

## Sample Paper

(2020-21)

## Class 10

**Unicus Critical Thinking Olympiad** 



Section - Class*  *Syllabus covered	Total Questions	Marks per Questions	Total Questions
Classic Section – Class 9	28	1	28
Classic Section – Class 8	12	1	12
Scholar Section – Class 9	7	2	14
Scholar Section – Class 8	3	2	6
<b>Grand Total</b>	50		60

1. Two positions of a dice are given below. If there's one dot at the top, how many dots will be there at the bottom:





a) 2

c) 4

b) 3

d) 6

Correct Answer: d 1 Mark

2. If in a certain code language, 'LAP' is coded as 'KMZBOQ', then how will 'NOTE' be written in that language?

a) MONPSUFD

b) MONPUSDF

c) MNOPSUDF

d) MONPSUDF

Correct Answer: d 1 Mark

3. Read the following information carefully to answer the question that follows:

Nine professors - G, H, I, J, K, L, M, N and O are appear on a series of three panels. Each panel will consists of three professors and each professor will appear exactly once. The panel must be arranged according to the following conditions.

- I. I and N must be on the same panel.
- II. K and L must be on the same panel.
- III. O and J cannot be on the same panel.
- IV. M must appear on the second panel.
- V. Either J or M or both must appear on the panel with H.

If J and K appear on the 3rd panel, which of the following professors must appear on 2nd?

a) G

b) H

c) I

d) L

Correct Answer: b 1 Mark

- **4.** B is the father of Q. B has only two children. Q is the brother of R. R is the daughter of P. A is the granddaughter of P and S is the father of A. How is S related to Q?
  - a) Son

b) Son-in-law

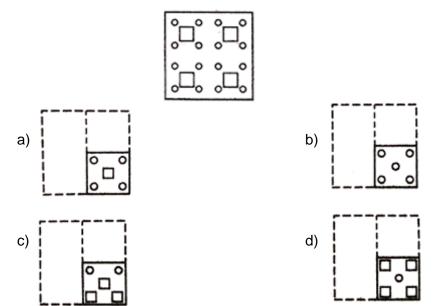
c) Brother

d) Brother-in-law

Correct Answer: d

1 Mark

5. In the following question, a sheet of paper is folded and punch is made. When unfolded the paper sheet looks like the question figure. See the answer figures and select the one that follows the manner in which the paper is folded and punch?



6. Four pairs of coloured socks, namely. black, white, green and orange are mixed in a box. Each of the four blind friends A, B, C and D picks up a pair of socks from the box. None of them gets the right pair. A and C do not get any common colour. Likewise, B and D also have no colour in common. The pairs of A and B give a pair of white coloured socks. A doesn't have any orange coloured socks and C doesn't have any green coloured socks. A pair of green coloured socks can be obtained from the pairs of?

a) A and D

b) B and C

c) B and D

d) C and D

Correct Answer: a

Correct Answer: c

1 Mark

1 Mark

- 7. Use the relationships defined below to solve the question: (i)  $'P \times Q'$  means 'P is the father of Q'. (ii) 'P \* Q' means 'P is the sister of Q'. (iii) 'P + Q' means 'P is the brother of Q'. (iv) 'P - Q' means 'P is the mother of Q'. (v)  $'P \div Q'$  means 'P is the son of Q'. (vi) 'P = Q' means 'P is the daughter of Q'. Which of the following means Z is the brother of X a)  $Y \div Z - X$ b) Z ÷ Y - X c) Y = X - Zd)  $X \div Y \times Z$ 1 Mark Correct Answer: b 8. A rat runs 20 m towards East and turns to the right, runs 10 m and turns to the right, runs 9 m and turns to the left, runs 5 m and then turns to left, runs 12 m and finally turns to left and runs 6 m. Now, in which direction is the rat facing? a) South b) West c) East d) North Correct Answer: d 1 Mark 9. In the given question, is given a statement followed by three assumptions numbered I, II and III. An assumption is something supposed or taken for granted, you have to consider the statement and the assumptions and decide which of the assumption(s) is/are implicit in the statement: Statement - The State Government has unilaterally increased octroi by 5% on all commodities entering into the State without seeking approval of the Central Government. **Assumptions I.** The State Government may be able to implement its decision. II. The Central Government may agree to support the State Government's decision.
  - III. The State Government may be able to earn considerable amount through the additional octroi.

a) All are implicit

b) I and II are implicit

c) None is implicit

d) II and III are implicit

Correct Answer: a

2 Marks

10. Answer the question based on the following arrangement: M 7  $\Sigma$  8 L P @ ? 6 N B T Y 3 2 = E \$ 4 9 © G H 5

If all the symbols are deleted from the arrangement, then will which of the following will be fourth to the left of the 17th element from the left end

a) 9 c) E b) 2 d) Y

Correct Answer: c 2 Marks