

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO.

2021

TEST BOOKLET

TEST BOOKLET SERIES

Paper-IV

Time allowed : 3 hours

Full marks : 200

Answer *all* the questions.

Questions are of equal value.


Serial No. **04922**.....

Roll No.:

Signature of the Candidate:

INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions:

1. This booklet consists of 24 pages including this front page. Verify the Page Nos. and Test Booklet series on each page and bring at once to the Invigilator's notice any discrepancy.
2. Answers will have to be given in the Special Answer-Sheets supplied for the purpose.
3. Before you proceed to mark in the Answer-Sheet in response to various items in the Test Booklet, you have to fill in some particulars in the Answer-Sheet as per instructions sent to you in the Admit Card. **Do not fold the Answer-Sheet as this will result in error in your marks.**
4. All questions are of multiple-choice answer-type. You will find *four* probable answers (A), (B), (C) and (D) against each question. Find out which of the four answers appears to you to be **correct or the best**. Now darken the circle corresponding to the letter of the selected answer in the Answer-Sheet with **Black Ball Point Pen** as per instructions printed on the reverse of the Admit Card and in the Answer-Sheet.
5. One and only one circle is to be fully blackened for answer. Any spot in any other circle (multiple circle) or in wrong circle will be considered as wrong answer.
6. **There will be negative marking of $\frac{1}{3}$ mark for each wrong answer.**
7. There are blank pages at the end of this Booklet for Rough Work.
8. **The Special Answer-Sheet should be handed over to the Invigilator before leaving the Examination Hall. You are permitted to take away the used Test Booklet after completion of the examination.**

1. A piece of wire of resistance R is cut into three equal parts. These parts are then connected in parallel. If the equivalent resistance of this combination is R_1 , then the ratio R/R_1 is

- (A) $1/3$
- (B) 1
- (C) 3
- (D) 9

2. The Nobel Prize in Physiology or Medicine in the year 2020 was awarded for

- (A) the development of a method for genome editing.
- (B) the discovery of Hepatitis C virus.
- (C) the discovery of Hepatitis B virus.
- (D) the discovery of directed evolution of enzymes.

3. The fundamental organisational unit of life is

- (A) protein
- (B) cell
- (C) DNA
- (D) RNA

4. Diamond and graphite are allotropes of

- (A) Iron
- (B) Gold
- (C) Carbon
- (D) Copper

5. Which of the following frequencies is not in the audible range of sound for human beings?

- (A) 5 Hz
- (B) 50 Hz
- (C) 500 Hz
- (D) 5000 Hz

6. Consider the following statements :

- (i) An emf can be induced by moving a conductor in a magnetic field.
- (ii) An emf can be induced by changing the magnetic field.

- (A) (i) is true but (ii) is false
- (B) (ii) is true but (i) is false
- (C) Both (i) and (ii) are false
- (D) Both (i) and (ii) are true

7. Gravitational force on the surface of the moon is

- (A) $1/6$ of that on the surface of the earth.
- (B) $1/5$ of that on the surface of the earth.
- (C) $1/4$ of that on the surface of the earth.
- (D) $1/3$ of that on the surface of the earth.

8. Which of the following pairs represent units of the same physical quantity?

- (A) Kelvin and Joule
- (B) Kelvin and Calorie
- (C) Newton and Calorie
- (D) Joule and Calorie

