

**TNPSC Original Question Paper:**

1. Density of matter is defined as

- A. mass / volume
- B. mass  $\bar{A}$ — volume
- C. volume / mass
- D. none of these

2. The resultant upthrust on a body partly immersed in liquid acts through

- A. the centre of gravity
- B. the metacentre
- C. the centre of pressure
- D. none of these

3. A transverse wave travels along z-axis. The particles of the medium travels along

- A. z-axis C. y-axis
- B. x-axis D. in x-y plane

4. Joule-Thomson cooling is

- A. temperature dependent
- B. temperature independent
- C. dependent on the molecular weight of the gas
- D. dependent on the total mass of the gas

5. The principle of action of points is used in

- A. capacitors
- B. inductors
- C. resistors
- D. lightning arrestors

6. A jet engine works under the principle of

- A. mass
- B. energy
- C. linear momentum
- D. angular momentum

7. To find the temperature of the sun, the following law is used:

- A. Charles's law
- B. Stefan's fourth power law of radiation
- C. Boyle's law
- D. Kirchhoff's law

8. Calotropis is an example of the following phyllotaxy:

- A. opposite and decussate
- B. spiral
- C. whorled
- D. alternate

9. Radio carbon dating is used to

- A. find diseases
- B. find the age of relics
- C. find the carbon content in the atmosphere
- D. none of these

10. Frequency modulation is more advantageous than amplitude modulation because

- A. there will be no distortion
- B. distortion will be maximum
- C. no internal noises produced
- D. internal noises can be filtered

11. X-rays travel with the velocity of

- A. light
- B. sound
- C. positive rays
- D. alpha rays

12. A loudspeaker converts

- A. electrical energy into sound energy
- B. sound energy into electrical energy
- C. small sound into a large sound
- D. none of the above

13. The transverse wave nature of light was proved by

- A. interference C. polarisation
- B. diffraction D. refraction

14. Electric iron takes a long time to cool because of

- A. greater emissivity
- B. lesser emissivity
- C. less absorptive power
- D. more absorptive power

15. Helium is preferred to hydrogen in airships because it

- A. has greater lifting power
- B. is less dense
- C. cheaper
- D. does not form explosive mixture with air

16. Excessive consumption of alcohol damages the

- A. liver C. heart
- B. kidneys D. lungs

17. Which of the following has the smell of garlic?

- A. White phosphorus
- B. Red phosphorus
- C. Phosphorus chloride
- D. Phosphine

18. A common nitrogenous fertilizer is

- A. urea
- B. superphosphate
- C. triple phosphate
- D. potassium chloride

27. The acid which etches glass is

- A. nitric acid
- B. sulphuric acid
- C. hydrofluoric acid
- D. hypochlorous acid

28. Which of the following diseases is likely to spread in the entire community if a leaky septic tank contaminates the water supply?

- A. Cholera C. Tuberculosis
- B. Cancer D. Leprosy

29. Yeast help in the production of

- A. oxygen C. alcohol
- B. glucose D. salts

30. Many pulses are obtained from plants of the family

- A. Euphorbiaceae
- B. Fabaceae
- C. Asteraceae
- D. Musaceae

31. Which of the following protozoans possesses definite shape?

- A. Amoeba
- B. Paramecium
- C. Both of these
- D. None of these

32. Which of the following is used for culture medium of bacterial growth?

- A. Iodine C. Sugar
- B. Agar-Agar D. Alcohol

33. Malaria is caused by

- A. virus C. protozoa
- B. bacteria D. fungi

34. One of the following is the simplest land plant:

- A. Bryophytes C. Algae
- B. Lichens D. Fungi

19. Which element is a metalloid in the following?

- A. Copper C. Aluminium
- B. Arsenic D. Gold

20. Night blindness is caused due to the deficiency of

- A. Vitamin A C. Vitamin K
- B. Vitamin B D. Vitamin E

21. Mercury is used in thermometers because it

- A. is heavy
- B. is a liquid
- C. expands uniformly
- D. is a metal

22. Sodium chloride is the scientific name of

- A. common salt C. rust
- B. soft coke D. chalk

23. Fresh foods and fruits contain more of

- A. proteins C. vitamins
- B. fats D. carbohydrates

24. Electric bulbs are filled with the gas

- A. oxygen
- B. carbon dioxide
- C. argon
- D. nitrogen

25. The sides of a match box contains

- A. red phosphorus
- B. white phosphorus
- C. phosphorus pentoxide
- D. none of these

26. Penicillin was discovered by

- A. Edward Jenner
- B. J.C. Bose
- C. Alexander Fleming
- D. William Harvey

35. Bacteria generally multiply by

- A. binary fission
- B. multiple fission
- C. longitudinal fission
- D. all of these

36. Agar-agar is obtained from

- A. gelidium C. ectocarpus
- B. laminaria D. fucus

37. Which one of the following animals is cold-blooded?

- A. Pigeon C. Dog
- B. Fish D. Man

38. Nitrogen fixation is done by

- A. blue-green algae
- B. green algae
- C. brown algae
- D. red algae

39. Which type of cancer is the most common?

- A. Carcinoma C. Lymphoma
- B. Sarcoma D. Leukaemia

40. Which bacteria produce vinegar in sugar solutions?

- A. Escherichia
- B. Acetobacter
- C. Acetobacter aceti
- D. Rhizobium

41. Baker's yeast is

- A. Zygosaccharomyces octosporus
- B. Saccharomyces cerevisiae
- C. Laminaria
- D. S. Ludwigii

42. The tallest tree occurs in

- A. Pteridophytes
- B. Monocots
- C. Gymnosperms
- D. Dicots

43. Which of the following has been identified as the main source of environmental pollution in the city of Delhi?

- A. Automobiles
- B. Cement Industry
- C. Fertilizer Industry
- D. Thermal Power Station

44. pH of water is

- A. 4 C. 12
- B. 7 D. 0

45. The deficiency of iodine causes

- A. diabetes C. rickets
- B. scurvy D. goitre

46. The poisonous substance that is present in tobacco is

- A. Morphine C. Nicotine
- B. Aspirin D. Reserpine

47. Which one of the following is excreted in Urine?

- A. Sugar C. Protein
- B. Creatin D. Fat

48. Who are more likely to get tapeworm?

- A. Fish eaters C. Meat eaters
- B. Pork eaters D. Beef eaters

49. In which animal was the AIDS virus first detected?

- A. Rat C. Horse
- B. Rabbit D. Monkey

50. Hargovind Khurana is credited for the discovery of

- A. synthesis of protein
- B. synthesis of gene

C. synthesis of nitrogenous bases  
D. none of these