T.B.C. : CAB–069

Test Booklet Series

Serial No. | 554222 |

B

TEST BOOKLET

GENERAL STUDIES

Time Allowed : 2 Hours

Maximum Marks : 150

INSTRUCTIONS TO CANDIDATES

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.

2. ENCODE CLEARLY THE TEST BOOKLET SERIES A, B, C OR D AS THE CASE MAY BE IN THE APPROPRIATE PLACES IN THE ANSWER SHEET USING HB PENCIL.

3. You have to enter your **Roll No.** on the Test Booklet in the Box provided along side. **DO NOT** write *anything else* on the Test Booklet.

4. This Test Booklet contains **150** items (questions). Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case, you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.

5. You have to mark all your responses **ONLY** on the **separate Answer Sheet** provided by **using HB pencil.** See instruction in the Answer Sheet.

6. All items carry equal marks. All items are compulsory. Your total marks will depend only on the number of correct responses marked by you in the Answer Sheet. For each question for which a wrong answer is given by you, **one fifth (0·20) of the marks assigned to that question will be deducted as penalty.**

7. Before you proceed to mark in the Answer Sheet the responses to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet as per instructions sent to you with your **Admission Certificate.**

8. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to the Invigilator the *Answer Sheet,* the Test Booklet issued to you.

1. Consider the following pairs :
   1. Proton — $e\ominus$
   2. β-Particle — $_1H^1$
   3. Neutrons — No mass but definite charge
   4. Electrons — No charge and no mass

   Which of these are not correctly matched ?
   (a) 1 and 2
   (b) 1 and 3
   (c) 2, 3 and 4
   (d) 1, 2, 3 and 4

2. Energy of Sun arises out of
   (a) Thermo-nuclear reactions
   (b) Nuclear fission reactions
   (c) Radioactive decay
   (d) Pu^{239} present in its atmosphere

3. Cholesterol is present in
   (a) Animal fats
   (b) Vegetable fats
   (c) Waxes
   (d) Drying oils

4. The combination which can not act as a Buffer solution is
   (a) Sodium acetate, HCl
   (b) Borax, Boric acid
   (c) Na_2HPO_4, Na_3PO_4
   (d) CH_3CO_2H, CH_3CO_2Na

5. The homolytic fission of a hydrocarbon results in the formation of
   (a) Carbanion
   (b) Free radicals
   (c) Carbonium ion
   (d) Carbenes

6. Graphite is used in nuclear reactors
   (a) as a lubricant
   (b) as a fuel
   (c) for reducing the velocity of neutrons
   (d) for lining the inside of the reactor as an insulator

7. Galvanised iron is protected from rusting because, it has a coating of
   (a) Mercury
   (b) Tin
   (c) Zinc
   (d) Chromium

8. Many ionic crystals dissolve in water because
   (a) water is an amphiprotic solvent
   (b) water is high boiling liquid
   (c) the process is accompanied by a positive heat of solution
   (d) water decreases the interionic attraction in the crystal lattice due to its solution

9. The hydrogen gas produced during nitrogen fixation by Cyanobacteria can be used as a
   (a) Biofertilizer
   (b) Bioflocculant
   (c) Biofuel
   (d) Bioremediation agent

10. The cultivation in forest lands by felling and burning of trees and the vegetation for one or two years done by the tribal people is known as
    (a) Forest land cultivation
    (b) Shifting cultivation
    (c) Burning land cultivation
    (d) Burning trees cultivation

C.

11. Soil erosion on a sloppy terrain can be prevented by doing
    (a) Deforestation
    (b) Check dam
    (c) Terracing
    (d) *in situ* conservation

12. The promotion of visitors in a forest land without affecting the subtle ecosystem of the area is known as
    (a) Ecotourism
    (b) Eco-expedition
    (c) Eco-management
    (d) Deep ecology

13. Botulism is a disease caused by a
    (a) Virus
    (b) Bacterium
    (c) Nematode
    (d) Fungus

14. Elephantiasis is caused by the infection of a nematode parasite at
    (a) Kidney
    (b) Lungs
    (c) Liver
    (d) Lymph nodes

15. _____ is a severe mental illness altering the whole personality.
    (a) Alzheimer's disease
    (b) Schizophrenia
    (c) Down's syndrome
    (d) Turner's syndrome

16. Gerontology is the science dealing with the problem of
    (a) Aging
    (b) Social changes in a community
    (c) Health and sanitation
    (d) Public awareness

17. Gene therapy was first tested for the crippling symptoms of
    (a) Phenylketonurea
    (b) Retinoblastoma
    (c) Epiloia
    (d) Sickle-celled anemia

