

1. Which of the following is under the Chairmanship of Vice-president
 1). NITI Aayog
 2). **Rajya Sabha**
 3). Lok Sabha
 4). UPSC
Ans: 1
2. Which of the following is a folk dance?
 1). Kathak
 2). Manipuri
 3). Odissi
 4). **Bhangra**
Ans: 4
3. Judo is the national game of –
 1). China
 2). Thailand
 3). Korea
 4). **Japan**
Ans: 4
4. Which element is found in chlorophyll?
 1). **Magnesium**
 2). Calcium
 3). Cesium
 4). Iridium
Ans: 1
5. Who among these was from Akbar's court?
 1). Raman of Tenali
 2). **Birbal**
 3). Nizam of Hyderabad
 4). Sher shah Suri
Ans: 2
6. The main source of heat on the earth is
 1) **Thermal radiation from the sun**
 2). The stars (excluding sun)
 3). Geothermal heat from the interior of the earth
 4). Chemical reactions
Ans: 1
7. Which is the capital of Sikkim?
 1). Imphal
 2). Dispur
 3). Aizwal
 4). **Gangtok**
Ans: 4
8. For which book did Rabindranath Tagore receive the Nobel Prize?
 1). Sriniketan
 2). Pushpanjali
 3). **Geetanjali**
 4). Shradhanjali
Ans: 3
9. Who is the inventor of the railway engine?
 1). Eli Whitney
 2). **George Stephenson**
 3). Richard Trevithik
 4). W.H.F. Talbot
 (Note: Richard Trevithik constructed a Locomotive)
Ans: 2
10. What is meant by Black Holes?
 1). Collapsing objects of very low density
 2). **Collapsing objects of very high density**
 3). The craters in the moon
 4). The bright spots on the sun
Ans: 2
11. Which acid is present in the vinegar?

- 1). Lactic acid 2). **Acetic acid** 3). Citric acid 4). Amino acid
Ans: 2
12. The distance between two stars is measured by the unit of –
 1). Metre 2). **Light year** 3). Mile 4). Yard
Ans: 2
13. Charles Babbage is regarded as
 1). **Inventor of computer** 2). Originator of Clanguage
 3). Father of Booleon algebra 4). None of these
Ans: 1
14. Which one of the following gives energy to the stars?
 1). Nuclear fission 2). Chemical reaction
 3). **Nuclear fusion** 4). Gravitational pull
Ans: 3
15. Mach's number is the ratio between fluid flow velocity and the
 1). **Speed of sound in the medium** 2). Speed of light
 3). Elastic force of liquid 4). None of these
Ans: 1
16. The process of evaluating cost of construction of a project is called
 1). **Estimate** 2). Rough cost 3). Actual cost 4). Workable cost
Ans: 1
17. The flow rate measurement in a rectangular weir is based on –
 1). **Bernoulli's Principle** 2). Newton's III Law
 3). Archimedes principle 4). None of these
Ans: 1
18. In which historical event did Nana Saheb Participate?
 1). Battle of Plassey 2). Partition of Bengal
 3). **First war of independence in 1857** 4). World War II
Ans: 3
19. Which country are the samurai warriors from?
 1). Korea 2). **Japan** 3). China 4). Cambodia
Ans: 2
20. Which one of the following is neither an element nor a compound?
 1). **Air** 2). Glucose 3). Gold 4). Water
Ans: 1
21. What is penumbra?
 1). A television 2). **A half-shadow**
 3). An umbrella 4). A type of clock
Ans: 2

22. The equivalent of the unit "watt" is –
 1). kilogram 2). Kilocalorie 3). Joule 4). Joule per second
Ans: 4
23. Conversion of heat into electrical energy can be achieved by using a -
 1). Ammeter 2). Hydrometer 3). Voltmeter 4). Thermocouple
Ans: 4
24. A strut is a –
 1). Flexible member 2). Compression structural member
 3). Torsion member 4). None of these
Ans: 2
25. The ratio of stress / strain, which is a constant called –
 1). Young's modulus of elasticity 2). Young's modulus of rigidity
 3). Young's modulus of Plastcity 4). Young's modulus of permeability
Ans: 1
26. The phenomenon of radioactivity is associated with
 1). Emission of electrons 2). Emission of spectra
 3). Fusion of nucleus 4). Decay of the nucleus
Ans:4
27. What is the name for the study of sound?
 1). Acoustics 2). Astrology 3). Ornithology 4). Physiology
Ans: 1
28. Perfect and strongest type of joints is a -
 1). Welded joint 2). Staggered joint
 3). Supported joint 4). Suspendedjoint
Ans: 1
29. The advantage of welding lies in
 1). Quick and economic process 2). Rigid joints
 3). Better appearance of joint 4).All of the above
Ans: 4
30. The centre of gravity of the liquid displaced by the body when immersed in a liquid is called
 1). Viscosity 2). Displacement 3). Buoyancy 4). Movement
Ans: 3
31. The direction of the magnetic field due to the current in a straight conductor is given by –
 1). Faraday's law 2). Fleming's right hand rule
 3). Maxwell's cork screw rule 4). Fleming left hand rule
Ans: 3

