

**Sylhet Cadet College**  
**Fortnightly Examination - 2022**  
**Class: XII**  
**Subject: Statistics 2nd Paper**  
**Subject Code: 129**

**Time: 40 minutes**

**Full Marks: 20**

Answer all the questions. Figures in the right indicate full marks.

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1. **Define the following terms with example.** 5  
Experiment, sample space, event, simple event, mutually exclusive event.
2. **A box contains four blue and 6 green balls. 3 balls are drawn randomly.**
  - (a) What is the value of  ${}^n C_r$ ? 1
  - (b) Illustrate the difference between permutation and combination with an example. 2
  - (c) What is the probability that all balls are green? 3
  - (d) What is the probability that one ball has a different color? 4
3. **Write down the conditions of the axiomatic approach of probability.** 3
4. **What is the probability that Grameenphone sim numbers starting with 017 end with 0?** 2