18. The maximum strength of Lok Sabha and Rajya Sabha respectively is
    (a) 500 and 250
    (b) 525 and 238
    (c) 545 and 250
    (d) 537 and 275

19. Two members to Lok Sabha belonging to Anglo-Indian Community are nominated in terms of the article
    (a) 331
    (b) 80
    (c) 370
    (d) 333

20. Which of the following has banned Floor crossing by the members elected on a party ticket to the Legislature ?
    (a) 52nd Constitutional Amendment
    (b) Peoples Representation Act
    (c) National Security Act
    (d) Maintenance of Internal Security Act

21. Chapter III on Fundamental Rights contains Twenty Four articles from
    (a) Articles 12—35
    (b) Articles 14—37
    (c) Articles 10—33
    (d) Articles 16—19

22. The President can promulgate ordinance
    (a) when the Lok Sabha has been dissolved
    (b) when bill is passed by the Lok Sabha is not passed by the Rajya Sabha
    (c) when both the Houses of Parliament are not in Session
    (d) when there is conflict between two houses regarding a particular bill

23. In which case did the Supreme Court declare that the preamble was not a part of the Constitution ?
    (a) Golak Nath Case
    (b) Keshavananda Bharti Case
    (c) Berubari Case
    (d) None of the above

24. The Ninth Schedule of the Constitution of India was
    (a) added by the 24th amendment
    (b) added by the 1st amendment
    (c) added by the 42nd amendment
    (d) a part of the original Constitution

25. Panchayat Raj was started in the country in
    (a) 1957
    (b) 1952
    (c) 1959
    (d) 1951

26. Who finally approves the draft of Five Years Plan ?
    (a) Parliament of India
    (b) President of India
    (c) Parliament and State Legislatures
    (d) National Development Council

27. Which of the following is not Statutory body ?
    (a) Election Commission
    (b) Planning Commission
    (c) Finance Commission
    (d) Union Public Service Commission

28. The Fundamental Duties were incorporated in the Indian Constitution in
    (a) 1971
    (b) 1972
    (c) 1975
    (d) 1976

29. What is Zero hour ?
    (a) When the proposals of opposition are considered
    (b) Interval between morning and after-noon session
    (c) When the matters of utmost importance are raised in the legislature
    (d) When money bill is introduced in the Lok Sabha

30. Indira Mahila Yojna for the empowerment of women was introduced in
    (a) September 1994
    (b) October 1996
    (c) August 1995
    (d) November 1993

31. 16th Commonwealth Games were held in
    (a) New Zealand
    (b) Canada
    (c) Malaysia
    (d) Australia

32. Palk Strait Separates India from
    (a) Pakistan
    (b) Maldives
    (c) Sri Lanka
    (d) Bangladesh

33. The first nuclear reactor of India is
    (a) Urvashi
    (b) Purnia
    (c) Kamani
    (d) Apsara

34. The first three recipient of Bharat Ratna Award were
    (a) Jawahar Lal Nehru, Dr. Zakir Hussain and Moulana Abul Kalam Azad
    (b) Dr. Radha Krishnan, Rajagopalachari and Dr. C.V. Raman
    (c) Bhagwan Das, Makshagundam Visvesaraya and Dr. Bhim Rao Ramji Ambedkar
    (d) Mrs. Indira Gandhi, Mother Teresa and Nelson Mandela

35. Nuclear Non-Proliferation Treaty (NPT) came into force in
    (a) 1968
    (b) 1972
    (c) 1970
    (d) 1974

36. The most important type of unemployment to be met in India is
    (a) frictional unemployment
    (b) cyclical unemployment
    (c) disguised unemployment
    (d) structural unemployment

37. Infant mortality rate refers to
    (a) the number of children dying before reaching the school going age
    (b) the number of children dying before reaching 3 years of age
    (c) the proportion of children dying within a year of their birth
    (d) none of the above

38. The largest share of savings in India accrues in
    (a) the household sector
    (b) the Government sector
    (c) the Corporate sector
    (d) the Government and the Corporate sector

39. Indian planning
    (a) is totalitarian in nature
    (b) is democratic in nature
    (c) is fully centralized
    (d) none of the above

40. The monetary policy as pursued by the Reserve Bank of India, can be aptly summed up in the phrase
    (a) controlled monetary expansion
    (b) cheap money
    (c) dear money
    (d) neutral money

41. Inflation in India in the recent years has been of the type of
    (a) demand pull inflation
    (b) cost push inflation
    (c) both demand pull and cost push inflation
    (d) none of the above

42. Small scale industries are immensely suited to India's economic environment, because these industries
    (a) lead to decentralisation of economic activities
    (b) make possible the use of latent resources
    (c) import-light and skill-light
    (d) all of the above

