

17U265

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Name:.....

Reg. No.....

SECOND SEMESTER B.Com (PROFESSIONAL) DEGREE EXAMINATION, APRIL 2018

(CUCBCSS-UG)

CC15U BCP2 B08 - QUANTITATIVE TECHNIQUES FOR BUSINESS

(Core Course)

(Regular)

Time : Three Hours

Maximum : 80 Marks

Part A

Answer *all* questions. Each question carries 1 mark

1. Regression Analysis consists ofco-efficient.
a. 1 b. 4 c. 2 d. 5
2. Result of the random experiment is called
a. Sample space b. Event c. Probability d. None
3. Mean of Binominal distribution is
a. npq b. np c. pq d. None
4. Degree of Freedom is related to
a. Number of observation
b. Hypothesis under test
c. Number of Independent observation
d. Total Number.
5. In one way ANOVA, variance are.....
a. Between samples b. Within samples c. Total d. All

Fill in the blanks :

6. If the two regression lines are perpendicular, the correlation co-efficient is
7. is the degree of freedom of 3x3 contingency table.
8. The parameter of poisson distribution is
9. If A and B are any two mutually exclusive events, then $P(A \cap B) = \dots\dots\dots$
10. The hypothesis complimentary to null hypothesis

(10 x 1 = 10 Marks)

Part B

Answer any *eight* questions. Each question carries 2 marks.

11. Explain quantitative Techniques.
12. Define Normal distribution.
13. Define Conditional Probability.
14. What is meant by Non-Parametric test?
15. What are the different types of correlation?
16. What is meant by standard error?
17. Distinguish between dependent and independent events.
18. Define Yate's correction.
19. Define Critical region.
20. Describe Regression Equation.

(8 x 2 = 16 Marks)

Part C

Answer any *six* questions. Each question carries 4 marks.

21. State and prove addition theorem for probability.
22. What are the differences between correlation and regression?
23. Explain the procedure for testing population mean.
24. The distribution of marks obtained by a group of students is normal with mean 50 marks and Standard deviation 15. Estimate the percentage of students with marks below 35.
25. Find the two regression equation.
 $n= 10, \sum x =300, \sum y = 250, \sum x^2 = 9138, \sum y^2 = 6414, \sum xy = 7623$
26. A bag contains 7 white and 9 black balls. Three balls have drawn at random. Find the probability that balls drawn are
 1. One white and two black.
 2. Two white and one black.
27. For a binomial distribution, mean = 4, variance 12/9. Write all term of the distribution.
28. Test whether the accidents occur uniformly over week days on the basis of following information.

Days	SUN	MON	TUE	WED	THU	FRI	SAT
No of accidents	11	13	14	13	15	14	18

(6 x 4 = 24 Marks)

(2)

Part D

Answer any *two* questions. Each question carries 15 marks.

29. Test whether there is any significant difference between productions of three varieties.

A	14	16	18		
B	14	13	15	22	
C	18	16	16	19	20
30. Explain Bayes theorem of probability. The chance that doctor A will diagnose disease B correctly is 60%. The chance that patient will die by his treatment after correct diagnosis is 40%. And Chance of death by wrong diagnosis is 70%. A patient of doctor A who had disease B died. What is the chance that his disease was not correctly diagnosed ?
31. Explain application of quantitative techniques in business.

(2 x 15 = 30 Marks)

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