9. The human eye forms the image of an object at its

- (A) cornea
- (B) iris
- (C) pupil
- (D) retina

10. Number of valence electrons in Cl^- ion are

- (A) 16
- (B) 8
- (C) 17
- (D) 18

11. The chemical formula C_2H_5OH stands for
 (A) Methane
 (B) Methanol
 (C) Ethane
 (D) Ethanol
12. Tissue that connects muscle to bone in humans is known as
 (A) Phloem
 (B) Adipose
 (C) Tendon
 (D) Epithelial
13. $Fe_2O_3 + 2Al \rightarrow Al_2O_3 + 2Fe$. This reaction is an example of a
 (A) combination reaction
 (B) double displacement reaction
 (C) decomposition reaction
 (D) displacement reaction
14. A person travelling on a straight line moves with a uniform speed v_1 for a distance x and with a uniform speed v_2 for the next equal distance. The average speed v is given by
 (A) $v = \frac{v_1 + v_2}{2}$
 (B) $v = \sqrt{v_1 v_2}$
 (C) $\frac{2}{v} = \frac{1}{v_1} + \frac{1}{v_2}$
 (D) $\frac{1}{v} = \frac{1}{v_1} + \frac{1}{v_2}$
15. The pH value of a neutral solution is
 (A) 3
 (B) 5
 (C) 7
 (D) 9
16. In summer, a mild wind is often found on the shore of a calm river. This is caused due to
 (A) difference in thermal conductivity of water and soil.
 (B) convection currents.
 (C) conduction between air and the soil.
 (D) radiation from the soil.
17. The first periodic table was given by
 (A) Mendel
 (B) Mendeleev
 (C) Bohr
 (D) Dalton
18. Which of the following is a wrong description of binding energy of a nucleus?
 (A) It is the energy required to break a nucleus into its constituent nucleons.
 (B) It is the energy made available when free nucleons combine to form a nucleus.
 (C) It is the sum of the rest mass energies of its nucleons minus the rest mass energy of the nucleus.
 (D) It is the sum of the kinetic energy of all the nucleons in the nucleus.
19. The reading in centigrade scale is $(-40)^\circ$. What is the corresponding reading in Fahrenheit scale?
 (A) $(-60)^\circ$
 (B) $(-40)^\circ$
 (C) 60°
 (D) 40°
20. The number of neutrons in Hydrogen nucleus is
 (A) 0
 (B) 1
 (C) 2
 (D) 3

21. How many atoms are there in one mole atom of an element?
- (A) 5.015×10^{15}
 - (B) 6.022×10^{23}
 - (C) 4.397×10^{26}
 - (D) 6.589×10^{20}
22. Cell was discovered by
- (A) Charles Darwin
 - (B) Robert Hooke
 - (C) Gregor Mendel
 - (D) Robert Brown
23. A porter lifts a luggage of 15kg from the ground and puts it on his head 1.5m above the ground. The work done by him on the luggage is (given $g = 10\text{ms}^{-2}$)
- (A) 25 Joule
 - (B) 125 Joule
 - (C) 225 Joule
 - (D) 112.5 Joule
24. Which of the following elements is a semiconductor?
- (A) Aluminium
 - (B) Mercury
 - (C) Silicon
 - (D) Silver
25. In terms of basic units of mass (M), length (L) and time (T), dimension of energy is
- (A) ML^2T^{-1}
 - (B) MLT
 - (C) MLT^{-1}
 - (D) ML^2T^{-2}
26. The bacteria which causes peptic ulcer —
- (A) *Lactobacillus acidophilus*
 - (B) *Helicobacter pylori*
 - (C) *Peptostreptococcus*
 - (D) *Streptococcus avium*
27. In one average-life of radioactive decay
- (A) half the active nuclei decay.
 - (B) less than half the active nuclei decay.
 - (C) more than half the active nuclei decay.
 - (D) all the nuclei decay.
28. Einstein received Nobel Prize for his work on
- (A) special theory of relativity
 - (B) general theory of relativity
 - (C) brownian motion
 - (D) photo electric effect
29. What is the typical size of an atom?
- (A) 1 meter
 - (B) 10^{-2} meter
 - (C) 10^{-6} meter
 - (D) 10^{-10} meter
30. The quanta of light is called
- (A) proton
 - (B) photon
 - (C) phonon
 - (D) neutron

31. When light is refracted, which of the following does not change?
- (A) Frequency
 - (B) Wavelength
 - (C) Velocity
 - (D) Amplitude
32. Which of the following statements is not a correct statement about the trends when going from left to right across the periods of Periodic Table?
- (A) The elements become less metallic in nature.
 - (B) The number of valence electrons increases.
 - (C) The atoms lose their electrons more easily.
 - (D) The oxides become more acidic.
33. Einstein proposed the idea of special theory of relativity in the year
- (A) 1901
 - (B) 1903
 - (C) 1905
 - (D) 1907
34. The anther contains
- (A) sepals
 - (B) ovules
 - (C) pistil
 - (D) pollen grains
35. What happens when dilute hydrochloric acid is added to iron filings?
- (A) Hydrogen gas and iron chloride are produced.
 - (B) Chlorine gas and iron hydroxide are produced.
 - (C) No reaction takes place.
 - (D) Iron salt and water are produced.
36. The first Nobel Prize in Physics was awarded for the discovery of
- (A) Photoelectric effect
 - (B) Atomic nucleus
 - (C) X-ray
 - (D) Special theory of relativity
37. Energy generation in stars take place mainly via
- (A) nuclear fission
 - (B) chemical displacement reaction
 - (C) nuclear fusion
 - (D) chemical additive reaction
38. The gap between two neurons is called a
- (A) dendrite
 - (B) synapse
 - (C) axon
 - (D) impulse
39. What is the typical size of a Prokaryotic cell?
- (A) 1-10 meter
 - (B) 1-10 millimeter
 - (C) 1-10 micrometer
 - (D) 1-10 nanometer
40. Asexual reproduction takes place through budding in
- (A) amoeba
 - (B) yeast
 - (C) plasmodium
 - (D) leishmania

