

Name:
Enrolment No:



UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, Dec 2020

Program: BA (Hons.) Economics
Course: Statistical Methods for Economics
Course Code: STGM 2004

Semester: III
Max. Marks: 100
Duration: 3 Hours

SECTION A

1. Each Question will carry 5 marks.
2. Attempt all the questions. Write very short answer.

S. No	Question	COs
1.	Differentiate between statistics and parameters.	CO1
2.	What do you mean by random experiment?	CO1
3.	Discuss the distinctive features of Poisson distribution.	CO1
4.	Distinguish between discrete and continuous random variables.	CO1
5.	What do you mean by regression?	CO1
6.	Why do you understand by skewness?	CO1

SECTION B

1. Each Question will carry 10 marks.
2. Attempt all the questions. Write short answer.

7.	Distinguish between Census method and Sample survey.	CO2
8.	Define the terms joint probability, marginal probability, and conditional probability.	CO2
9.	The incidence of occupational disease in an industry is such that the workers have 20 percent chance of suffering from it. What is the probability that out of 6 workers 4 or more will come in contact of the disease?	CO2, CO3
10.	The distribution of typing mistake committed by a typist is given below. Assuming a Poisson distribution, find out the expected frequencies: No. of mistakes/page: 0 1 2 3 4 5 No. of Pages: 142 156 69 27 5 1	CO2, CO3
11.	A husband and wife appear in an interview for two vacancies in the same post. The probability of husband's selection is $1/7$ and that of wife's selection is $1/5$. What is the probability that: (a) both of them will be selected, (b) only one of them will be selected, and (c) none of them will be selected.	CO2, CO3

SECTION C

- 1. Each Question will carry 20 marks.**
- 2. Write long answer.**

12.	Define binomial distribution stating its parameters, mean and standard deviation along with two examples where such a distribution is ideally suited. Under what conditions does it tend to Poisson distribution?	CO4
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