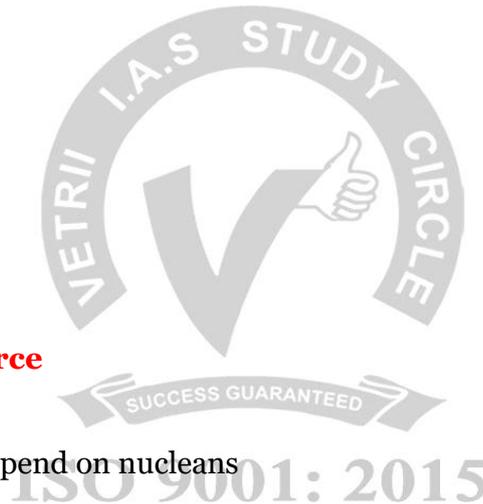


### PHYSICS

- The unit for equivalent conductivity is  
(A)  $\text{ohm}^{-1}\text{cm}^{-1}$  (B)  $\text{ohm}^{-1}\text{cm}^{-2}\text{eq}^{-1}$   
**(C)  $\text{ohm}^{-1}\text{cm}^2\text{eq}^{-1}$**  (D)  $\text{S cm}^{-2}\text{eq}^{-1}$
- A Cathode Ray Oscilloscope (CRO) is used to measure \_\_\_\_\_ of a signal.  
(A) voltage (B) frequency  
(C) phase **(D) all the above**
- If the diameter of the earth becomes two times its present value and its mass remains unchanged then how would the weight of an object on the surface of the earth be affected  
(A) Becomes half  
**(B) Becomes one-fourth**  
(C) Becomes one-third  
(D) Remains unaffected
- Nuclear forces are  
**(A) strongly attractive force**  
(B) strongly repulsive force  
(C) attractive or repulsive depend on nucleons  
(D) gravitational forces
- According to Moseley's law the frequency of the spectral line in X-ray spectrum varies as  
(A) Atomic number of the element  
**(B) Square of the atomic number of the element**  
(C) Square root of atomic – number of element  
(D) Fourth power of the atomic number of the element



### CHEMISTRY

6. Nitrous Oxide is known as Laughing gas. It is also used in medical field as  
(A) Instant horse power (B) Propellant  
(C) Antiseptic **(D) Anesthetic**
7. Methane is the carbon compound. It's Molecular Formula is  
**(A) CH<sub>4</sub>** (B) CH<sub>3</sub> Cl  
(C) C<sub>2</sub>H<sub>6</sub> (D) CCl<sub>4</sub>
8. Which of the following is strong acid and strong base reaction?  
(A) HCOOH + NH<sub>3</sub> (B) HCOOH + NaOH  
(C) HCl + NH<sub>3</sub> **(D) HCl + NaOH**
9. The Indian Salt Petre is  
(A) Ammonium nitrate (NH<sub>4</sub>NO<sub>3</sub>) (B) Sodium nitrate (Na NO<sub>3</sub>)  
**(C) Potassium nitrate (KNO<sub>3</sub>)** (D) Calcium nitrate Ca (NO<sub>3</sub>)<sub>2</sub>
10. The main constituent of steel in India are  
(A) Ni and Cu **(B) Mn and Cr**  
(C) Fe and Cu (D) Ti and Cr
11. Which of the following ecological Pyramid is always upright?  
**(A) Pyramid of energy** (B) Pyramid of number  
(C) Pyramid of biomass (D) (B) and (C)
12. Which one of the compounds is not a protonic acid?  
(A) SO (OH)<sub>2</sub> (B) SO<sub>2</sub> (OH)<sub>2</sub>  
**(C) B (OH)<sub>3</sub>** (D) Po (OH)<sub>3</sub>
13. SO<sub>2</sub> acts as  
(A) a reducing agent  
(B) an oxidizing agent  
**(C) both reducing and oxidizing agent**  
(D) neither reducing nor oxidizing agent

# TNPSC – GROUP 2A

## GENERAL STUDIES - 2016 (ENGLISH)

14. The end product of anaerobic respiration is  
(A) Acetyl Co-A (B) Ethanol alcohol  
(C) Pyruvic acid (D) Succinic acid
15. What is the covalency of nitrogen in ammonia molecule?  
(A) 2 (B) 4 (C) 3 (D) 5

### ZOOLOGY

16. Find the wrong pair/pairs:  
1. Metabolism - Sum total of enzymatic reactions  
2. Auxin - Photosyntheiss  
3. Photolysis of water - Growth  
4. Oxidative phosphorylation - Respiration  
(A) 1 and 2 (B) 2 only  
(C) 2 and 3 (D) 3 and 4
17. Combined drug in use to cure the Malaria is  
(A) Quinine (B) Fansidar  
(C) Chloroquine (D) Primaquine
18. In mammals the mammalian glands are modied gland of following  
1. Salivary gland  
2. Sebaceous gland  
3. Pituitary gland  
(A) 1 only (B) 2 only  
(C) 1 and 2 only (D) 1 and 3 only
19. Which of the following ecological Pyramid is always upright?  
(A) Pyramid of energy (B) Pyramid of number  
(C) Pyramid of biomass (D) (B) and (C)
20. What happens in human ThalasseMIas?  
1. reduce  $\alpha$  - globin synthesis  
2. reduce  $\beta$  - globin synthesis  
3. enhance  $\alpha$  and  $\beta$  - globin synthesis

# TNPSC – GROUP 2A

## GENERAL STUDIES - 2016 (ENGLISH)

- (A) 1 alone correct  
**(C) 1 and 2 are correct**
- (B) 2 alone correct  
(D) 3 alone correct

21. Norman Borlaug – is associated with

1. high yield variety seeds
2. chemical fertilizers
3. chemical pesticides

Select the correct answer using the code given below:

- (A) 1 only**                      (B) 2 and 3                      (C) 1 and 3                      (D) 2 only

22. Consider the following Endocrine glands:

1. Islets of Langerhans                      -                      Produce Insulin
2. Thyroid gland                                      -                      Produce diabetes
3. Adrenal gland                                      -                      Produce Goitre

Which of the following is correctly matched?

- (A) 1 only**                      (B) 1 and 2 only                      (C) 2 and 3 only                      (D) 1, 2 and 3

23. Which one called from the development and the maturation of the erythrocyte from the haemocytoblast?

- (A) Erythropoiesis**                      (B) Erythrocytin                      (C) Erythrocyte                      (D) Haemocyte

24. Golden rice is a genetically modified crop. Where the incorporated gene is meant for biosynthesis of

- (A) Vitamin A**                      (B) Vitamin B                      (C) Vitamin C                      (D) Vitamin D

25. Most widely used bioweapon is

- (A) Bacillus subtilis                                      (B) Vibrio cholerae  
**(C) Bacillus anthracis**                                      (D) Escherichia coli

### BOTANY

26. Among the following plants, which one has oil repelling property?

- (A) Tobacco                      (B) Maize                      (C) Hibiscus                      **(D) Aloe Vera**

27. Which of the following plant boosts the production of red blood cells?

- (A) Turmeric                      (B) Tulsi                      **(C) Lemon grass**                      (D) Mustard