

Tnpsc Science Questions 2021 Part 1 in English

More Questions: <https://wp.me/p7JanY-6T4>

- The wettability of a surface by a liquid depends primarily on
(a) Viscosity (b) Surface tension (c) Density
(d) Angle of contact between the surface and the liquid (e) Answer not known
- IUCAA stands for
(a) Indian University Centre for Astronomy and Astrology
(b) International University Centre for Astronomy and Astrophysics
(c) Italian University Centre for Astronomy and Astrophysics
(d) Inter-University Centre for Astronomy and Astrophysics
(e) Answer not known
- Which one of the following fertilizer has the highest nitrogen content?
(a) Super Phosphate of lime (b) Calcium Ammonium Nitrate **(c) Urea**
(d) Ammonium Sulphate (e) Answer not known
- Which of the following statement is incorrect regarding blue green algae?
(a) The thallus is unicellular (b) The reserve food material is cyanophycean starch
(c) Absence of mucilage around the thallus (d) Sexual reproduction is absent
(e) Answer not known
- Which one is the common stage for both aerobic and anaerobic respiration?
(a) Glycolysis (b) Krebs cycle (c) Tricarboxylic Acid Cycle
(d) Oxidative Phosphorylation (e) Answer not known
- Select the correct sequence of origin and conduction of heart beat in human being
(a) AV node-bundle of his SA node-Purkinje fibres
(b) SA node-Purkinje fibres-AV node-bundle of his
(c) Purkinje fibres-SA node-AV node-bundle of his

(d) SA node-AV node-bundle of his-Purkinje fibres

(e) Answer not known

7. Select the disease for which the first synthetic vaccine was produced for the first time in the world

(a) Polio (b) **Hepatitis B** (c) Rabies (d) Chickenpox (e) Answer not known

8. Which bacterium synthesizes biodegradable plastic?

(a) Thermoplasma (b) Methanobacterium (c) Halobacterium (d) **Ralstonia**

(e) Answer not known

9. An extraction of tender leaves of papaya and herbal drink nilavembu kudineer is given to dengue patients, which increases ----- in the human blood.

(a) RBC (b) WBC (c) **Blood Platelet Count** (d) Both a and b

(e) Answer not known

10. Which of the following is incorrectly paired?

(a) 1 astronomical unit – 1.49×10^{11} m (b) 1 light year – 9.46×10^{15} m

(c) 1 fermi – 10^{-15} m (d) **1 Atomic mass unit – 6.17×10^{-27} m** (e) Answer not known

11. Which pair of elements has the similar chemical properties? (Z means atomic number)

(a) Z = 14; Z = 22 (b) **Z = 11; Z = 19** (c) Z = 4; Z = 21 (d) Z = 2; Z = 4

(e) Answer not known

12. Which one of the following reduces Tollen's reagent?

(a) **Formic acid** (b) Acetic Acid (c) Benzo Phenone (d) Benzene

(e) Answer not known

13. The taxonomy which involves the similarities and dissimilarities among the immune system of different taxa is termed as

(a) Chemotaxonomy (b) Molecular Systematics (c) **Secretotaxonomy**

(d) Numerical taxonomy (e) Answer not known

14. Match the following minerals with its deficiency symptoms?

(a) Exanthema in citrus 1. Zinc

(b) Hooked leaf tip 2. Copper

22. Assertion: The hard boiled egg and raw egg can be distinguished on the basis of spinning of both.

Reason: The moment of inertia of hardboiled egg is more as compared to raw egg.

(a) **Both Assertion and Reason are true and Reason is the correct explanation of the Assertion**

(b) Both Assertion and Reason are true but the Reason is not correct explanation of the Assertion

(c) Assertion is true but the reason is false

(d) Assertion is false but the reason is true

(e) Answer not known

23. What is rancidity?

(a) Decaying of carbohydrate

(b) Decaying of protein

(c) Decaying of fruits

(d) Decaying of lipids

(e) Answer not known

24. Accuracy of scientific knowledge is enhanced through

(a) Direct observation

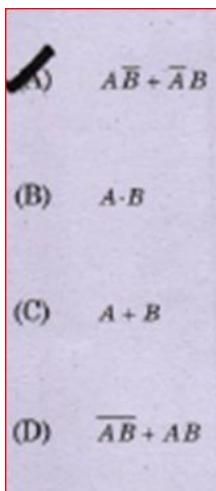
(b) Experimental observation

(c) Indirect observation

(d) Inferential observation

(e) Answer not known

25. The Boolean expression for XOR gate is



(e) Answer not known

26. If a simple pendulum with the mass of the bob as 'M' has a time period 'T', then if in the same pendulum another bob with mass 2 M replaces the original bob. Now the time period is (It may be assumed that the string attached to the bob has no mass)

(a) 2T

(b) T/2

(c) T

(d) 3T/2

(e) Answer not known

27. The source of dendrothermal energy is

- (a) **Biomass** (b) Cool (c) Pyrolysis (d) Natural gas (e) Answer not known

28. Which of the following is the consequence of climate change related warming of rivers?

- (a) Changes in water salinity **(b) Changes in fish migration patterns**
(c) Changes in pathogen load (d) Changes in contaminant levels (e) Answer not known

29. The major cause for the depletion of Ozone is

- (a) **Aerosol** (b) Hydrogen Sulphide (c) Hydrogen Sulphate (d) Carbon di oxide
(e) Answer not known

30. The pollutant which cause impairment in plant metabolism is

- (a) Nitrous oxide (b) Carbon di oxide **(c) Sulphur di oxide** (d) Carbon mono oxide
(e) Answer not known

31. The term biodiversity indicates

- (a) Species richness and genetic variation** (b) Species richness and habitat diversity
(c) Genetic variation and diverse ecosystem (d) Species richness alone (e) Answer not known