42. The purest form of iron is –
 1). **Wrought iron** 2). Cast iron 3). Steel 4). None of these

Ans: 1

43. Which of the following vitamins is essential for growth of skin?
 1) Vitamin A 2). Vitamin B 3). Vitamin C 4). **Vitamin D**

Ans: 4

44. The song "Vande Matram" is taken from –
 1). Bhart bhārathi 2). **Anand Math** 3). Geetanjali 4). Ramayan

Ans: 2 (written by Bankim Chandra Chatterjee)

45. The main gas causing the "green house effect" is –
 1). Oxygen 2). Nitrogen 3). Ammonia 4) **carbon dioxide**

Ans: 4

46. Urea is used as a
 1). **fertilizer** 2). Insecticide 3). Food 4), medicine

Ans: 1

47. The heat required to convert unit mass of "solid" into a liquid" at the same temperature is known as -

- 1). Latent heat of ice 2). Latent heat of steam
 3). **Latent heat of fusion** 4). Latent heat of vapourisation

Ans: 3

48. A wound spring of a watch has-
 1). **Potential energy** 2). Kinetic energy
 3) Heat energy 4), electromagnetic energy

Ans: 1

49. The formula for the moment of a force is given by
 1). **Force × Distance** 2). Force×velocity
 3). Force × acceleration 4), Mass ×velocity

Ans: 1

50. The metal which is found in a liquid state is
 1). Potassium 2). Copper 3). Iron 4) **Mercury**

Ans: 4

51. How many legs does a spider have?
 1). 6 2). **8** 3). 10 4). 7

Ans: 2

52. Green plants store food in –
 1). Stems 2). **Leaves** 3). Roots 4). None of these

Ans: 2

63. What do the number of rings on a tree indicates?
 1). Age 2). Size 3). Thickness 4). Hardness
 Ans: 1
64. The classification of elements in the periodic table is based on –
 1). Atomic number 2). Atomic weight
 3). Number of neutrons 4). None of these
 Ans: 1
65. The curves obtained by plotting pressure against volume at various constant temperatures a
 1). isotherms 2). Isotropy 3. Isobars 4). Isocurves
 Ans: 3
66. Which gas is used in the preparation of Soda water?
 1). Carbon monoxide 2). Carbon
 3). Sulphur 4) Carbon dioxide
 Ans: 4
67. The genes are arranged on a chromosome in a –
 1). Random manner 2). Spiral manner
 3). Linear manner 4). Irregular manner
 Ans: 2
68. Which one of the following diseases is not immunised by Tre e
 1). Typhoid 2). Whooping cough
 3). Tetanus 4). Diptheria
 Ans: 1
69. What is ELISA?
 1). A test to detect AIDS
 2). The virus which causes AIDS
 3). The very firstperson who died of AIDS
 4). The centre in which AIDS was detected first
 Ans: 1
70. How long does a train 100 metres long running at the rate of 45 kmph take to cross a telephone pole?
 1). 16 secs 2). 12 secs 3). 6 secs 4). 8 secs
 Ans: 4
71. Impulses of living plants were brought to cognition by –
 1). Acharya Jagadish Chandra Bose
 2). Karl Landstainer
 3).River water
 4). Hargobind Khorana
 Ans: 1

72. The Theory of Electrolysis was propounded by –
 1). Ohm 2). Faraday 3). Coulomb 4). None of these
Ans: 2

73. Bile secreted by liver helps in –
 1). Respiration 2). Excretion 3). Purification 4). Digestion
Ans: 4

74. In TN where is the Kailasanatha Temple found?
 1). Mount Kailash 2). Kanchipuram 3). Kasi 4). Haridwar
Ans: 2

75. Low temperature experiments are carried out by using liquid
 1) He 2). Ne 3). Ar 4). Kr
Ans: 1

76. Acid secretion is a characteristic of -
 1). Buccal cavity 2). Stomach 3). Small intestine 4). Large intestine
Ans: 2

