Reg. No. | | | | | | | | |

D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1

SEMESTER EXAMINATIONS

NOVEMBER – 2016 CBC5D

ELECTIVE : BIOSTATISTICS

Time : 3 Hrs **Max. Marks : 75**

SECTION-A (10 x 2 = 20)

Answer ALL questions.

1. Explain the different methods of collecting data.
2. What do you mean by bar diagram?
3. Define mode.
4. Write note on merits of median.
5. Define null hypothesis.
6. Define sampling and sampling size.
7. Write note on application of chi-square test.
8. Define standard normal distribution.
9. Write note on coefficient of variation.
10. What is linear and non linear correlation?

SECTION-B (5 x 5 = 25)

Answer any FIVE of the following questions.

11. Explain the graphical representation of statistical data.
12. What is tabulation? Explain the major objective of tabulation.
13. Explain the sampling and non sampling error.
14. Find out the median for the blood sample (HDL) of 43 patients.

No of patients	6	4	16	7	8	2
HDL (in mg/dl)	20	9	25	50	40	80

15. Explain the method of sampling.
16. Define probability. Theorems of probability.
17. Write note on chi- square test, uses and goodness of fit.
18. Calculate Karl Pearson's coefficient of skewness for the following data on the number of red flowers of a plant 12, 18, 35, 22, 18.

SECTION-C (3 x 10 = 30)

Answer ALL questions.

19. (a) Discuss in detail on advantage and disadvantage of graphical representation and types of graphs.

(Or)

(b) Find probability. A bag contains 6 red and 5 blue and another bag contains 5 red and 8 blue balls. A ball is drawn from the first bag and without noticing its colour is put in the second. A ball is then drawn from the second bag. Find out the probability that the ball drawn is blue in colour.

20. (a) Find the coefficient of correlation between the heights of fathers and sons from the following data.

Heights of father (in inches) (x)	65	66	67	68	69	70	71
Heights of sons (in inches) (x)	67	68	66	69	72	72	69

(Or)

(b) Calculate the arithmetic mean and the median. The frequency distribution of weight in gram of mangoes of a given variety is given below.

Weight in grams	No. of mangoes	Weight in grams	No. of mangoes
410 – 419	14	450 – 459	45
420 – 429	20	460 – 469	18
430 - 439	42	470 – 479	7
440 – 449	54		

21. (a) Ten students got the following percentage of marks in mathematics and physics.

Mathematics	8	36	98	25	75	82	92	62	65	35
Physics	84	51	91	60	68	62	86	58	35	49

Find out the coefficient of rank correlation.

(Or)

(b) Explain briefly on procedure of testing a hypothesis.

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