

RAMAKRISHNA MISSION VIDYAMANDIRA

Belur Math, Howrah – 711 202

ADMISSION TEST – 2015

COMPUTER SCIENCE (Honours)

Date : 19-06-2015

Full Marks : 50

Time: 11:00 a.m – 12:00 noon

Instructions for the candidate

Answer all the questions given below. Tick (✓) the correct option. Each correct answer carries 2 marks. For every wrong answer 1 mark will be deducted. Calculator is not allowed. No additional page will be provided for rough work.

Name of the student : _____

Application No. : _____

Signature of the invigilator : _____

- A man has certain number of small boxes to pack into parcels. If he packs 3,4,5 or 6 in a parcel, he is left with one; if he packs 7 in a parcel, none is left over. What is the number of boxes he may have to pack?
a) 301 b) 106 c) 309 d) 400
- Find the union of the following sets:
 $\{x|x=\text{odd integer}<15\}$
 $\{x|x=\text{prime number}<15\}$
a) {1} b) {1,15} c) {1,2,3,5,7,9,11,13} d) {1,3,5,7}
- How many permutations of {a,b,c,d,e,f,g} end with a?
a) 72 b) 120 c) 48 d) None of these
- How many ways are there to select a first-prize winner, a second prize winner and a third prize winner from 100 different people who have entered a contest?
a) 1,00,200 b) 98,120 c) 99,700 d) 9,70,200
- Evaluate: $\lim_{n \rightarrow \infty} x^n$ when $-1 < x < 1$.
a) 0 b) $+\infty$ c) $-\infty$ d) No limit exist
- Arrange the following items from general to particular:
1. Animal 2. Feline 3. Leopard 4. Mammal 5. Vertebrate 6. Cat
a) 1,5,4,2,3,6 b) 1,4,3,2,5,6 c) 1,3,5,4,2,6 d) 1,2,3,4,6,5
- In the following series how many pairs of alternate numbers have a difference of 2?
Series: 6 4 1 2 2 8 7 4 2 1 5 3 8 6 2 1 7 1 4 1 3 2 8 6
a) One b) Two c) Three d) Four
- How many independent words can 'DETERMINATION' be divided into without changing the order of the letters and using each letter only once?
a) 3 b) 1 c) 6 d) 2
- If A+B means A is the son of B; A-B means A is the husband of B; A×B means A is the sister of B, then which of the following shows the relation Q is the maternal uncle of P?
a) P+B-R×Q b) P-B+R×Q c) P+B×R-Q d) Cannot be determined

24. Let P, Q, R, S and T be statements such that if P is true then both Q and S are true, and if both R and S are true then T is false. We then have

- a) If T is true then both P and R must be true
- b) If T is true then both P and R must be false
- c) If T is true then at least one of P and R must be true
- d) If T is true then at least one of P and R must be false

25. In the following series , find the missing number

90, 180, 12, 50, 100, 200, ?, 3, 50, 4, 25, 2, 6, 30, 3

- a) 150 b) 175 c) 225 d) 250

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FOR ROUGH WORK