43. Kilowatt-hour is a unit of
    (a) power
    (b) energy
    (c) time
    (d) distance

44. In Einstein's special theory of relativity which of the following holds true
    (a) velocity of light in vacuum is constant
    (b) velocity of light in air is constant
    (c) velocity of light in water is constant
    (d) velocity of light in ether is constant

45. One can hear no sound on moon because
    (a) moon has a low mass
    (b) moon has a low temperature
    (c) moon has no atmosphere
    (d) moon has low gravity

46. The pressure of an ideal gas in a box of fixed volume varies
    (a) directly with its temperature
    (b) directly as square root of its temperature
    (c) directly as the square of its temperature
    (d) inversely as its temperature

47. Electromagnetic waves have which of the following polarizations ?
    (a) longitudinal
    (b) transverse
    (c) both longitudinal and transverse
    (d) no polarization

48. White light passing through a prism undergoes
    (a) refraction
    (b) diffraction
    (c) interference
    (d) dispersion

49. Earth's magnetic field lines are like those of a
    (a) monopole
    (b) dipole
    (c) quadrupole
    (d) octopole

50. "Atomic energy" in reactors is obtained by
  (a) splitting of atoms by neutrons
  (b) splitting of nuclei by electrons
  (c) splitting of nuclei by gamma rays
  (d) splitting of nuclei by neutrons

51. King Kharavela belonged to which royal dynasty ?
  (a) Nanda
  (b) Maurya
  (c) Chedi
  (d) Satavahana

52. In which royal dynasty of early medieval Orissa we find the rule of the Queens ?
  (a) Sailodbhava
  (b) Bhaumakara
  (c) Somavamsa
  (d) Ganga

53. Who was the last independent ruler of the medieval kingdom of Orissa ?
  (a) Kapilendradeva
  (b) Prataprudradeva
  (c) Govinda Vidyadhar
  (d) Mukundadeva

54. Who was the founder of Mahima Dharma ?
  (a) Biswanath Baba
  (b) Mahima Gosain
  (c) Bhima Bhoi
  (d) Siddha Baba

55. Who was the Editor of Utkal Dipika published in 1866 ?
  (a) Fakir Mohan Senapati
  (b) Baikunth Nath De
  (c) Gouri Shankar Roy
  (d) Nilamani Vidyaratna

56. When was Sambalpur united with Orissa ?
  (a) 1901
  (b) 1903
  (c) 1909
  (d) 1936

57. Being sentenced to death who became a martyr in Orissa during the Quit India Movement ?
  (a) Baji Raut
  (b) Birsa Munda
  (c) Laxman Nayak
  (d) Raghu Dibakar

58. How many districts were first included in the separate Orissa Province ?
  (a) Six
  (b) Nine
  (c) Thirteen
  (d) Fifteen

59. Indian Standard Time is measured from one of the following meridians which is ahead of 5½ hours of Greenwich Time :
  (a) 80°30'
  (b) 81°30'
  (c) 82°30'
  (d) 83°30'

60. Earthquakes are thought to occur because of one of the following :
    (a) When molten magma from interior escapes to the surface
    (b) When pressure is released suddenly along a fault
    (c) When there is a shift in the underground water table
    (d) When a heavy construction takes place over an extensive area

61. 'Hydrological cycle' refers to as one of the following :
    (a) Draining off the rain water into the sea
    (b) Percolation of rain water in sub-soil
    (c) Precipitation and evaporation occurring in the form of rain and snow
    (d) The rain water over the surface of the earth in the form of run off

62. The lowest layer of the atmosphere in which most weather phenomenon takes place is
    (a) Mesosphere
    (b) Ionosphere
    (c) Stratosphere
    (d) Troposphere

63. Frost is most likely to occur in valleys on a night with one of the following atmospheric conditions
    (a) cool, clear and calm
    (b) cool, cloudy and calm
    (c) cool, clear and windy
    (d) cool, cloudy and windy

64. Which one of the following is the deepest part of the ocean ?
    (a) Challenger deep
    (b) Juscarora deep
    (c) Puerto Rico deep
    (d) Murray deep

65. Water spouts are
    (a) Cloud bursts over the land surface
    (b) Temperate cyclones at sea
    (c) Small rivulets joining the main stream
    (d) Tornados at sea

66. The 'Ring of Fire' one of the prominent features of Pacific ocean floor is referred to as
    (a) Volcanic ridge
    (b) Volcanic cone
    (c) Volcanic chain
    (d) Volcanic eruption

67. The periodic warming of tropical waters along the coast of Ecuador-Peru in the Pacific ocean is named as
    (a) Callao Painter
    (b) El Nino
    (c) La Nina
    (d) West wind Drift

