

DEERWALK INSTITUTE OF TECHNOLOGY			
PRACTICAL EXAMINATION, SEM I		SUBJECT	CSC- 103 PROBABILITY AND STISTICS SET-B
PASS MARK	8	FULL MARK	20
TIME	1.5HRS	DATE	22 MARCH, 2017

INSTRUCTIONS

Students should be seated in the examination hall 10 minutes prior to the conduction of examination.

Fill in the required details carefully on the front page of the answer sheet.

Do not scribble on the question paper.

Addition answer sheets should be safely stapled in order.

Malpractice observed during the examination will lead to an expulsion.

Raise your hand towards Invigilator in case you need any assistance during the examination.

Good luck and all the best.

Attempt Any Three Questions

1. Find skewness and kurtosis based on positional averages.

71	41	78	72	32	41	48	62	65	77	12	47	33	41	29
32	14	44	22	40	18	69	25	19	15	71	62	40	31	15
61	23	76	62	26	77	68	36	35	54	56	27	26	18	57
18	23	64	19	17	66	15	50	78	12	47	80	70	48	12

2. Fit Poisson distribution to the following data and find expected frequencies;

x	0	1	2	3	4	5	6	7	8
f	21	38	42	58	65	41	30	22	13

3. Let (x,y) be two dimensional random variable having joint pmf $P(x,y) = k(x+2y-3)$; $x = 0,1,2$; $y = 1,2,3$

Find (i) k (ii) $P(x)$ (iii) $P(y)$ (iv) $P(x/y)$ (v) $P(y/x)$ (vi) $P(x=1, y \leq 2)$ (vii) $P(x=2)$ (viii) $P(y \geq 2)$ (ix) $P(X \leq 1/y=2)$ (x) $E(2x-3y)$ (xi) $V(3x+2y)$ (xii) $Cov(xy)$ (xiii) $r(xy)$

4. In an examination, it is laid down that a student passes if he secures 30% or more marks. He is placed in first, second and third division as he secures 60% or more, between 45% to 60% and marks between 30% to 45% respectively. He gets distinction if secures 80% or more. The result shows 6% are in distinction division and 10% of them failed. What is the number of students in second division among 10000 examination appeared students if the result is assumed to be normally distributed?
5. To test the effect of a fertilizer on rice production, 24 plots of land having equal areas were chosen. Half of these plots were treated with fertilizer and the other half were untreated. Other condition was the same. The mean yield of rice on untreated plots was 4.8 quintals with a standard deviation of 0.4 quintal, while the mean yield on the treated plots was 5.1 quintals with a standard deviation of 0.36 quintal. Can we conclude that there is significant improvement in rice production because of fertilizer at 5% level of significance? Also find 95% confidence limits.
6. For the data given below i) Fit linear regression $Y = a + bX$ by the method of least square and interpret regression coefficient ii) determine coefficient of determination and interpret iii) test the significance of regression coefficient.

X	5	10	15	20	25
Y	22	15	27	22	42

DEERWALK INSTITUTE OF TECHNOLOGY			
PRACTICAL EXAMINATION, SEM I		SUBJECT	CSC- 101 INTRODUCTION TO INFORMATION TECHNOLOGY SET-B
PASS MARK	12	FULL MARK	20
TIME	1.5HRS	DATE	20 MARCH, 2017

INSTRUCTIONS

Students should be seated in the examination hall 10 minutes prior to the conduction of examination.
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Good luck and all the best.

Attempt All The Questions

1. How do you find your PC IP address?[2]
2. Explain various Hardware and few trouble shootings in computer maintenance?[2]
3. Prepare a grade sheet, with the following details. No of students 10, No of subjects 7. Full marks 100, Pass marks 40, Total obtain marks, Total percentage, Status.[8]
4. Design a brief introduction presentation Slide about your college and course.[8]