

Junior Research Fellowship Question Paper

1. *Triticum aestivum* is a

(A) **Hexaploid** (B) Diploid

(C) Tetraploid (D) Euploid

2. Gregor John Mendal worked on the crop

(A) Sweet Pea (B) Field pea

(C) Beans (D) **Garden pea**

3. t-test is applicable when the numbers of treatments are

(A) **2** (B) 6

(C) 8 (D) 12

4. The first Director General of ICAR

(A) **Dr. B. P. Paul** (B) Dr. R. S. Paroda

(C) Dr. M.S. Swaminathan (D) Dr. B. Vishwanath

5. Red and purple colour of maize (*Zea Mays*) is due to deficiency of

(A) Ca (B) N

(C) F (D) P

6. Geographical area of India is

(A) **328 Mha** (B) 148 Mha

(C) 428 Mha (D) 392 Mha

7. Most common method of irrigation in India is

(A) Border irrigation (B) **Check basin irrigation**

(C) Sprinkler irrigation (D) Drip irrigation

8. Global warming is attributed to increase in concentration of green house gases like <https://www.freshersnow.com/previous-year-question-papers/>

(A) CO₂ (B) CFCs

(C) CH₄ (D) **All of these**

9. The cropping intensity of India during 2004-05 is about

(A) 125% (B) **135%**

(C) 145% (D) 155%

10. The net gain of ATP during glycolysis is

(A) 1 (B) 4

(C) **2** (D) 8

11. The error degree of freedom for a RBD design with 10 treatments and 4 replications is

(A) 20 (B) **27**

(C) 40 (D) 36

12. Absorption of solute ions is regulated by

(A) Nucleus wall (B) Cell organelles

(C) Vacuoles (D) Plant cell membrane

13. One gram of glucose produces how much fat or oil

(A) 0.25 g (B) 0.35 g

(C) **0.45 g** (D) 0.32 g

14. Total number of State Agriculture University in India in the year 2004 was

(A) 25 (B) 44

(C) **34** (D) 30

15. Growth of plant towards light is called?

(A) Phototropism (B) Photorespiration

(C) Photocromatism (D) **Photoperiodism**

16. The CO₂ content of soil air is

(A) 3% (B) **0.3 %**

(C) 0.03% (D) 0.003%

17. The C: N ratio of humus is

(A) 20: 1 (B) 100: 1

(C) **10: 1** (D) 400:1

18. Densest part of atmosphere strata is

(A) **Troposphere** (B) Thermosphere

(C) Stratosphere (D) Mesosphere

19. The plants which open their stomata during night for taking CO₂ are known as

(A) C₃ (B) CAM

(C) C₄ (D) All of above

20. Plants absorb phosphorus in the form of

(A) H₂PO₄ (B) PO₄

(C) SSP (D) P

21. Principle of Experimental design is given by

(A) R A Fisher (B) Wilcoxon

(C) Cox and Cochran (D) WG Cochran

22. An acid derived from green leaves of chickpea prescribed for intestinal disorders is

(A) Citric acid (B) Sulphuric acid

(C) Oxalic acid (D) Prussic acid

23. Which one of the plant is the C4 plant?

(A) **Maize** (B) Potato

(C) Pea (D) Papaya

24. Atmosphere extends above mean sea level to a height of about

(A) 160 km (B) **1600 km**

(C) 1600 meter (D) 1600 miles

25. Criteria for the essentiality of nutrients for plants was given by

(A) **Arnon** (B) Wilcox

(C) Liebig (D) None

26. The Oleoresin compounds occurs in

(A) Cotton (B) Maize

(C) **Chilli** (D) Ginger

27. The law of tolerance was introduced by

(A) Milvert (B) Shelford

(C) Hilaire (D) **Ear- net Haeckel**

28. End product of glycolysis is

(A) ATP (B) **Pyruvate**

(C) PEP (D) Glucose

29. Plants capable of growing in rocks crevices are called

(A) Calciphytes (B) Chosmophytes

(C) **Lithophytes** (D) Helophytes

30. Plant cells are connected with the help of

(A) **Plsmodesmata** (B) Cellwall (C) Plasma membrane (D) Plasmoderma