

## I SIMULAZIONE IN INGLESE 2018

### General Knowledge and Logical Reasoning

1. Should education be given by the government free of charge ?

Arg. I: Yes, it will help in universalization of education in the country.

Arg. II: No, there will be budgetary deficit creating some new problems.

- A. I is strong
- B. only argument II is strong
- C. both the arguments are strong
- D. neither I nor II is strong
- E. None of them above

2. Statement: Should students study in early hours of morning ?

Arg. I: Yes, mind is fresh and alert at that time.

Arg. II: No, early risers feel sleepy throughout the day.

- A. only I is strong
- B. only argument II is strong
- C. both the arguments are strong
- D. neither I nor II is strong
- E. None of them above

3: Statement: Should the government stop aiding to minority institutions of education?

Arg. I: Yes, their poor quality as well as quantity of education is wasting the fund.

Arg. II: No, ruling party will lose its vote bank in the coming elections.

- A. only I is strong
- B. only argument II is strong
- C. both the arguments are strong
- D. neither I nor II is strong
- E. None of them above

4. Statement: Should workers be allowed to participate in the management of factories in India?

Arg. I: Yes, it is the present management theory.

Arg. II: No, many workers are illiterate and their contribution will not be of value.

- A. only I is strong
- B. only argument II is strong
- C. both the arguments are strong
- D. neither I nor II is strong
- E. None of them above

5: Statement: Should the political parties be banned?

Arg. I: Yes, it is necessary to teach a lesson to the politicians.

Arg. II: No, it will lead to an end of democracy.

- A. only I is strong
- B. **only argument II is strong**
- C. both the arguments are strong
- D. neither I nor II is strong
- E. None of them above

6. AZ, GT, MN, ?, YB

- A. KF
- B. RX
- C. **SH**
- D. TS
- E. MO

7. FOX : CUNNING = RABBIT : ..... ?

- A. **Courageous**
- B. Dangerous
- C. Timid
- D. Ferocious
- E. None of them above

8. Find the odd one out

- A. Echo
- B. Resonance
- C. Tone
- D. **Ear**
- E. None of them above

9. If in a certain language KINDLE is coded as ELDNIK, how is EXOTIC coded in that code?

- A. EOXITC
- B. EXOTLC
- C. **CITOXE**
- D. COXITE
- E. None of them above

10. Statement: The educated people should work in villages.

Arg. I: Yes, because they can revolutionize agriculture and revamp the rural atmosphere.

Arg. II: No, because their education might waste there in villages.

- A. only I is strong
- B. only argument II is strong
- C. both the arguments are strong
- D. neither I nor II is strong
- E. None of them above

11. In which year was the Magna Carta signed?

- A. 1215
- B. 1340
- C. 1250
- D. 1318
- E. 1227

### Biology

12. Holds the genetic information (DNA) for the cell. It controls all cell activities.

- A. ribosome
- B. nucleus
- C. lysosome
- D. mitochondria
- E. cell membrane

13. Food producer for the plant cell. It converts the energy of the sun into sugar.

- A. nucleus
- B. cell membrane
- C. cytoplasm
- D. chloroplast
- E. mitochondria

14. Acts as the digestive system inside a cell. It helps to break down old or unneeded parts of the cell, and substances that have been brought into the cell from the outside.

- A. lysosome
- B. ribosome

- C. peroxisome
- D. endoplasmic reticulum
- E. mitochondria

15. Monitors and controls entry into and out of the cell.

- A. cell membrane
- B. vacuole
- C. ribosome
- D. chloroplast
- E. nuclear membrane

16. Which of the following organelles has single membranes

- A. Mitochondria
- B. Nucleus
- C. Spherosomes
- D. Chloroplast
- E. Cell wall

17. Checks, makes necessary changes, packages and secretes proteins.

- A. cell wall
- B. mitochondria
- C. Golgi Bodies / Golgi Apparatus
- D. endoplasmic reticulum
- E. vacuole

18. In plant cells, a large, fluid-filled space inside the cell that helps the cell maintain its shape and may also be used to store nutrients and waste products. In animal cells, small fluid spaces inside the cell that are used to store nutrients and waste products.

- A. cell wall
- B. chloroplast
- C. vacuole
- D. ribosome
- E. peroxisome

19. Ribosome were discovered by

- A. Golgi
- B. Palade
- C. Porter
- D. De Robertis
- E. Nicolson

20. Helps transport proteins.

- A. endoplasmic reticulum
- B. lysosome
- C. cell wall
- D. vacuole
- E. mitochondria

### Chemistry

21. The charge of a  $P^{3-}$  atom is:

- A.  $+ 2.4 \times 10^{-16} \text{ C}$
- B.  $- 8.1 \times 10^{-17} \text{ C}$
- C.  $-1.3 \times 10^{-18} \text{ C}$
- D.  $-4.8 \times 10^{-19} \text{ C}$
- E.  $1.3 \times 10^{-18} \text{ C}$

22. Pairs of outer shell electrons not used in bonding are called as

- A. valence electrons
- B. loner electrons
- C. electrovalent electrons
- D. lone pairs
- E. anions

23. Which of the following molecules has an ionic bond?

- A.  $N_2$
- B.  $H_2O$
- C.  $CH_3OH$
- D.  $CH_4$
- E.  $KCl$

24. In  $Al_2Cl_6$ , number of electron pairs donated by each Chloride ion are

- A. 1
- B. 2
- C. 3
- D. 4
- E. 0

25. Ions have noble gas electronic configuration' was suggested by

- A. Kossel
- B. Lewis
- C. Newton
- D. Russell
- E. Pauli

26. Chloride ion ( $\text{Cl}^-$ ) have same configuration as

- A. neon
- B. helium
- C. argon
- D. nitrogen
- E. xenon

### Physics and Mathematics

27. Consider a ball thrown up from the surface of the earth into the air at an angle of  $30^\circ$  above the horizontal. Air friction is negligible. Just after the ball is released, its acceleration is:

- A. upwards at  $9.8 \text{ m/s}^2$
- B. upwards at  $4.9 \text{ m/s}^2$
- C. downwards at  $9.8 \text{ m/s}^2$
- D.  $0 \text{ m/s}^2$
- E. None of them above

28. A projectile is fired horizontally from a height of 20 meters above the ground, with an initial velocity of  $7.0 \text{ m/s}$ . How far does the projectile travel horizontally before it reaches the ground.

- A. 7 m
- B. 14 m
- C. 140 m
- D. 3.5 m
- E. 20 m

29. If  $y$  is expressed in terms of a variable  $x$  as  $Y = f(x)$ , then  $y$  is called

- A. explicit function
- B. implicit function
- C. linear function
- D. identity function
- E. None of them above

30. If  $f(x) = x \sec x$ , then  $f(0) =$

- A. -1
- B. 0
- C. 1
- D.  $\sqrt{2}$
- E. 2