

From:

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Dt: 8/10/2021

To

The Registrar

Andhra University

Vizakuppanur

Sir,

Sub: Sending Model Question Paper for Second Semester Statistics 2021 Reg-reg.

I P. GANDHI Lecturer in Statistics Mrs AVN College, Vizakuppanur and also Chairman Board of Studies A-V, with Board Statistics. I am sending a model question paper under Second Semester Statistics under CBCS System.

Thanking you Sir,

Yours faithfully  
P. GANDHI

5. Explain additive property of poisson distribution
6. Define geometric distribution, obtain mean and Variance.
7. Explain memoryless property of exponential distribution.
8. Define Beta distribution, obtain mean and variance.

### SECTION - B

( $5 \times 10 = 50$  marks)

Answer the following. (one from each unit).

#### UNIT - I

9. State and prove Boole's inequality.

or

10. The contents of urns I, II, III are as follows:

1 white, 2 black and 3 red balls,

2 white, 1 black and 1 red balls, and

4 white, 5 black and 3 red balls.

One urn is chosen at random and two balls drawn from it. They happen to be white and red. What is the probability that they come from urns I, II or III?

## UNIT - IV

15. Define Binomial distribution, obtain its m.g.f., C.f., C.G.F and P.G.F, mean and Variance.

(or)

16. Define Hyper geometric distribution and obtain its mean and Variance.

## UNIT - V

17. Define gamma distribution, obtain m.g.f and its mean and Variance.

(or)

18. Define normal distribution and Explain the chief characteristics of the normal distribution.

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