

A: 12 14 13 15 18 19 20 21 20

B: 16 18 21 22 23 22 21 - -

C: 17 19 21 22 24 26 28 30 -

Carryout the analysis of variance and state your  
conclusive.

APRIL/MAY 2019

**BAMB42 — BIO-STATISTICS**

Time : Three hours

Maximum : 75 marks

**SECTION A — (10 × 2 = 20 marks)**

Answer ALL questions.

1. Define statistics.
2. What are the nature of statistics?
3. Define probability.
4. Define an event with example.
5. Define correlation.
6. Explain positive correlation.
7. Define one-tailed and two tailed tests.
8. What is alternative hypothesis?
9. What is analysis variance?
10. Define randomisation.





SECTION B — ( $5 \times 5 = 25$  marks)

Answer ALL questions.

11. (a) What are the limitations of statistics?  
Or  
(b) Explain about the various types of classification.
12. (a) Define mutually – exclusive and primary event with an example.  
Or  
(b) Describe about the sample space and complementary event.
13. (a) Explain about scatter diagram with an example.  
Or  
(b) Explain about regression lines with an example.
14. (a) Write a short note on binomial distribution.  
Or  
(b) Explain about sign with an example.
15. (a) Explain about local control.  
Or  
(b) Describe about two-way classification.

SECTION C — ( $3 \times 10 = 30$  marks)

Answer any THREE questions.

16. Describe about the tabulation of statistical data.
17. (a) Explain addition and multiplication theorem on probability.  
(b) Two cards are drawn from a pack of cards at random. What is the probability that it will be (i) a diamond, and a heart (ii) king and a queen (iii) two kings?
18. Calculate the correlation coefficient from the following data:  
Height of children: 100 120 130 95 98 92 97  
Weight of children: 10 15 20 22 26 20 19
19. One fifth percent of the blades produced by a blade manufacturing factory turn out to be defective. The blades are supplied in packets of 10. Use Poisson distribution to calculate the approximate number of packets containing no defective, one defective, two defective and three defective blades respectively in a consignment of 1,00,000 packets.
20. Three treatment A, B and C are tested to see whether their outputs are equivalent. The following observation of output are made: