

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

2023

TEST BOOKLET

TEST BOOKLET SERIES

PAPER - IV

Time allowed : 3 hours

Full marks : 200

Answer *all* the questions.

Questions are of equal value.



Note: This question paper has been attempted by one of our students. So the markings here are his answers not ours. This is not our answer key.

Serial No.

Roll No.:

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, containing 200 questions. **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 OMR Sheet supplied for the purpose.
3. Before you proceed to mark in the OMR Sheet in response to various items in the Test Booklet, you have to fill in some particulars in the OMR Sheet. **Do not fold the OMR 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 in 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. If more circle is encoded for a particular answer, it will be treated as a wrong answer.
6. **There will be negative marking of 0.25 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.**

MWC/IV/23

A-2

1. Powndal is a unit of

- (A) mass
- (B) weight
- (C) momentum
- (D) energy

2. Who is called the 'Father of Green Revolution' in India?

- (A) Verghese Kurien
- (B) M S Swaminathan
- (C) Dhyan Chand
- (D) Vikram Sarabhai

3. Which of the following carbohydrates is not a monosaccharide?

- (A) Glucose
- (B) Fructose
- (C) Ribose
- (D) Lactose

4. Who is called the 'Father of Election Science'?

- (A) David Butler
- (B) T. N. Seshan
- (C) Abul Kalam Azad
- (D) Sukumar Sen

5. When the power of eye lens increases, the defect of vision is produced. The defect is known as

- (A) shortsightedness
- (B) longsightedness
- (C) colour blindness
- (D) astigmatism

6. Which of the following is the most suitable material for making permanent magnet?

- (A) Steel
- (B) Soft iron
- (C) Copper
- (D) Nickel

7. A magnetic field can be produced by

- (A) moving charge.
- (B) a changing electric field.
- (C) both (A) and (B)
- (D) None of the above

8. An astronaut in a spaceship see the outer space as

- (A) Red
- (B) Blue
- (C) Indigo
- (D) Black

9. The National Inland Navigation Institute is situated in which of the following places ?

- (A) Patna
- (B) Balasore
- (C) Bangalore
- (D) Dehradun

10. The first geostationary satellite launched in 1964 was called

- (A) ANIK
- (B) SYNCOM-3
- (C) WESTAR
- (D) MOLNIYA

11. Graphite is a good conductor of electricity due to

- (A) strong electrostatic bonding. α
- (B) free localized bonds.
- (C) free delocalized electrons. ✓
- (D) tetrahedral arrangement of particles. α

12. The year in which NCEPC was set up is

- (A) 1970
- (B) 1972
- (C) 1974
- (D) 1980

13. Which of the following is a naturally occurring polymer?

- (A) Starch ✓
- (B) Teflon
- (C) Neoprene
- (D) Nylon

14. Fullerene is made up of _____ carbon atoms

- (A) 100
- (B) 20
- (C) 75
- (D) 60 ✓

15. The 10% law was provided by

- (A) Odum ✓
- (B) Lindemann ✓
- (C) Tausley
- (D) Darwin

16. Where is the COP 28 scheduled to be held?

- (A) India
- (B) Dubai ✓
- (C) USA
- (D) Japan ✓

17. The following organism does not exhibit sexual reproduction :

- (A) Bacteria ✓
- (B) Cyanobacteria
- (C) Fungi
- (D) Algae

18. World Earth Day is celebrated on

- (A) 2nd May
- (B) 22nd April ✓
- (C) 20th March
- (D) 28th February

19. Gahirmatha Sanctuary is the only sanctuary for _____ in Odisha.

- (A) Turtles ✓
- (B) Crocodiles
- (C) Elephants
- (D) Deer

20. The range of visible spectrum is

- (A) 350 - 650 nm
- (B) 380 - 750 nm
- (C) 390 - 700 nm
- (D) 400 - 800 nm ✓

MWC/IV/23

A-4

21. The number of United Nations Sustainable Development Goals are

(A) 15

(B) 16

(C) 17

(D) 18

22. Stone cancer occurs due to

(A) Frost damage

(B) SPM

(C) Acid Rain

(D) Higher VOC level

23. The WSSD was held in

(A) Johannesburg

(B) Brazil

(C) London

(D) Paris

24. Minamata disease is caused by

(A) Lead

(B) Mercury

(C) Cadmium

(D) Arsenic

25. The HQ for CPCB is located in

(A) Mumbai

(B) Kolkata

(C) New Delhi

(D) Bangalore

26. Who among the following made first Film Theatre of India?

(A) Lumiere Brothers

(B) Mani Sethna

(C) Dada Saheb Phalke

(D) Dhirendra Nath Ganguly

27. Vinegar is a dilute solution of

(A) ethyl alcohol

(B) acetic acid

(C) formic acid

(D) vanadium

28. What was the capital of Vajji Mahajanapada?

(A) Kushinara

(B) Vaishali

(C) Pava

(D) Shuktimati

29. The internal energy of gas due to adiabatic expansion will be

(A) decreased

(B) increased

(C) same

(D) dissipated

30. Probiotics are

(A) cancer inducing microbes

(B) safe antibiotics

(C) new kind of food allergens

(D) live microbial food supplement

31. The following layer is also called the hot layer of the atmosphere :

- (A) Troposphere
- (B) Stratosphere
- (C) Mesosphere
- (D) Thermosphere

32. Where is the global seed vault located ?

- (A) Switzerland
- (B) Norway
- (C) Finland
- (D) Denmark

33. Which one of the following is not a metalloid?

- (A) Boron
- (B) Silicon
- (C) Gallium
- (D) Germanium

34. When is the 'World Intellectual Property Day' observed?

- (A) April 24
- (B) April 26
- (C) April 28
- (D) April 30

35. The following organism helps in denitrification :

- (A) Fungi
- (B) Bacteria
- (C) Algae
- (D) Protozoa

36. Silent Valley Movement occurred in

- (A) Tamil Nadu
- (B) Karnataka
- (C) Andhra Pradesh
- (D) Kerala

37. Which of the following is a vector quantity?

- (A) Current
- (B) Current density
- (C) Power
- (D) Wattless current

38. UNDP HeadQuarters is located in

- (A) New york
- (B) Geneva
- (C) London
- (D) Paris

39. How many biosphere reserves are there in India in 2023?

- (A) 17
- (B) 18
- (C) 19
- (D) 20

40. Lumbar vertebrae are found in

- (A) Abdominal region
- (B) Thorax
- (C) Neck region
- (D) Hip region

Please Turn Over

MWC/IV/23

A-6

41. The highest global warming potential is observed in

- (A) CO₂
- (B) NO₂
- (C) CFC
- (D) SF₆

42. Lichen is extremely sensitive to

- (A) SO₂
- (B) CO₂
- (C) CO
- (D) N₂

43. The year in which WHO was established is

- (A) 1940
- (B) 1948
- (C) 1952
- (D) 1954

44. The positive temperature coefficient of resistance is for

- (A) Carbon
- (B) Germanium
- (C) Copper
- (D) An electrolyte

45. Water is disinfected with

- (A) KMnO₄
- (B) Cl₂
- (C) Both
- (D) NO₂

46. Which is the largest tennis stadium in the world?

- (A) Arthur Ashe Stadium
- (B) O2 Arena Stadium
- (C) Rotterdam Ahoy Stadium
- (D) Perth Arena Stadium

47. BOD increases in a waterbody due to the increase of

- (A) Phytoplankton
- (B) Zooplankton
- (C) Sewage
- (D) Heavy Metals

48. GATT was introduced in

- (A) 1947
- (B) 1948
- (C) 1954
- (D) 1960

49. The coldest layer of the atmosphere is

- (A) Troposphere
- (B) Stratosphere
- (C) Mesosphere
- (D) Thermosphere

50. Toptapani is located in

- (A) Uttar Pradesh
- (B) Odisha
- (C) Madhya Pradesh
- (D) Jharkhand

51. The primary organ affected by COVID 19

- (A) Lung
- (B) Liver
- (C) Kidney
- (D) Spleen

52. The size of the nanoparticles between _____ nm.

- (A) 100 to 1000
- (B) 0.1 to 10
- (C) 1 to 100
- (D) 0.01 to 1

53. Pablo Picasso was a famous painter from which country?

- (A) USA
- (B) France
- (C) Spain
- (D) UAE

54. Minamata Bay is located in

- (A) North Korea
- (B) China
- (C) South Korea
- (D) Japan

55. The frequency of a simple pendulum is f . What is the frequency change in the energy of the pendulum?

- (A) $\frac{f}{2}$
- (B) f
- (C) $2f$
- (D) $4f$

56. Which is the first Indian documentary to win an Oscar Award?

- (A) Stranger at the Gate
- (B) How do you Measure a Year?
- (C) The Elephant Whisperers
- (D) All that Breathes

57. The direction of induced e.m.f. during electromagnetic induction is given by

- (A) Faraday's Law.
- (B) Lenz's Law.
- (C) Maxwell's Law.
- (D) Ampere's Law.

58. Who is known as the father of the modern Olympic Games?

- (A) Woodrow Wilson
- (B) Pierre de Coubertin
- (C) Spyridon Samaras
- (D) Herbert Hoove

59. What is the order of increasing energy of the orbitals within a single energy level?

- (A) $d < s < f < p$
- (B) $s < p < d < f$
- (C) $p < s < f < d$
- (D) $f < d < p < s$

60. The size of E.Coli bacteria is

- (A) 2000 nm.
- (B) 200 nm.
- (C) 20 nm.
- (D) 2nm.

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A-8

61. There are _____ districts in North Bengal.

- (A) 8
- (B) 7
- (C) 6
- (D) 5

62. Which institution won the '2021 Indira Gandhi Prize for Peace, Disarmament and Development'?

- (A) Children For You
- (B) Pratham
- (C) Vanavil
- (D) Give India Foundation

63. The element that is required for the synthesis of chlorophyll is

- (A) Mn
- (B) Fe
- (C) Mg
- (D) Mo

64. Which of the following beach is also known as Mahatma Gandhi Beach ?

- (A) Marari beach
- (B) Cherai beach
- (C) Kollam beach
- (D) Kannur beach

65. Competitive Exclusion Principle was denoted by

- (A) Darwin
- (B) Gause
- (C) Lamarck
- (D) Odum

66. A soap bubble is given a negative charge, then its radius

- (A) decreases
- (B) increases
- (C) remains unchanged
- (D) nothing can be predicted as information is insufficient

67. One of the following liquids will leave behind a residue on heating. This one is

- (A) Brine
- (B) Bromine
- (C) Mercury
- (D) Alcohol

68. Which species does not contain at least one 90° bond angle?

- (A) CF_4
- (B) PF_5
- (C) SF_6
- (D) SiF_6^{2-}

69. Fixed torque is applied to a body. What will be generated in the body?

- (A) Angular acceleration
- (B) Linear acceleration
- (C) Angular velocity
- (D) Angular displacement

70. Cyclotron is a device which is used to

- (A) measure the charge
- (B) measure the voltage
- (C) accelerating electrons
- (D) accelerating protons

71. The colour of CuS is
(A) Black
(B) Blue
(C) Yellow
(D) Red
72. The degrees of freedom of H₂ molecule is
(A) 2
(B) 3
(C) 5
(D) 6
73. Who among the following made the first fully indigenous silent feature film in India?
(A) Lumiere Brothers
(B) Mani Sethna
(C) Dada Saheb Phalke
(D) Dhirendra Nath Ganguly
74. Who was recently crowned as 'Miss India 2023'?
(A) Nandini Gupta
(B) Megan Edward
(C) Shreya Poonja
(D) Strela Luwang
75. The valley of flowers is located in which state of India?
(A) Uttar Pradesh
(B) Uttarakhand
(C) Sikkim
(D) Arunachal Pradesh
76. Which transitions are studied by UV spectrometer?
(A) Rotational
(B) Electronic
(C) Nuclear
(D) Vibrational
77. Which documentary won the "Best Long Documentary Award" at the South Asian Film Festival of Montreal 2023?
(A) Gujarat
(B) Scam
(C) Bharat Mata Ki
(D) Gauri
78. Which movie has been declared the best Indian film of all time by the International Federation of Film Critics (FIPRESCI)?
(A) Pather Panchali
(B) Ankur
(C) Anand
(D) Mughal-E-Azam
79. Noise in temperature of Sun compared to Earth is more than _____ K.
(A) 1000
(B) 500
(C) 5000
(D) 1,00,000
80. 'Country Partnership Framework' is associated with which institution?
(A) World Bank
(B) IMF
(C) WEF
(D) ADB

