## Syllabus and Sample Questions: iTHO

## **Class 10th Sample Questions**

The actual question paper contains 40 questions. The duration of the test paper is 50 minutes.

6.

- 1. Which one of the following is the balanced equation?
  - (A)  $N_3 + H_3 \rightarrow 2NH_3$
  - (B)  $N_3 + 3H_3 \rightarrow NH_3$
  - (C)  $1/2N_3 + 3H_3 \rightarrow 2NH_3$
  - (D)  $N_2 + 3H_2 \rightarrow 2NH_3$
- 2. A current of 0.896 A is flowing when the battery is connected in series with resistors of 0.2 ohm, 0.3 ohm, 0.4 ohm, 0.5 ohm and 12 ohm. Find the potential difference produced by the battery.
  - (A) 10 V
  - (B) 15 V
  - (C) 12 V
  - (D) 20 V
- 3. Which one of the following organisms can live without oxygen?
  - (A) Amoeba
  - (B) Leech
  - (C) Sheep
  - (D) Yeast
- 4. A cross between two individuals results in a ratio of 9:3:3:1 for four possible phenotypes of progeny. This is an example of:
  - (A) Monohybrid Cross
  - (B) Dihybrid Cross
  - (C) Test Cross
  - (D) Second Generation Cross
- 5. If P(n) denotes the number of prime numbers less than n, then find the value of P(P(P(35))), considering 1 as not a prime number.
  - (A) 0 (B) 1
  - (C) 2 (D) 3

	m :	n, then the value of	$\int \sqrt{\frac{m}{n}}$	$+\sqrt{\frac{n}{m}}+\sqrt{\frac{b}{a}}$ is equal to:							
	(A)	0	(B)	1							
	(C)	2	(D)	4							
7.	Find the smallest number which when increased by 17										
	exactly divisible by both 520 and 468?										
	(A)	4680	(B)	4650							
	(C)	4663	(D)	4636							
8.	at t circ (A) (B) (C) (D)	he centre. Find the a 590 cm <sup>2</sup> 560 cm <sup>2</sup> 595 cm <sup>2</sup> 995 cm <sup>2</sup>	area	5 14 cm makes a right angle of the major segment of the							
9.	The	e value of $\frac{\sin^2 45^\circ + c}{\sin^2 3}$	cos² 4 0°	-5° — is:							
	(A)	$\frac{1}{2}$	(B)	$\frac{1}{4}$							
	(C)	4	(D)	1							

If the roots of the equation  $ax^2 + bx + b = 0$  are in the ratio

5

Г

- 10. In a certain coding system, 'rbm std bro pus' means 'the cat is beautiful', 'tnh pus dim std', means 'the dog is brown', 'pus dim bro pus cus' means 'the dog has the cat'. What is the code for 'has'?
  - (A) std (B) dim (C) bro (D) cus



Class_10 Talent Hunt Answers												
1. (D)	2. (C)	3. (D)	4. (B)	5. (C)	6. (A)	7. (C)	8. (B)	9. (C)	10. (D)			