41. The human eye can focus on objects at different distances by adjusting the focal length of the eye lens. This is due to
- (A) presbyopia
 - (B) accommodation
 - (C) near-sightedness
 - (D) far-sightedness
42. The xylem in plants are responsible for
- (A) transport of water.
 - (B) transport of food.
 - (C) transport of amino acids.
 - (D) transport of oxygen.
43. Which of the following is a plant hormone?
- (A) Insulin
 - (B) Thyroxin
 - (C) Oestrogen
 - (D) Cytokinin
44. Same mass of iron, copper, water and glycerine are heated to 80° centigrade. Which substance among these, will take largest time to cool down to 20° ?
- (A) Iron
 - (B) Copper
 - (C) Water
 - (D) Glycerine
45. The metal which can be easily cut with a knife —
- (A) Paper
 - (B) Silver
 - (C) Sodium
 - (D) Gold
46. Two isotopes have same
- (A) mass number
 - (B) difference of neutron number and proton number
 - (C) neutron number
 - (D) proton number
47. In the Rutherford experiment towards the discovery of atomic nucleus the target used was
- (A) Gold
 - (B) Silver
 - (C) Platinum
 - (D) Copper
48. The kidneys in human beings are a part of the system for
- (A) Excretion
 - (B) Nutrition
 - (C) Respiration
 - (D) Transportation
49. A person clapped his hands near a cliff and heard the echo after 2s. What is the distance of the cliff from the person if the speed of the sound is taken as 346 meter/s?
- (A) 173 meter
 - (B) 346 meter
 - (C) 692 meter
 - (D) 1384 meter
50. An athlete completes one round of a circular track of diameter 200m. What will be the distance covered (closest value among the options)?
- (A) 528 meter
 - (B) 628 meter
 - (C) 314 meter
 - (D) 1256 meter

51. Write the chemical formulae of Magnesium chloride.

- (A) $MgCl$
- (B) $MgCl_2$
- (C) $MgCl_3$
- (D) $MgCl_4$

52. The age of our universe is closest to

- (A) 13.8 years
- (B) 13.8 thousand years
- (C) 13.8 million years
- (D) 13.8 billion years

53. A metal sheet with a circular hole is heated. The hole

- (A) gets larger
- (B) gets smaller
- (C) remains of the same size
- (D) gets deformed

54. Uncertainty relation in quantum mechanics was proposed by

- (A) Rutherford
- (B) Bohr
- (C) Heisenberg
- (D) Feynman

55. Electron was discovered by

- (A) Bohr
- (B) Thomson
- (C) Planck
- (D) Heisenberg

56. The stars twinkle because of

- (A) reflection
- (B) refraction
- (C) diffraction
- (D) interference

57. The breakdown of pyruvate to give carbon dioxide, water and energy takes place in

- (A) cytoplasm
- (B) mitochondria
- (C) chloroplast
- (D) nucleus

58. PCR is a relatively simple and widely used molecular biology technique to amplify and detect DNA and RNA sequences. PCR stands for

- (A) Protein chain reaction
- (B) Polymerase chain reaction
- (C) Polymerase carbon reaction
- (D) Protein carbon reaction

59. Which of the following is not a part of the female reproductive system in human beings?

- (A) Ovary
- (B) Uterus
- (C) Vas deferens
- (D) Fallopian tube

60. Acceleration due to gravity of earth is maximum at

- (A) the center of the earth.
- (B) the midpoint of the center and the surface of the earth.
- (C) the surface of the earth.
- (D) a height equal to the radius of the earth from the surface of the earth.