81. Reaction of Lead Oxide (PbO) and hydrogen gas (H₂) leads to

- (A) reduction of lead.
- (B) oxidation of lead.
- (C) formation of PbCl₂.
- (D) formation of PbO.

82. *Liberica excelsa*, which was seen in the news, belongs to which species?

- (A) Tea
- (B) Coffee
- (C) Rice
- (D) Wheat

83. The Fukushima Nuclear disaster took place in

- (A) 2010
- (B) 2011
- (C) 2012
- (D) 2014

84. Netaji Subhas Chandra Bose became the Supreme Commander of Indian National Army in

- (A) 1932
- (B) 1935
- (C) 1945
- (D) 1943

85. What was the launch date of Chaiidrayaan-3?

- (A) 24 July, 2023
- (B) 14 July, 2023
- (C) 13 July, 2023
- (D) 04 July, 2023

86. Vocal Cords occur in

- (A) pharynx
- (B) larynx
- (C) glottis
- (D) bronchial tube

87. Law of definite proportion is obeyed in

- (A) Stoichiometry
- (B) electrometry
- (C) photometry
- (D) spectrometer

88. Triglycerides are broken down to

- (A) Fatty acids
- (B) Amino acids
- (C) Glycerol
- (D) Fatty acid and glycerol

89. OTEC involves thermal power generation from

- (A) Sea
- (B) River
- (C) Wetland
- (D) Lake

90. The Paithan (Jayakwadi) Hydro-electric project, completed with the help of Japan, is on the river—

- (A) Godavari
- (B) Narmada
- (C) Cauvery
- (D) Ganga

91. The down link frequency in the C-band transponder is

- (A) 2 GHz
- (B) 4 GHz
- (C) 14 GHz
- (D) 11 GHz

92. Which company has retained its spot as the top-selling car-maker in World for third straight year?

- (A) Volkswagen
- (B) Toyota
- (C) Skoda
- (D) None of the above

93. The nitrogen fixation in a paddy field, is brought about by

- (A) Bacteria
- (B) Fern
- (C) Cyano bacteria
- (D) Algae

94. A television (TV) transmission is an example of which type of transmission?

- (A) Simplex
- (B) Half-duplex
- (C) Full-duplex
- (D) Bidirectional

95. Which Indian has won the 2023 Ramon Magsaysay Award?

- (A) Ravi Kannan
- (B) Gautam Adani
- (C) Ghazal Alagh
- (D) Kailash Vidyarthi

96. An n-type semiconductor is

- (A) negatively charged.
- (B) positively charged.
- (C) neutral.
- (D) negatively or positively charged depending upon the amount and substance of impurity.

97. What is the revised prize amount for Nobel Prize Winners, as of 2023?

- (A) 1 million Swedish crowns
- (B) 11 million Swedish crowns
- (C) 21 million Swedish crowns
- (D) 31 million Swedish crowns

98. The usual pH of sea water ranges from

- (A) 7.5 – 8.5
- (B) 8.5 – 9.5
- (C) 9.5 – 10.5
- (D) 10.5 – 11.5

99. The damage induced by PAN is

- (A) Skin cancer
- (B) Eye irritation
- (C) Both
- (D) Liver cancer

100. The Electrostatic Precipitator is ideally used for the removal of which type of pollution?

- (A) Outdoor Air pollution
- (B) Indoor Air pollution
- (C) Water pollution
- (D) Odour pollution

Please Turn Over

MWC/IV/23

A-12

101. At constant temperature, the graph between P (pressure) vs $\frac{1}{V}$ (V=volume) of a real gas is

- (A) hyperbola
- (B) parabola
- (C) circle
- (D) straight line

102. Magnetic effect of current was discovered by

- (A) Faraday
- (B) Oersted
- (C) Ampere
- (D) Bohr

103. The following Hepatitis virus is transmitted through blood.

- (A) Hep. A
- (B) Hep. B
- (C) Hep. C
- (D) (B) and (C)

104. The best quality coal is

- (A) Anthracite
- (B) Peat
- (C) Bituminous
- (D) Lignite

105. World's 1st medicine from marijuana is named as

- (A) Malarone
- (B) Effexor
- (C) Absinthium
- (D) Epidolex

106. How many awards were won by West Bengal Government in the Scotch Governance Awards in 2021?

- (A) 3
- (B) 4
- (C) 5
- (D) 6

107. Which state is the largest producer of bamboo in India?

- (A) Assam
- (B) Arunachal Pradesh
- (C) Chhatishgarh
- (D) Karnataka

108. Which among the following part of Bombay (now Mumbai) is known as Old Woman's Island?

- (A) Parel
- (B) Worli
- (C) Colaba
- (D) Mazgao

109. The least albedo is noted in case of

- (A) Soil
- (B) Snow
- (C) Asphalt
- (D) Forest

110. Which scheme of West Bengal Government was awarded in the Digital India Mission.

- (A) Shashthya Sathi
- (B) Shilpa Sathi
- (C) Rupashree
- (D) Duare Sarkar

111. Alec Jeffery's name is associated with
- (A) DNA sequencing
 - (B) DNA fingerprinting
 - (C) RNA sequencing
 - (D) Site directed mutagenesis

112. The shape of the Diminishing Age Pyramid
- (A) Triangular
 - (B) Bell-shaped
 - (C) Urn-shaped
 - (D) None of these

113. The following ecosystem develops in flowing water :
- (A) Lentic
 - (B) Lotic
 - (C) Benthic
 - (D) Pelagic

114. What is the name of world's first robotic check-in assistant, that was launched by Emirates?
- (A) Sara
 - (B) Kiwi
 - (C) Siri
 - (D) Rini

115. What is the name of the first female robot to be part of India's first manned space mission?
- (A) Sangha mitra
 - (B) Ganga mitra
 - (C) Vyom mitra
 - (D) Gagan mitra

116. UNCED was held in
- (A) Rio
 - (B) Stockholm
 - (C) Oslo
 - (D) London

117. Jadugoda mines are famous for
- (A) iron ore.
 - (B) mica deposits.
 - (C) gold deposits.
 - (D) uranium deposits.

118. What do we see at speedometer of a car?
- (A) Average speed
 - (B) Average velocity
 - (C) Instantaneous speed
 - (D) Instantaneous velocity

119. The main objective(s) of industrial robot is to
- (A) minimize the labour requirement.
 - (B) increase the productivity.
 - (C) enhance the life of production machines.
 - (D) All of the above

120. Which type of modulation is employed in India for radio transmission?
- (A) Amplitude modulation
 - (B) Frequency modulation
 - (C) Pulse modulation
 - (D) Phase modulation

121. The latest Biosphere Reserve in India is

- (A) Nilgiri
- (B) Andaman and Nicobar
- (C) Gulf of Mannar
- (D) Panna

122. In 2006, Nobel Prize for RNA Interference Phenomenon was won on the work carried out on

- (A) D. melanogaster
- (B) A. thaliana
- (C) C. Elegans
- (D) S. Pombe

123. Which theorem law can explain the working principle of sprayer?

- (A) Stoke's law
- (B) Bernoulli's theorem
- (C) Jurin's law
- (D) Virial theorem

124. Which radioactive metal is responsible for Chernobyl accident?

- (A) Radioactive Uranium
- (B) Radioactive Coesium
- (C) Radioactive Plutonium
- (D) Radioactive Polonium