32. Kidney stones are formed by the Precipitation of the following chemicals

- I. Cystine II. Oxalate III. Uric acid IV. Sodium
(a) I and II **(b) I, II and III** (c) III and IV (d) I, II, III and IV
(e) Answer not known

33. The colour of the skin in ripened apple, tomato and grape fruits is due to accumulation of

- (a) Carotenoid (b) Lycopene **(c) Anthocyanin** (d) Ethylene
(e) Answer not known

34. Single cell Eukaryotes are included in

- (a) Fungi (b) Monera **(c) Protista** (d) Archea (e) Answer not known

35. In the Haber's process for the manufacture of ammonia

- (a) Finely divided iron is used as a catalyst** (b) Finely divided molybdenum is used as a catalyst
(c) Finely divided nickel is used as a catalyst (d) No catalyst is required

(e) Answer not known

36. What are isotones?

(a) Atoms have same number of protons but different number of neutrons

(b) Atoms have same number of neutrons but different number of protons

(c) Atoms have same number of protons and neutrons

(d) Atoms of the same element with different masses

(e) Answer not known

37. Silicon is one of the best known semi conducting material. As its temperature rises more, it becomes a better conductor. But the temperature at which the silicon gets permanently damaged is

(a) 100°C **(b) 150°C** (c) 200°C (d) 250°C (e) Answer not known

38. A rock containing the fluorescing calcite is illuminated by ultraviolet light. Then, the colour of the rock seems to be

(a) Violet (b) Blue (c) Green **(d) Red** (e) Answer not known

39. Raman Effect is scattering by

(a) Pure Solids **(b) Pure Liquids** (c) Pure Gases (d) Impure Gases

(e) Answer not known

40. The common table salt is

(a) Compound (b) Element (c) Mixture (d) Alloy (e) Answer not known

41. On rear wheel drive cars, with the engine in front it is a common practice to weigh down the trunk in order to increase safety, when driving on –

(a) Icy roads (b) Muddy roads (c) Hill roads (d) Plane roads

(e) Answer not known

42. Specific Experiments:

1. Blue Litmus paper is dipped into hydrochloric acid and it is changed into Red Colour.

2. Blue Litmus paper is dipped into oxalic acid and it is changed into Red colour.

3. Blue Litmus paper is dipped into sulphuric acid and it is changed into Red colour.

General Law: Acid is turned into blue litmus red. It is called ----- Reasoning.

(a) Deductive (b) Critical (c) Everyday (d) **Inductive** (e) Answer not known

43. According to Darwin, speciation is effected by

- (a) **Small continuous heritable variation** (b) Small continuous non heritable variation
(c) Sudden heritable variation (d) Sudden discontinuous variation (e) Answer not known

44. Agriculture Information Service Network (AGRISNET) was launched for providing following information viz.,

- I. Rainfall II. Fertilizers position
III. Minimum support price IV. Sister departments of farm community

Select the appropriate combination

- (a) I, II and III (b) **I, II and IV** (c) I, III and IV (d) II, III and IV
(e) Answer not known

45. Water drop in space is spherical because in the absence/reduced effects of gravity, the forces governing the objects are all the same and therefore the drop

- (a) **Attains a shape having the least amount of surface area**
(b) Attains a shape having the maximum amount of surface area
(c) Attains a shape having the least volume
(d) Attains a shape having the maximum volume
(e) Answer not known

46. ----- is a desiccant herbicides.

- (a) **Arsenic acid** (b) Acetic acid (c) 2, 4-D (d) Ammonium Sulphamate
(e) Answer not known

47. The system of animal classification used nowadays is

- (a) Artificial classification (b) Practical classification (c) **Natural classification**
(d) Horizontal classification (e) Answer not known

48. The HIV-I (virus) contains two identical molecules of positive sense is

- (a) mRNA (b) rRNA (c) **ssRNA** (d) b and c (e) Answer not known

49. The stored form of Iron content in human body is

(a) Haemoglobin (b) Haemoiron (c) **Haemosiderin** (d) a and b (e) Answer not known

50. In the nuclear reaction ${}_{92}\text{U}^{238} \rightarrow {}_2\text{Th}^A + {}_2\text{He}^4$, the value of A and Z are

- (a) A = 234, Z = 94 (b) **A = 234, Z = 90** (c) A = 238, Z = 94
 (d) A = 238, Z = 90 (e) Answer not known

51. An AND gate can be obtained by repetitive use of

- (a) NOT gate (b) NOR gate (c) NAND gate (d) **Both b and c**
 (e) Answer not known

52. The velocity of sound in air at 30°C is 350 m/s. Keeping the temperature constant, the pressure of air is doubled. The velocity of sound in air now will be

- (a) 700 m/s (b) 175 m/s (c) **350 m/s** (d) 800 m/s (e) Answer not known

53. Match the following:

- | | |
|-------------------------|---------------------------|
| (a) Bacillary dysentery | 1. Salmonella typhii |
| (b) Enteric fever | 2. Streptococcus pyogenes |
| (c) Whooping Cough | 3. Bordetella pertusis |
| (d) Pharyngitis | 4. Shigella species |

- | | | | | |
|-----|----------|----------|----------|----------|
| | (a) | (b) | (c) | (d) |
| (a) | 1 | 3 | 2 | 4 |
| (b) | 2 | 1 | 4 | 3 |
| (c) | 4 | 1 | 3 | 2 |
| (d) | 3 | 4 | 1 | 2 |

(e) Answer not known

54. A book three body problem written by

- (a) S.T. John Mendal (b) N.K. Jemisin (c) **Liu Cixin** (d) Cadwell Turnbull
 (e) Answer not known