sample data? What is its advantage over mean and in what situations?**
- 21. Define skewness of a distribution. What are the various measures of skewness?**
- 22. Give axiomatic definition of probability.**
- 23. Distinguish between Discrete and Continuous random variables with suitable examples**
- 24 Define parametric and non-parametric statistics,**
- 25.Discuss measures of central tendency and dispersion,**
- 26 What do u mean by tests of significance t-test,discuss it with examples**
- 27 What is molecular evolution ? Explain.**
- 28. Describe the various types of natural selection.**
- 29 Write short notes on any four of the following: a. Miller's experiment b. Industrial melanism c. QTL analysis d. Conditions for Hardy-Weinberg equilibrium e. Synthetic theory**
- 30 Discuss Hardy-Weinberg Law, using a hypothetical example of two allele locus.**
- 31. Discuss effects of natural selection on phenotypic distribution.**
- 32 Calculate the frequency of recessive allele for a population of 50 individuals where 18 individuals are homozygous dominant and 24 individuals are heterozygous for a character.**

33 What are the advantages of median?

34 Explain the important properties of standard deviation.

35 the arithmetic mean & SD of a set of 9 items are 43 & 5 respectively. If an item of value 63 is added to the set. Find the mean and SD of 10 items.

36 explain the concept of skewness. How is it different from dispersion?