125. Sultan Azlan Shah Cup is related to which among the following sports?

- (A) Badminton
- (B) Hockey
- (C) Table Tennis
- (D) Golf

126. We keep food in refrigerator to prevent food from going bad due to

- (A) viral infection.
- (B) fungal infection.
- (C) bacterial infection.
- (D) both (B) and (C)

127. Kuno National Park is situated in

- (A) Madhya Pradesh
- (B) Chattisgarh
- (C) Gujarat
- (D) Uttarakhand

128. When is the first paper mill established in India?

- (A) 1832
- (B) 1849
- (C) 1857
- (D) 1861

129. ISRO launched sounding rocket for atmospheric studies. What is the name of the rocket?

- (A) Car to Sat
- (B) Agni-IV
- (C) RH 300
- (D) Brahmos-II

130. Which is not a constituent of cell membrane?

- (A) Glycolipids
- (B) Phospholipids
- (C) Cholesterol
- (D) Proline

131. Which book was written by Kalhana?

- (A) Harshacharita
- (B) Arthashastra
- (C) Indika
- (D) Rajatarangini

132. "The Last Ethic" is a book written by

- (A) Leopold
- (B) Carson
- (C) Hardin
- (D) White

133. Pressure within the lungs is called

- (A) Inter-pulmonary pressure.
- (B) Intra-pulmonary pressure.
- (C) Interstitial pressure.
- (D) Alveolar pressure.

134. Which sport's regional form is "Pehlwani"?

- (A) Boxing
- (B) Football
- (C) Wrestling
- (D) Badminton

135. 'Baibhav, Saurav and Gaurav' are the civilian awards provided by which state?

- (A) Tamil Nadu
- (B) Assam
- (C) Odisha
- (D) Jharkhand

136. Which structure has delocalized π electrons?

- (A) O₃
- (B) Co
- (C) HCN
- (D) CO₂

137. Which one of the following is more elastic

- (A) Copper
- (B) Rubber
- (C) Sponze
- (D) Steel

138. Who launched the Krishi Vikas Yojana

- (A) Indian Council for Agricultural Research
- (B) National Development Council
- (C) State Bank of India
- (D) State Agricultural Research Board

139. In a charged capacitor, the energy resides in

- (A) positive charges.
- (B) both positive and negative charges.
- (C) the field between the plates.
- (D) around the edge of the plates.

140. Who is the only living Indian to win the Grammy Award thrice?

- (A) A R Rahman
- (B) Ricky Kej
- (C) Resul Pookutty
- (D) Babbu Mann

141. The Global Warming Potential of CO₂ is

- (A) 1
- (B) 2
- (C) 3
- (D) 4

142. At which of the following places, noon sun shines exactly overhead twice a year?

- (A) Digha
- (B) Patna
- (C) Kanpur
- (D) Delhi

143. The following antibiotic is produced by bacteria :

- (A) Penicillin
- (B) Chloramphenicol
- (C) Bacitracin
- (D) Streptomycin

144. Boron is useful for which of the following organ?

- (A) Liver
- (B) Kidney
- (C) Brain
- (D) Bones

145. Which of the following states shares the longest boundary with China?

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

146. A 220 volt A.C. is more dangerous than 220 volt D.C. because

- (A) the A.C. attracts.
- (B) the D.C. repels.
- (C) the body offers less resistance to A.C.
- (D) peak voltage for A.C. is much larger than 220 volt.

147. X-unit = ?

- (A) 10⁻¹⁵m
- (B) 10⁻¹²m
- (C) 10⁻¹⁰m
- (D) 10⁻¹³m

148. Which one of the following is most likely to exhibit Tyndall effect?

- (A) Sugar and water mixture
- (B) Potash alum and water mixture
- (C) Chalk powder and water mixture
- (D) Potassium permanganate and water mixture

149. In which year, the first Women's Cricket World Cup was held?

- (A) 1971
- (B) 1972
- (C) 1973
- (D) 1974

150. Which of the following was the first made indigenous, coloured film in India?

- (A) Alama Ara
- (B) Pather Panchali
- (C) Kisan Kanya
- (D) Devdas

151. 'Big Ben' is the famous clock located in which country?

