

2026

6th Semester Examination (CCFUP : NEP)

BOTANY

Paper : MDSE 2-T

(Single Core Major Elective-2)

Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

[Biostatistics]

Group - A

Answer any *five* questions : $2 \times 5 = 10$

1. Define a quantitative variable. Give one example. 1+1
2. Calculate mode of the following data :
3, 5, 2, 5, 7, 5, 9, 2
3. What is secondary data? State one merit and one demerit of it. 1+1
4. What is median? Find the median of the following data :
18, 12, 15, 27, 22, 24, 36, 30 1+1
5. What are the different types of correlation?

P.T.O.



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6. State the application of Chi-square test.
7. What do you mean by zero correlation?
8. Define quartile deviation and mention its formula.

Group - B

Answer any *four* questions : $5 \times 4 = 20$

9. Explain the different methods of collecting primary data with their merits and demerits. $3+2$
10. Explain geometric mean with a suitable example. Mention one merit and one demerit of it. $3+2$
11. What is standard deviation? Find the standard deviation of the following data :
6, 8, 10, 12. $1+4$
12. Write a short note on t-test in biostatistics.
13. Discuss the similarities and dissimilarities between correlation and regression.
14. What are the different measures of dispersion of a data set?

Group - C

Answer any *one* question : $10 \times 1 = 10$

15. What is coefficient of variation? Mention one merit and one demerit of standard deviation. In two different

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populations (Batch I and Batch II), the seed number per fruit is recorded as follows :

Batch I : 07, 09, 10, 10, 07, 08, 08, 06, 07, 08

Batch II : 12, 08, 10, 13, 12, 11, 05, 06, 07, 06

Find the coefficient of variation for both the batches.

$2+2+6$

16. Define and explain simple hypothesis with example. Write the significance of random sampling in statistical analysis.

$5+5$





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OR

[Basics of Forestry]

Group - A

Answer any *five* questions : 2×5=10

1. What is PAN formation?
2. How do forests maintain sustainable ecosystem?
3. Give an example of dry deciduous forest and littoral swampy forest in West Bengal.
4. What is minor forest produce? Give an example. 1+1
5. Give the positive role of social forestry.
6. Define silviculture. What is site factor?
7. Name one forest hardy species and one forest tender species.
8. What is meant by periodic block?

Group - B

Answer any *four* questions : 5×4=20

9. What do you mean by forest mensuration? What is DBH? Name one equipment used to measure DBH. 2+2+1
10. Which instrument is used to measure height of a standing tree? Give the basic principle of it. What is eye height? 1+2+2

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11. What is volume of a log? How volume of a standard tree trunk is measured? 2+3
12. Differentiate clear felling system from coppice system. State two advantages of the coppice system. 3+2
13. What is shelter wood system? Give two advantages of shelter wood system. 3+2
14. State the role of Forest Protection Committee. Give the full form of CAI and MAI. 3+2

Group - C

Answer any *one* question : 10×1=10

15. Differentiate hill forest from plain forest. Name two dominant plant species of plain forests in West Bengal. Mention three important NTFPs of South West Bengal and discuss their utilities. 2+2+6
16. Write a short note on protected forests. Explain the mutualistic beneficial role of forests and wildlife in any ecosystem. Define livelihood of forest dwellers. Give the role of forest in eco-tourism development. 3+3+2+2