Please Turn Over

61. The temperature, in centigrade scale, at which the density of water is maximum —
- (A) 100°
 - (B) 44°
 - (C) 4°
 - (D) 0°
62. Which of the following parameters is the same for molecules of all gases at a given temperature?
- (A) Mass
 - (B) Speed
 - (C) Momentum
 - (D) Kinetic energy
63. Two bullets are fired simultaneously and horizontally from the same vertical height. The first bullet has mass and velocity m_1 and v_1 respectively and the second one has mass and velocity m_2 and v_2 respectively. Which bullet will hit the ground first?
- (A) The faster one
 - (B) The slower one
 - (C) Both will reach simultaneously
 - (D) Will depend on masses
64. At the time of short circuit, the current in the circuit
- (A) reduces substantially
 - (B) does not change
 - (C) increases heavily
 - (D) vary continuously
65. Which of the following is not an example of a bio-mass energy source?
- (A) Wood
 - (B) Gobar gas
 - (C) Nuclear energy
 - (D) Coal
66. Two resistors R and $2R$ are connected in series in an electric circuit. The thermal energy developed in R and $2R$ are in the ratio
- (A) 2 : 1
 - (B) 4 : 1
 - (C) 1 : 4
 - (D) 1 : 2
67. The unit of density in CGS system is
- (A) gm/cm^4
 - (B) gm/cm^3
 - (C) gm/cm^2
 - (D) gm/cm
68. The nucleus of a living cell was discovered by
- (A) Charles Darwin
 - (B) Robert Hooke
 - (C) Gregor Mendel
 - (D) Robert Brown
69. Penicillin was discovered by
- (A) Gregor Mendel
 - (B) Francis Crick
 - (C) James Watson
 - (D) Alexander Fleming
70. A nucleus has 6 protons and 8 neutrons. The nucleus emits two α particles. How many protons and neutrons will be left in the nucleus?
- (A) 2 and 4
 - (B) 2 and 2
 - (C) 4 and 6
 - (D) 5 and 7

71. There were _____ Mahajanapadas in India (600BC - 325BC)

- (A) 14
- (B) 12
- (C) 16
- (D) 20

72. _____ is called the 'Land of White Clouds'.

- (A) New Zealand
- (B) Belgium
- (C) Sri Lanka
- (D) South Africa

73. _____ is the currency of Turkey.

- (A) Dirham
- (B) Zloty
- (C) Riyal
- (D) Lira

74. OH radicals in atmosphere play a role of

- (A) Scavenger
- (B) Acidifier
- (C) Reducing agent
- (D) Greenhouse gas

75. The widely-used aerobic suspension type of liquid waste treatment system is

- (A) Rotating Biological Contractor
- (B) Percolating filter
- (C) Activated sludge process
- (D) Septic tank

76. 10 miles is equivalent to _____.

- (A) 12 km
- (B) 18 km
- (C) 14 km
- (D) 16 km

77. National Ambient Air Quality Standards for major pollutants were notified by CPCB in

- (A) 1994
- (B) 1984
- (C) 2004
- (D) 1974

78. Minamata disease is caused by

- (A) As vapour
- (B) Hg vapour
- (C) organic Hg
- (D) Dissolved As

79. The Saffron Revolution is associated with

- (A) Egg
- (B) Oilseeds
- (C) Solar Energy
- (D) Onion

80. The Suez Canal opened for traffic in

- (A) 1869
- (B) 1700
- (C) 1800
- (D) 1620

Please Turn Over

81. The name *Amoco Cadiz* is related with
(A) Nuclear waste site
(B) Oil slick
(C) Toxic cloud
(D) Forest fire
82. The Bhopal Disaster occurred on
(A) December 3, 1984
(B) January 4, 1984
(C) August 14, 1984
(D) None of the above
83. Sea water is
(A) acidic
(B) alkaline
(C) neutral
(D) hypotonic
84. Gobar gas contains mainly
(A) Ethylene
(B) Methane
(C) Hydrogen and Ethylene
(D) Hydrogen and Oxygen
85. Air pollutant causing leaf curling is
(A) SO_2
(B) O_3
(C) H_2S
(D) CO
86. Bosphorous Strait joins _____
(A) Black Sea and Marmara Sea
(B) Tasman Sea and South Sea
(C) Java Sea and Indian Ocean
(D) Red Sea and Gulf of Aden
87. Black foot disease is caused by
(A) excess of fluoride in water
(B) deficiency of iodine in water
(C) excess of arsenic in water
(D) excess of iodine in water
88. Which pollution causes Jaundice?
(A) Water
(B) Air
(C) Land
(D) Thermal
89. The finest 'Glass Industry' is associated with _____.
(A) France
(B) Belgium
(C) Germany
(D) Italy
90. The deepest lake in the world is _____.
(A) Titicaca
(B) Baikal
(C) Superior
(D) Ontario