- (A) USA
- (B) UK
- (C) Australia
- (D) France

152. The percentage of thermal power generated from coal in India at present is

- (A) 50%
- (B) 57%
- (C) 64%
- (D) 74%

153. The OTEC plant in India is located in

- (A) Andaman and Nicobar Island
- (B) Lakshadweep
- (C) Gujarat
- (D) Odisha

154. Which of the following tribes of Uttarakhand mainly associate themselves with sheep rearing?

- (A) Boksha
- (B) Bhotia
- (C) Raji
- (D) Tharu

155. Maximum application of animal cell culture technology today is in the production of

- (A) Insulin
- (B) Interferons
- (C) edible Proteins
- (D) vaccines

156. Alternating current is transmitted to distant places at

- (A) high voltage and low current.
- (B) high voltage and high current.
- (C) low voltage and low current.
- (D) low voltage and high current.

157. Nor'wester in Assam is known as by which of the following name ?

- (A) Andhi
- (B) Mango Shower
- (C) Bordoisila
- (D) Blossom

158. The following vitamin is produced in human body due to exposure to sunlight:

- (A) Vit B₆
- (B) Vit B₁
- (C) Vit C
- (D) Vit D₃

159. Which among the following sectors used maximum commercial energy in India?

- (A) Household sector
- (B) Agriculture
- (C) Industry
- (D) Transport

160. Deposit of Lithium has been found in which Indian state?

- (A) Ladakh
- (B) Punjab
- (C) Gujarat
- (D) Jammu & Kashmir

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161. The Rowlatt Act was passed in

- (A) 1905
- (B) 1913
- ~~(C) 1919~~
- (D) 1925

162. Reindeer moss is actually a member of

- ~~(A) Algae~~
- (B) Fungi
- (C) Bryophyte
- (D) Lichen

163. Ecology was coined by

- ~~(A) Haeckel~~
- (B) Odum
- (C) Tausley
- (D) Darwin

164. What is the source of UV radiation?

- (A) Hydrogen gas discharge lamp
- (B) RF oscillator
- (C) Klystron oscillator
- (D) Nernst filament

165. Which of the following Indian states does not share boundary with Myanmar?

- ~~(A) Assam~~
- (B) Manipur
- (C) Nagaland
- (D) Arunachal Pradesh

166. Hormone secretin is produced by

- ~~(A) Stomach~~
- (B) Liver
- (C) Intestine
- (D) Pancreas

167. The Principle of Controlled Chain Reaction is used in

- (A) atom bomb.
- ~~(B) atomic energy reactor.~~
- (C) the core of sun.
- (D) artificial radioactivity.

168. Water purity is denoted by the absence of

- (A) CO₂
- (B) CO
- ~~(C) Coliform~~
- (D) Entero bacter

169. What is the frequency of supply A.C. (current) in India?

- (A) 220 Hz
- (B) 60 Hz
- ~~(C) 50 Hz~~
- (D) 40 Hz

170. Which Indian was conferred the UNEP 'Champions of the Earth' Award in 2022?

- ~~(A) Purnima Devi Barman~~
- ~~(B) Narendra Modi~~
- (C) K. K. Shailaja
- (D) Piyush Goyal

171. For which novel Nayantara Sahgal was awarded Sahitya Academy Award for English?

- (A) A Time to be Happy
- (B) The Day in Shadow
- (C) Rich Like Us
- (D) None of the above

172. Who is the author of the book "India After Gandhi The History of the World's Largest Democracy"?

- (A) Madhav Gandhi
- (B) Romila Thapar
- (C) Ramachandra Guha
- (D) Sujit Mukherjee

