

Reg No:

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D.K.M.COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1
SEMESTER EXAMINATIONS
NOVEMBER - 2017
BIostatISTICS AND BIOinformatics

15CZO5A

Time : 3 Hrs

Max.Marks : 75

SECTION-A (10 x 2 =20)

Answer ALL the questions.
Define /explain the following.

1. Primary data.
2. Discrete Variable.
3. Arithmetic mean.
4. Standard deviation.
5. Normal distribution.
6. Chi- square test.
7. Bioinformatics
8. Pubmed.
9. BLAST.
10. Clustal –W.

SECTION-B (5 x 5 =25)

Answer any FIVE of the following questions.

11. Explain about the sources of collecting secondary data.
12. How will you construct a table? Discuss.
13. Find out the median weight of fishes from the following data.

| | | | | | | | | | |
|-------------------------|----|----|----|----|----|----|----|----|----|
| Weight of fishes in gms | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| No of Fishes | 15 | 14 | 16 | 17 | 19 | 6 | 7 | 9 | 5 |

14. Give an account on Quartile Deviation.
15. Discuss about the concept and events of Probability.
16. Write notes on Binomial Distribution.
17. Explain about the salient features of the Nucleic acid Data Bases.
18. Write notes on scoring Matrices PAM and BLOSUM.

SECTION-C (3 x 10 =30)

Answer ALL the questions.

19. (a) Explain about Sampling Methods.

(Or)

- (b) Write about the Diagramatic Presentation of the data.

20. (a) Calculate Standard Deviation for the following data.

| | | | | | | | | | |
|-----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Marks of the students | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 |
| No of student | 5 | 10 | 30 | 40 | 20 | 10 | 6 | 4 | 3 |

(Or)

(b) In a random sampling, the height of ten persons selected given below. The mean height of the population is 56. Calculate with the help of t-test, the mean differences between the sample and the population is significant or not (Table Value at 0.05% for df 9 is 2 . 26)

| | | | | | | | | | | |
|----------------------|----|----|----|----|----|----|----|----|----|----|
| Height of the person | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 |
|----------------------|----|----|----|----|----|----|----|----|----|----|

21. (a) What are Biological data bases? Explain about the protein sequence data bases.

(Or)

(b) Discuss about the multiple sequence Alignment.

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