

D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE – 1
SEMESTER EXAMINATIONS
APRIL – 2016 **CPMB4A**
BIOSTATISTICS AND RESEARCH METHODOLOGY

Time: 3 Hrs

Max. Marks: 75

SECTION – A (5 X 6 =30)

Answer ALL the questions.

1. a) Write a note on the classification of data.

(Or)

- b) Find the arithmetic mean of the following frequency distribution:

<i>X</i>	1	2	3	4	5	6	7
<i>F</i>	5	9	12	17	14	10	6

2. a) Five salesmen of A, B, C, D and E of a company are considered for a three - member trade delegation to represent the company in an international trade conference. Construct the sample space and find the probability that
- i) A is Selected.
 - ii) A is not selected
 - iii) Either A or B (not both) is selected.

(Assume the natural assignment of probability)

(Or)

- b) Give a short note on Hardy Weinberg's law.

3. a) Explain the methods of sampling.

(Or)

- b) Test the hypothesis that
- $\sigma = 10$
- , given that
- $S = 15$
- for a random sample of size 50 from a normal population.

4. a) Give an account on various steps involved in research process.

(Or)

- b) Narrate the guidelines for collecting the literature review and tool validation.

5. a) Explain about the role of computers in research

(Or)

b) Write about the synopsis presentation and article structuring.

SECTION – B (3 X 15 = 45)

Answer any THREE of the following questions.

6. Explain in detail the statistical techniques of biostatistics.
7. If two dice are thrown, what is the probability that the sum is
 - i) Greater than 8.
 - ii) Neither 7 nor 11.
8. A random sample of students of XYZ University was selected and asked their opinion about the autonomous colleges. The results are given below. The same number of each sex was included within each class – group. Test hypothesis at 5 % level that opinions are independent of the class groupings:

Class	Numbers		Total
	Favouring autonomous college	Opposing autonomous college	
Part I	120	80	200
Part II	130	70	200
Part III	70	30	100
Part IV	80	20	100
Total	400	200	600

9. Discuss in detail about the experimental designing.
10. Describe the documentation of research findings.

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