173. The first transgenic plant was produces

- (A) Rice
- (B) Tobacco
- (C) Maiz
- (D) Cotton

174. These days HFC is replaced by which gas in refrigerator?

- (A) Toluene
- (B) Butane
- (C) Isobutane
- (D) Nitrobenzene

175. Who was the founder of Haryanka dynasty in India?

- (A) Bimbisara
- (B) Ajatashatru
- (C) Harshabardhana
- (D) Ghanananda

176. IAEA looks after the safety for which type of pollution?

- (A) Heavy Metals
- (B) Hydro carbon
- (C) Plastic
- (D) Radio active elements

177. Which Greek Ruler sent Megasthenes in the Court of Chandragupta Mourya?

- (A) Seleucas Nicator
- (B) Antiochus
- (C) Ptolemy
- (D) None of the above

178. Which of the following gases causes the formation of Carlamino haemoglobin?

- (A) CO
 - (B) CO₂
 - (C) NO₂
 - (D) SO₂
- amine

179. The NDRF is under which Ministry?

- (A) Ministry of Home Affairs
- (B) Ministry of Environment and Forest
- (C) Ministry of External Affairs
- (D) Ministry of New and Renewable Energy

180. Which of the following phenomena is not common to sound and light waves?

- (A) Interference
- (B) Diffraction
- (C) Polarisation
- (D) reflection

181. A non-volatile solid is added to water. Its boiling point will

- (A) decrease.
- (B) increase.
- (C) not change.
- (D) not to be predicted.

182. When light is refracted, which of the following does not change?

- (A) Wavelength
- (B) Frequency
- (C) Velocity
- (D) Amplitude

183. How many major forest groups are there in India?

- (A) 3
- (B) 4
- (C) 5
- (D) 6

184. The state in India having the highest number of wind mill is

- (A) Karnataka
- (B) Gujarat ✓
- (C) Tamil Nadu
- (D) Kerala

185. The average temperature of the Earth due to the albedo effect is

- (A) 10°C
- (B) 15°C
- (C) 20°C
- (D) 25°C

186. Which one of the following is a novel by Rabindranath Tagore?

- (A) Jagir
- (B) Durgeshnandini
- (C) Gora
- (D) Ganadevata

187. What is the India's first nuclear reactor?

- (A) RAMBHA
- (B) MENAKA
- (C) URVASI
- (D) APSARA

188. What is the name of antibiotics that has been discovered to help in fighting drug resistant or hard-to-treat bacterial infections?

- (A) Philo habdins
- (B) Odilor habdins
- (C) Oli habdins
- (D) Ozor habdins

189. What is the amount of methane in cow dung?

- (A) 30%
- (B) 40%
- (C) 50%
- (D) 60%

190. The use of living microorganism to degrade environmental pollutants is called

- (A) microremediation.
- (B) nanoremediation.
- (C) bioremediation.
- (D) All of the above

191. Which launcher was used for Chandrayaan-3?

- (A) GSLV
- (B) LVSM
- (C) GSLV-MK 3
- (D) PSLV

192. Which component is absent in animal cell membrane?

- (A) Cholesterol
- (B) Ergosterol
- (C) Phospholipid
- (D) Oligosaccharide

193. In which year Asoka invaded Kalinga?

- (A) 261 BC
- (B) 235 BC
- (C) 275 BC
- (D) 251 BC

194. Artemesin is a drug used in

- (A) Dengue
- (B) Malaria
- (C) Typhoid
- (D) Pertussis

195. Quantity that remains unchanged in a transformer is

- (A) Voltage
- (B) Current
- (C) Frequency
- (D) Current density

196. The water which is available to plant roots is

- (A) Gravitational water.
- (B) Chemically combined water.
- (C) Hygroscopic water.
- (D) Capillary water.

197. Which was the India's first talkie film?

- (A) Alama Ara
- (B) Pundlik
- (C) Raja Harishchandra
- (D) Nal Damayanti

198. Who is the author of the book "The Idea of India"?

- (A) Sunil Khilnani
- (B) Kiran Nagarkar
- (C) Shiv K Kumar
- (D) None of the above

199. The maximum height of Troposphere from the Earth's surface is

- (A) 10 Km
- (B) 12 Km
- (C) 14.5 Km
- (D) 16.8 Km

200. Which sport's competition was known as the "Friends Provident Trophy"?

- (A) Football
- (B) Volleyball
- (C) Squash
- (D) Cricket

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