

TNPSC Original Question Paper:

1. Density of matter is defined as

- A. mass / volume
- B. mass ÷ 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