77. The product of two numbers is equal to
 1). $(HCF)^2 + (LCM)^2$ 2). $(HCF)^2 (LCM)^2$
 3). $HCF \times LCM$ 4). $HCF + LCM$
Ans: 3

78. Cobalt 60 is used for the treatment of
 1). Cancer 2). Heart attack
 3). Thyroid gland 4). Maintaining blood circulation
Ans: 1

79. Pure water can be obtained from sea water by the process of –
 1). Distillation 2). Evaporation
 3). Fractional distillation 4). Filtration
Ans: 2

80. 'Insulin' is secreted by –
 1). Thyroid 2). Pancreas 3). Pituitary 4). None of these
Ans: 2

81. Inert gases are –
 1). Miscible with water 2). Not stable
 3) Chemically unreactive 4). Chemically very active
Ans: 3

82. Einstein's relations connects
 1). Energy and mass of particles
 2). Particle and wave aspect of light
 3). Wavelength of light and energy of radiation
 4). Particle and wave aspect of
Ans: 1

83. The compound found in some stony deposit in kidney is
 1). Potassium oxalate 2). Oxalic acid
 3). Potassium succinate 4). Calcium oxalate
 Ans: 4
84. Which of the following diseases is caused due to shortage of red blood cells?
 1). Meningitis 2). Leukemia 3). Arthritis 4) Anemia
 Ans: 4
85. 'Fixation of Nitrogen' implies –
 1). The liquefaction of nitrogen
 2). The conversion of atmospheric nitrogen into useful compounds
 3). the conversion of nitrogen into amines
 4). None
 Ans: 2
86. Usually which portions of the plant help photosynthesis to occur?
 1). Leaf and stem
 2). Branches and trunk
 3). Roots and root sap
 4). Leaf and other chloroplast bearing parts
 Ans: 4
87. The main function of the white blood corpuscles in the body is –
 1). to carry food
 2). to help in the formation of clot
 3). to carry oxygen
 4). to protect the body against diseases
 Ans: 4
88. The atomic number of an element is equal to the -
 1). number of neutrons in its nucleus
 2) Number of protons in its nucleus
 3). relative atomic mass
 4). number of electrons in its outermost orbit
 Ans: 2
89. Blood circulates from arteries to veins through microscopic vessels known as –
 1) Capillaries 2). Corpuscles 3). Cells 4). Calories
 Ans: 1
90. Which instrument is used to determine the relative density of a liquid?
 1). Barometer 2). Hydrometer 3). Thermometer 4). Barograph
 Ans: 2
91. The presence of normal amount fluorides in drinking water helps in
 1). Purification of water 2) Preventing decaying of teeth
 3). Deodourisation of water 4). Reduce fungi formation

Ans: 2

92. Which of these organs secrete fluids?

- 1). Heart 2). **Glands** 3). Lung 4). Kidney

Ans: 2

93. 'Thrombosis' is a disease of the –

- 1).Brain 2). Skin 3). **Blood** 4). None of these

Ans: 3 (blood clotting)

94. The pH of pure water at 25°C is

- 1). 1 2). 14 3). **7** 4). 0

Ans: 3

95. Hemoglobin is a pigment present in –

- 1). The plasma 2). **Red blood cells**
3). White blood cells 4). Spleen

Ans: 2 (they are oxygen carriers)

96. Which one of the following is completely curable?

- 1). **Hepatitis-B** 2). Breast Cancer
3). Blood Cancer 4). Lung Cancer

Ans: 1

97. Insulin regulates

- 1). Reproduction 2).Heart beat
3). **Blood glucose level** 4). Physical growth

Ans: 3

98. The blood pressure of a young male human being is –

- 1). 110/70 2). **120/80** 3). 135/90 4). 140/100

Ans: 2

99. The electron in the outermost orbit is called electrons.

- 1). **Valence** 2). Covalent 3). Acceptor 4). Donar

Ans: 1

100. The railway station situated in the extreme south in India is –

- 1). Chennai. 2). Cochin. 3). **Kanyakumari.** 4). Trivandrum.

Ans: 3