91. Lightening in the atmosphere produces
(A) NO
(B) CO
(C) CO₂
(D) NH₃
92. In turbidity analysis, formazin is used
(A) to stabilize the samples.
(B) to preserve the sample.
(C) to make turbidity standard.
(D) to remove colour interferences.
93. The term 'Bhugol' was first used in the book 'Surya Siddhanta' written by _____.
(A) Brahmagupta
(B) Aryabhata
(C) Bhaskaracharya
(D) Varah Mihir
94. MPN (Most Probable Number) indicates
(A) Thermal pollution
(B) Air pollution
(C) Faecal pollution
(D) Industrial pollution
95. Right to Information came into force on _____.
(A) 10/12/2005
(B) 12/10/2005
(C) 01/10/2005
(D) 10/01/2005
96. Which secondary pollutant is produced by UV rays of sun lights?
(A) SO₂
(B) CO
(C) Fluorides
(D) O₃
97. The major stratospheric ozone layer over Antarctica was discovered in
(A) 1983
(B) 1985
(C) 1987
(D) 1980
98. Peeling of Ozone umbrella is due to
(A) CFCs
(B) PAN
(C) CO₂
(D) Coal burning
99. The treatment designed to remove non-biodegradable organic pollutants and mineral nutrients from waste water is
(A) Lagoons
(B) Imhoff tank
(C) Secondary treatment
(D) Tertiary treatment
100. Jar test is used to determine
(A) Turbidity of water
(B) Settling of solids
(C) Coagulant dose
(D) Coagulant time

Please Turn Over

101. The Environmental Protection Act was enacted in
- (A) 1986
 - (B) 1985
 - (C) 1987
 - (D) 1972
102. _____ takes only 9.9 hours for a complete rotation around its own axis.
- (A) Jupiter
 - (B) Mars
 - (C) Saturn
 - (D) Neptune
103. Layer of Ozone is present in
- (A) Stratosphere
 - (B) Troposphere
 - (C) Thermosphere
 - (D) Mesosphere
104. Banabhatta was the court poet of
- (A) Harshavardhana
 - (B) Kumarpala
 - (C) Ramapala
 - (D) Prithwiraja-III
105. Which species of chromium is toxic in water?
- (A) Cr^{+2}
 - (B) Cr^{+3}
 - (C) Cr^{+6}
 - (D) Cr^0
106. Cyclone collector is used for minimizing
- (A) Radioactive pollution
 - (B) Air pollution
 - (C) Noise pollution
 - (D) Water pollution
107. Taiwan was earlier known as _____
- (A) Tai Pe
 - (B) Hongkong
 - (C) Yangon
 - (D) Formosa
108. Gol Gumbaz is in _____
- (A) Jaipur
 - (B) Junagadh
 - (C) Bijapur
 - (D) Gwalior
109. Result of Ozone hole is
- (A) greenhouse effect
 - (B) global warming
 - (C) acid rain
 - (D) UV radiations reach the earth
110. Rajaji National Park is situated in
- (A) Delhi
 - (B) Uttarakhand
 - (C) Tamil Nadu
 - (D) Karnataka
111. NITI Aayog was constituted on _____
- (A) 01/01/2016
 - (B) 10/10/2015
 - (C) 10/10/2016
 - (D) 01/01/2015
112. Venice of the East is _____
- (A) Shillong
 - (B) Kolkata
 - (C) Allapuzha
 - (D) Bengaluru

113. The city of Seven Hills is _____.
- (A) Milan
 - (B) Athens
 - (C) Barcelona
 - (D) Rome
114. Lucknow is situated on the bank of _____.
- (A) Gomati
 - (B) Ganga
 - (C) Yamuna
 - (D) Son
115. Photochemical smog is related to pollution of _____.
- (A) air
 - (B) water
 - (C) soil
 - (D) nostoc
116. Which one of the following is used as microbial indicator of water contamination?
- (A) Coliform bacteria
 - (B) Giardia
 - (C) Cryptosporidium
 - (D) Tobacco mosaic virus
117. Pollutants in soil can be broken by microorganisms. The process is called _____.
- (A) Probiotics
 - (B) Bioremediation
 - (C) Bio-augmentation
 - (D) None of the above
118. _____ is known as 'The Father of History'.
- (A) Nearchus
 - (B) Herodotus
 - (C) Megasthenese
 - (D) Von Ranke
119. Animal species protected in Kaziranga National Park is _____.
- (A) *Pantherleo*
 - (B) *Rhinoceros unicornis*
 - (C) *Panther tigris*
 - (D) *Macacamulatta*
120. BOD is related to _____.
- (A) detergents
 - (B) putrescibility
 - (C) inorganic pollutants
 - (D) organic pollutants
121. In which Industry, workers suffer from Byssinosis?
- (A) Cardboard
 - (B) Textile
 - (C) Plastic
 - (D) Paper
122. Line joining places with equal temperature is called _____.
- (A) Isotim
 - (B) Isohyet
 - (C) Isobar
 - (D) Isotherm
123. Most abundant pollutant in the atmosphere among hydrocarbon is _____.
- (A) methane
 - (B) propane
 - (C) butane
 - (D) bezypyrene
124. Nalgonda method was developed by Indian Scientist to remove which chemical species from water?
- (A) Iron
 - (B) Manganese
 - (C) Chromium
 - (D) Fluoride

