

## Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

☐ Introduction to Probability- I

☐ Introduction to Probability- II

☐ Probability Distributions - I

☐ Probability Distributions - II

☐ Probability Distributions - III

☒ Quiz: Week 2 : Assignment 2

☐ Solution for week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Week 11

Week 12

Download Videos

Weekly Feedback

Text Transcripts

Books

Problem Solving Session

## Week 2 : Assignment 2

The due date for submitting this assignment has passed.

Due on 2023-02-08, 23:59 IST.

Assignment submitted on 2023-02-05, 11:11 IST

1) Which of the following is not a method for describing a sample space?

1 point

- ☐ roster or listing
- ☐ tree diagram
- ☒ Offset builder notation
- ☐ Venn diagram

Yes, the answer is correct.

Score: 1

Accepted Answers:

Offset builder notation

2) A club of 4 is to be selected from a group of 12 people. How many possible clubs can be selected?

1 point

- ☐ 395
- ☐ 425
- ☒ 495
- ☐ 525

Yes, the answer is correct.

Score: 1

Accepted Answers:

495

3) Eight individuals are candidates for positions of president, vice president, and treasurer of an organization. How many possibilities of selections exist?

1 point

- ☐ 300
- ☐ 330
- ☒ 336
- ☐ 339

Yes, the answer is correct.

Score: 1

Accepted Answers:

336

4) A college plans to interview 8 students for possible offers of graduate assistantships. The college has three assistantships available. How many groups of three can the college select?

1 point

- ☐ 126
- ☒ 56
- ☐ 136
- ☐ 130

Yes, the answer is correct.

Score: 1

Accepted Answers:

56

5) company plans to interview 10 recent graduates for possible employment. The company has three positions open. How many groups of three can the company select?

1 point

- ☐ 90
- ☐ 100
- ☒ 120
- ☐ 130

Yes, the answer is correct.

Score: 1

Accepted Answers:

120

6) Individual outcome of an experiment is called?

1 point

- ☐ the sample space
- ☒ a sample point
- ☐ an experiment
- ☐ an individual

Yes, the answer is correct.

Score: 1

Accepted Answers:

a sample point

7) Two events having nonzero probabilities

1 point

- ☐ can be both mutually exclusive and independent
- ☒ cannot be both mutually exclusive and independent
- ☐ are always mutually exclusive
- ☐ are always independent

Yes, the answer is correct.  
Score: 1  
Accepted Answers:  
*cannot be both mutually exclusive and independent*

8) On an average 5 % items supplied by manufacturer X are defectives. If a batch of 10 items is inspected: what is the probability that 2 items are defective **1 point**

- ☐ 0.065  
☒ 0.075  
☐ 0.085  
☐ 0.095

Yes, the answer is correct.  
Score: 1  
Accepted Answers:  
*0.075*

9) A question paper contains 90 multiple choice questions. There are 4 alternative answers (A, B, C or D) out of which only one is correct. Mr X answers these questions randomly (i.e. without preparation). What is the probability that X gets a score of at least 10 marks? **1 point**

- ☒ 0.9997  
☐ 0.7894  
☐ 0  
☐ 0.001

Yes, the answer is correct.  
Score: 1  
Accepted Answers:  
*0.9997*

10) State true or False: Statement: A distribution can either be discrete or continuous, it can't be both at the same time. **1 point**

- ☒ True  
☐ False

Yes, the answer is correct.  
Score: 1  
Accepted Answers:  
*True*

