

Seat No.	
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**S.Y.B.Tech. (E & TC) (Part - II) (Semester -IV) (CBCS)**

**Examination, May-2025**

**Digital Communication**

**Sub. Code : 79184/79472**

**Day and Date : Friday, 23/05/2025**

**Total Marks : 70**

**Time : 10:30 a.m. to 01:00 p.m.**

- Instructions :**
- 1) All questions are compulsory.
  - 2) Figures to the right indicate full marks.

**Q1) Attempt the following multiple choice questions.**

**[14]**

- 1) Two unbiased coins are tossed. What is the probability of getting at most one head?
 

A) $\frac{1}{2}$	B) $\frac{1}{3}$
C) $\frac{1}{6}$	D) $\frac{3}{4}$
- 2) When we throw a coin, then what is the probability of getting head?
 

A) $\frac{1}{2}$	B) 3
C) 4	D) 1
- 3) When we throw a dice, then what is the probability of getting the number greater than 5?
 

A) $\frac{1}{5}$	B) $\frac{1}{6}$
C) $\frac{1}{2}$	D) $\frac{1}{3}$
- 4)  $P(A \cap B)$  is equal to \_\_\_\_\_.
 

A) $P(A) \cdot P(B A)$	B) $P(B) \cdot P(A B)$
C) Both option A) and B)	D) None of these





**Q5) Solve any two.**

**[14]**

- 1) Explain Spread Spectrum techniques : DSSS, FHSS
- 2) Explain PCM in detail.
- 3) Explain coding format of :
  - i) Bipolar RZ
  - ii) Bipolar NRZ
  - iii) Unipolar NRZ
  - iv) Unipolar RZ