125. Which of the following is used as a coagulant for removal of phosphates in water?
- (A) Aluminium sulphate
 - (B) Iron carbonate
 - (C) Copper sulphate
 - (D) Potassium chromate
126. Dr. Zakir Hussain was the _____ President of India.
- (A) 3rd
 - (B) 4th
 - (C) 2nd
 - (D) 5th
127. 10°C is equivalent to _____.
- (A) 55°F
 - (B) 60°F
 - (C) 50°F
 - (D) 52°F
128. Flame photometry is suitable method for the determination of
- (A) heavy metals
 - (B) dissolved gases
 - (C) dissolved organics
 - (D) alkali metals
129. BOD stands for
- (A) Biochemical Oxygen Demand
 - (B) Biotic Oxygen Dropping
 - (C) Biochemical Oxygen Dressing
 - (D) None of the above
130. _____ is known as the 'Morning Star'.
- (A) Mars
 - (B) Moon
 - (C) Jupiter
 - (D) Venus
131. Kanha National Park is situated in
- (A) Assam
 - (B) Rajasthan
 - (C) Uttar Pradesh
 - (D) Madhya Pradesh
132. Which Vitamin was discovered by Henrik Dam?
- (A) Vitamin K
 - (B) Vitamin C
 - (C) Vitamin E
 - (D) Vitamin A
133. 38th Parallel separates _____.
- (A) North Korea from South Korea
 - (B) Japan from North Korea
 - (C) New Zealand from Australia
 - (D) Vietnam from Kampuchia
134. Pink City refers to _____.
- (A) Chitor
 - (B) Udaipur
 - (C) Ajmer
 - (D) Jaipur
135. The Namami Gange Scheme was announced on _____.
- (A) 07/07/2016
 - (B) 01/01/2016
 - (C) 01/03/2016
 - (D) 31/03/2016

136. Ozone day is
(A) January 30
(B) September 16
(C) April 21
(D) December 25
137. Cement dust is characterized by very fine particles. Which of the following air pollution control devices is appropriate for removing them from hot exhaust gases emanating from cement kiln?
(A) Bag house
(B) Cyclone
(C) Venture scrubber
(D) Electrostatic precipitator
138. Activated sludge is associated with management of waste and it is a kind of
(A) Chemical treatment
(B) Mechanical means
(C) Biological treatment
(D) Nuclear means
139. Strait of Gibraltar is known as _____
(A) Pillars of Hercules
(B) Pearl of Antilles
(C) Honeymoon Lake
(D) None of the above
140. 49th Parallel separates _____
(A) India from Pakistan
(B) India from Tibet
(C) USA from Canada
(D) France from Germany
141. The National Highway linking Delhi–Agra–Kanpur–Varanasi–Kolkata is _____.
(A) NH-1
(B) NH-3
(C) NH-2
(D) NH-4
142. The headquarters of South Eastern Railway is at _____.
(A) Kolkata
(B) Kharagpur
(C) Bilaspur
(D) Durgapur
143. _____ is known as the Hermit Kingdom.
(A) Nepal
(B) Tibet
(C) Bhutan
(D) Korea
144. Savannahs are
(A) Tropical rain forests
(B) Desert scrubs
(C) Grassland with scattered trees
(D) Dense forests with closed canopy
145. For the detection of polyaromatic hydrocarbons which of the following instruments is used?
(A) Atomic absorption spectrophotometer
(B) X-ray Diffractometer
(C) Gas Chromatography
(D) Flame photometer

Please Turn Over

146. Technically, there are _____ Articles in the Constitution of India.

- (A) 295
- (B) 380
- (C) 395
- (D) 375

147. Queen of Adriatic is the nickname of _____.

- (A) Rome
- (B) Paris
- (C) Tokyo
- (D) Venice

148. *E. Coli* is used as an indicator organism to determine pollution of water with

- (A) pollen of aquatic plants
- (B) heavy metals
- (C) faecal matter
- (D) industrial effluents

