

Unit 2 - Week 0

Course outline

How does an NPTEL online course work?

Week 0

Quiz : Assignment 0

Week 1

Week 2

Week 3

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Assignment 0

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-01-27, 23:59 IST.

Note : This assignment is only for practice purpose and it will not be counted towards the Final score

1) How many ways can four couples be seated at a circular table, alternating by sex?

1 point

- 4!
 3!4!
 4!4!
 3!

No, the answer is incorrect.
Score: 0

Accepted Answers:
3!4!

2) If a pair of dice are rolled, there are 36 outcomes. What is the probability of rolling a total of 7.

1 point

- $\frac{1}{6}$
 $\frac{7}{36}$
 $\frac{1}{4}$
 none of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
 $\frac{1}{6}$

3) Find the number of 3-digit even numbers with no repeated digits

1 point

- 320
 315
 328
 316

No, the answer is incorrect.
Score: 0

Accepted Answers:
328

4) What is the coefficient of $x^{11}y^4$ in the expansion of $(2x + y)^{15}$

1 point

- $\binom{15}{4}$
 $2^{11} \binom{15}{4}$
 $2^4 \binom{15}{4}$
 $2^{15} \binom{15}{4}$

No, the answer is incorrect.
Score: 0

Accepted Answers:
 $2^{11} \binom{15}{4}$

5) Find the number of binary sequences of length n that contain an even number of 1 s.

1 point

- 2^{n-1}
 2^n
 $\binom{n}{2}$
 n^2

No, the answer is incorrect.
Score: 0

Accepted Answers:
 2^{n-1}

6) In a certain sports club with 54 members 34 members play tennis, 22 play golf and 10 play both tennis and golf. We are also told that 11 members play handball, of whom 6 play handball and tennis, 4 plays handball and golf, and 2 play all three sports. How many people play none of the three sports?

1 point

- 4
 5
 6
 3

No, the answer is incorrect.
Score: 0

Accepted Answers:
5

7) Suppose a fair coin is flipped nine times. What is the probability that it will be heads exactly five times?

1 point

- $\binom{9}{5} \frac{1}{2}$
 $\binom{9}{5} \frac{1}{2^5}$
 $\binom{9}{5} \frac{1}{2^4}$
 none of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
 $\binom{9}{5} \frac{1}{2^5}$

8) How many 5-letter words can be formed that contain at least one vowel?

1 point

- 5×26^4
 $26^5 - 21^5$
 26^5
 5×21^4

No, the answer is incorrect.
Score: 0

Accepted Answers:
 $26^5 - 21^5$