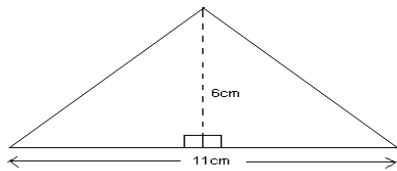
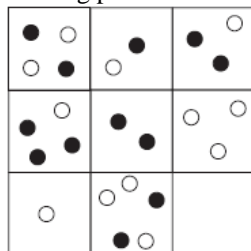


# PUCIT Sample Entrance Test for BS and MSc Degree Programs

- 1) Which number is the odd one out?
  - A. 9678
  - B. 4572
  - C. 5261
  - D. 3527
- 2) What is the probability of getting exactly 2 heads in three tosses of a fair coin?
  - A.  $1/8$
  - B.  $1/4$
  - C.  $3/8$
  - D.  $1/2$
- 3) A man sold his book for Rs. 891, thereby gaining  $1/10$ th of its cost price. The cost price of the book was?
  - A. Rs. 830
  - B. Rs. 820
  - C. Rs. 810
  - D. Rs. 800
- 4) What is the area of the following triangle?



- A.  $22 \text{ cm}^2$
  - B.  $33 \text{ cm}^2$
  - C.  $44 \text{ cm}^2$
  - D.  $50 \text{ cm}^2$
- 5) If  $x + y = 8$  and  $x - y = 2$ , then  $x^2 + y^2 = ?$ 
  - A. 30
  - B. 34
  - C. 36
  - D. 68
- 6) If  $1 + x + x^2 + x^3 = 60$ , then the average (arithmetic mean) of  $x, x^2, x^3$ , and  $x^4$  is equal to which of the following?
  - A.  $12x$
  - B.  $15x$
  - C.  $30x$
  - D.  $60x$
- 7) Identify the missing piece:



- A.
- B.
- C.
- D.

- 8) If  $n = 2^3$ , then  $n^n =$ 
  - A.  $2^6$
  - B.  $2^{11}$
  - C.  $2^{24}$
  - D.  $2^{27}$
- 9) In how many ways can a teacher choose three students out of five students?
  - A. 10
  - B. 20
  - C. 40
  - D. 60
- 10) Which number should come next in this sequence: 1000, 975, 925, 850, 750, \_\_\_\_
  - A. 600
  - B. 625
  - C. 650
  - D. 675
- 11) In a driving competition, Ali and Bilal drove the same course at average speeds of 64 miles per hour and 80 miles per hour, respectively. If it took Ali 50 minutes to drive the course, how long did it take Bilal?
  - A. 40 minutes
  - B. 42 minutes
  - C. 46 minutes
  - D. None of the above

### Scenario for Questions 12 to 15:

Six athletes - A, B, C, D, E, F - competed in a race. We know the following facts about the race results:

- B finished either immediately before or immediately after D.
  - E finished third
  - A did not finish last
  - There were no ties.
- 12) Which of the following is a possible order of the racers at the finish, from first to last?
    - A. A,E,B,D,F,C
    - B. B,D,E,F,C,A
    - C. D,A,E,B,C,F
    - D. C,A,E,F,D,B
  - 13) Which of the following is a complete list of all runners who could finish last?
    - A. C,F
    - B. B,D,F
    - C. B,C,E,F
    - D. B,C,D,F
  - 14) If D finishes first, which of the following could be true?
    - A. C and F finish before A
    - B. E finishes before B
    - C. F finishes before A and C
    - D. A finishes before B and F
  - 15) If A finishes fifth, which of the following must be true?
    - A. F must finish either first or last
    - B. C must finish either second or fourth
    - C. D must finish either first or second
    - D. B must finish either first or third