149. Gate of Tears is in _____.

- (A) New Delhi
- (B) Mumbai
- (C) Jerusalem
- (D) Ahmedabad

150. Jawahar Lal Nehru port is in _____.

- (A) Maharashtra
- (B) Goa
- (C) Odisha
- (D) Karnataka

151. Ozone undergoes photolysis due to ultra-violet radiations of wavelength

- (A) <320 nm
- (B) <400 nm
- (C) <500 nm
- (D) <600 nm

152. The largest Tiger Reserve in India is _____.

- (A) Sundarban
- (B) Periyar
- (C) Kanha
- (D) Nagarjunsagar Srisailem

153. Mango necrosis (Black Tip) is due to

- (A) SO_2
- (B) HCl
- (C) PAH
- (D) PAN

154. Kanha National Park is famous for

- (A) Rhinoceros
- (B) Tiger
- (C) Birds
- (D) Crocodiles

155. Overgrazing causes

- (A) Negative pollution
- (B) Positive pollution
- (C) Soil erosion
- (D) Reduction in crop yield

156. In which year Alexander Flemming discovered Penicilline?
- (A) 1930
 - (B) 1928
 - (C) 1932
 - (D) 1934
157. Biome have
- (A) plant communities
 - (B) animal communities
 - (C) trees only
 - (D) Both (A) and (B)
158. MAB stands for
- (A) Man and Biosphere
 - (B) Man, Antibiotic and Bacteria
 - (C) Man and Biotic Community
 - (D) Mayer, Andersand and Bisby
159. _____ is known as 'The Father of Geography'.
- (A) Hipparchus
 - (B) Hecataeus
 - (C) Ptolemy
 - (D) Eratosthenes
160. Ultrafiltration can remove
- (A) suspended solids
 - (B) bacteria
 - (C) protozoa
 - (D) All of the above
161. When is International Yoga Day celebrated?
- (A) June 21
 - (B) July 20
 - (C) March 21
 - (D) June 20
162. Who has won the Booker Prize 2020 for his debut novel "Shuggie Bain"?
- (A) James Kelman
 - (B) Marieke Lucas Rijneveld
 - (C) Margaret Atwood
 - (D) Douglas Stuart
163. Which port is renamed as Shyama Prasad Mukherjee Port?
- (A) Paradeep
 - (B) Kolkata
 - (C) Chennai
 - (D) Vishakhapatnam
164. When is the United Nations (UN)'s World Tsunami Awareness Day observed?
- (A) November 1
 - (B) November 2
 - (C) November 3
 - (D) November 5
165. United Nations (UN)'s World Science Day for Peace and Development is observed on which date?
- (A) November 7
 - (B) November 10
 - (C) November 8
 - (D) November 9

Please Turn Over

166. Ministry of Shipping has been renamed as _____
- (A) Ministry of Ports
 - (B) Ministry of Coast
 - (C) Ministry of Waterways
 - (D) Ministry of Ports, Shipping and Waterways
167. What is the name of the latest earth observation satellite launched by ISRO (November 2020) along with 9 international customer satellites from Andhra Pradesh?
- (A) G Sat-30
 - (B) India Sat
 - (C) EOS-1
 - (D) EOS-2
168. Which country named the Cyclone "Yaas"?
- (A) Oman
 - (B) India
 - (C) Myanmar
 - (D) Srilanka
169. Where will be United Nations (UN) Climate Conference also known as COP 26 held in 2021?
- (A) Rome, Italy
 - (B) Glasgow, United Kingdom
 - (C) Madrid, Spain
 - (D) Santiago, Chile
170. Which popular social media/messaging app got approval to launch a payment system on Unified Payments Interface (UPI) in the multi-bank model in India?
- (A) Facebook
 - (B) Telegram
 - (C) Whatsapp
 - (D) Instagram
171. ISRO plans to launch Venus mission named "Shukrayaan-1" by which year?
- (A) 2024
 - (B) 2022
 - (C) 2021
 - (D) 2025
172. On which river is the Ratle Hydropower project located?
- (A) Beas
 - (B) Ravi
 - (C) Chenub
 - (D) Sutlej
173. Name the first Country to formally exit the Paris Climate Agreement (November 2020).
- (A) China
 - (B) United States (US)
 - (C) India
 - (D) Australia
174. Who has developed the new anti-covid drug "2-DG" in collaboration with DRL?
- (A) DRDO
 - (B) Bharat Biotech
 - (C) ICMR
 - (D) Serum Institute
175. India's first-ever e-resource centre, 'Nyay Kaushal' has been inaugurated (October 31, 2020) in which State?
- (A) Karnataka
 - (B) Maharashtra
 - (C) Tamil Nadu
 - (D) Gujarat

176. Shane Watson announced his retirement from all forms of Cricket. He belongs to which country?

- (A) England
- (B) New Zealand
- (C) Australia
- (D) South Africa

177. Name the first country to launch the world's first 6G satellite named "UESTC" satellite (Star Era-12) to test communications from space?

- (A) China
- (B) United States (US)
- (C) Japan
- (D) France

178. Who won the Dream11 Indian Premier League 2020 (13th Edition of IPL) held in UAE?

- (A) Delhi Capital
- (B) Chennai Superkings
- (C) Kings XI Punjab
- (D) Mumbai Indians

179. Which Tiger Reserve received TX2 Tiger Conservation Awards 2020 for doubling the number of tigers in 4 years ahead of the target of 10 years?

- (A) Nagarjunsagar-Srisailem Tiger Reserve, Andhra Pradesh
- (B) Bor Tiger Reserve, Maharashtra
- (C) Amrabad Tiger Reserve, Hyderabad
- (D) Pilibhit Tiger Reserve, Uttar Pradesh

180. Who became the fastest Indian spinner to claim 100 wickets in One Day Internationals?

- (A) K Yadav
- (B) R Ashwin
- (C) R Jadeja
- (D) Y Chahal

181. Who is now the CBI chief?

- (A) Rishi Kumar Shukla
- (B) Alok Verma
- (C) Subodh Kumar Jaiswal
- (D) Kumar Rajesh Chandra

182. Which state reported the first confirmed coronavirus case in India?

- (A) Odisha
- (B) Kerala
- (C) Goa
- (D) Punjab

183. Which is 1st state in India to use Quick Deployment Antenna (QDA) technology for disaster management?

- (A) Arunachal Pradesh
- (B) Uttarakhand
- (C) Gujarat
- (D) Sikkim

184. Indira Gandhi Peace Prize, 2020 has been awarded to

- (A) Donald Trump
- (B) Sir David Attenborough
- (C) Amitabh Bachchan
- (D) Manmohan Singh

185. Alassane Outtara has been elected as President of which country?

- (A) Turkey
- (B) Brazil
- (C) Ghana
- (D) Ivory Coast

186. Who won the International Children's Peace Prize 2020?

- (A) Greta Thunberg
- (B) Sadat Rahman
- (C) Aava Murto
- (D) Khusi Chindaliya

187. Where the Second World Health Expo held in November 2020?

- (A) Wuhan, China
- (B) Geneva, Switzerland
- (C) New York, USA
- (D) New Delhi, India

188. Who has been appointed as the Chairman of the International Cricket Council (ICC)?

- (A) Shashank Manohar
- (B) Manu Sawhney
- (C) Imran Khwaja
- (D) Greg Barclay

189. Who authored the book titled "Pandemonium: The Great Indian Banking Tragedy"?

- (A) Pradeep Srivastava
- (B) Sarbpreet Singh
- (C) Tamal Bandyopadhyay
- (D) Anand Neelakantan

190. The new National Education Policy (NEP) was passed by Government of India on

- (A) 20 July, 2020
- (B) 29 July, 2019
- (C) 29 July, 2020
- (D) 20 January, 2020

191. Which film won the 'Best Picture' award at the Oscars (93rd Academy Awards), 2021?

- (A) Minari
- (B) The Father
- (C) Nomadland
- (D) My Octopus Teacher

192. Where has been India's first solar-based Integrated Multi-Village Water Supply Project (IMVWSP) inaugurated?

- (A) Gujarat
- (B) Assam
- (C) Sikkim
- (D) Arunachal Pradesh

193. When was UN's International Day of Older Persons observed annually?

- (A) October 2
- (B) September 29
- (C) October 1
- (D) September 30

194. Who won the French Open, 2021 in the Men's Singles category?

- (A) Rafael Nadal
- (B) Tsitsipas
- (C) Alexander Zverev
- (D) Novak Djokovic

195. Where is the world's largest care and cure centre for elephants being set up in India?

- (A) Kerala
- (B) Meghalaya
- (C) Chhattisgarh
- (D) Odisha

196. Where has India's First Moss Garden been inaugurated?

- (A) Kevadia, Gujarat
- (B) Nainital, Uttarakhand
- (C) Mandi, Himachal Pradesh
- (D) Subansiri, Arunachal Pradesh

197. Foundation Day of NDRF was observed on

- (A) January 20
- (B) January 15
- (C) January 23
- (D) January 22

198. The Lai Haraoba festival is observed in _____.

- (A) Mizoram
- (B) Sikkim
- (C) Nagaland
- (D) Tripura

199. Roger Penrose, Reinhard Genzel, and Andrea Ghez have got the 2020 Nobel Prize in which field?

- (A) Physics
- (B) Economics
- (C) Medicine
- (D) Chemistry

200. Who has been named as the Brand Ambassador for Namami Gange Project during the Ganga Utsav, 2020?

- (A) Amitabh Bachchan
- (B) Aamir Khan
- (C) Akshay Kumar
- (D) Chacha Chaudhary