68. Many of the wildlife species are becoming extinct because of a number of reasons. The most important reason is
    (a) Climatic change
    (b) Denudation of habitat
    (c) Environmental pollution
    (d) Excessive animal hunting

69. Which one of the following statements describes correctly the birth and death rate trends in present day India ?
   (a) Birth rate is falling and death rate is rising
   (b) Birth rate is rising and death rate falling
   (c) Both birth and death rates are falling
   (d) Both birth and death rates are rising

70. An outstanding characteristic of Xerophytic vegetation is one of the following :
   (a) Bears an abundant foliage
   (b) Small root system
   (c) Ability to withstand without water
   (d) Ability to gather, store water and resist against evaporation

71. Which one of the following is the correct sequence of rivers which make up the Punjab plains ?
   (a) Jhelum, Chenab, Ravi, Beas and Sutlej
   (b) Ganga, Indus, Chenab, Ravi and Sutlej
   (c) Luni, Chenab, Ravi, Beas and Sutlej
   (d) Yamuna, Chenab, Ravi, Beas and Sutlej

72. A vertical section of surface soil arranged in distinct layers is referred to as one of the following :
   (a) Fertility
   (b) Profile
   (c) Structure
   (d) Texture

73. Sex-Ratio refers to the number of females for how many males ?
   (a) 500
   (b) 1000
   (c) 1500
   (d) 2000

74. Which one of the following in Brazil is known as 'Coffee capital' ?
   (a) Brasilia
   (b) Rio de Janeiro
   (c) Sao Paulo
   (d) Santos

75. Which of the cartographic technique would appropriately show import-export proportions of a commodity on map ?
   (a) Histogram
   (b) Pie-diagram
   (c) Scatter diagram
   (d) Star diagram

76. The reservoir at Kotraguda which created a conflict between Orissa and Andhra Pradesh is on which river ?
   (a) Bansadhara
   (b) Nagavali
   (c) Bahuda
   (d) Mahendratanaya

77. Which part of the cyclone remains cloud free ?
   (a) Advancing front
   (b) Rear front
   (c) Spiraling Bands
   (d) Eye

78. Flash flood is a phenomena with
    (a) Rivers of the coastal areas
    (b) Rivers of the hilly terrain
    (c) Both of these rivers
    (d) None of these rivers

79. Orchids are associates of which type of vegetation ?
    (a) Dry deciduous
    (b) Semi-evergreen
    (c) Dry shrubs
    (d) Cactus vegetation

80. Badampahar-famous for iron ore is located in which district ?
    (a) Sundargarh
    (b) Keonjhar
    (c) Mayurbhanj
    (d) Singhbhum

81. The layer of rocks which hold groundwater is commonly known as
    (a) Water table
    (b) Water parting
    (c) Equifer
    (d) Equiclude

82. 'Utri' in Khurda district is known for
    (a) Normal spring
    (b) Hot spring
    (c) Both of these
    (d) None of these

83. A low pressure system with 33 to 48 knots/hr wind speed is known by the Indian Meteorological Dept. as
    (a) Depression
    (b) Storm
    (c) Severe storm
    (d) None of these

84. Both the Lord Buddha and Lord Mahavira were
    (a) Saints
    (b) Prophets
    (c) Philosophers
    (d) None of the above

85. Chandragupta Maurya ascended the throne around
    (a) 321 B.C.
    (b) 320 B.C.
    (c) 221 B.C.
    (d) 220 B.C.

86. Who adopted the title of 'the Son of Valour' ?
    (a) Chandragupta I
    (b) Samudragupta
    (c) Skandagupta
    (d) None of the above

87. Harshavardhan died in
    (a) 545 A.D.
    (b) 547 A.D.
    (c) 645 A.D.
    (d) 647 A.D.

88. Which monument at Delhi is the precursor of the Taj Mahal ?
   (a) The Moti Masjid (Lal Quila)
   (b) Humayun tomb
   (c) Safdarjung tomb
   (d) None of the above

89. The Iqtadari system was introduced by
   (a) Qutub-ud-din Aibek
   (b) Iltutmish
   (c) Balban
   (d) Alauddin Khalji

90. Who wrote "Tarik-i-Hind" ?
   (a) Amir Khusrao
   (b) Ibn Batuta
   (c) Firishta
   (d) Alberuni

91. Guru Nanak preached
   (a) Sikhism as a religion
   (b) Unity among Sikhs
   (c) Militancy among Sikhs
   (d) None of the above

92. The Mughal culture greatly influenced the Indian
   (a) Architecture
   (b) Sculpture
   (c) Dance
   (d) Painting

93. "India has to unite and conquer the whole world once again with its might." Who said it ?
   (a) Swami Dayanand
   (b) Annie Besant
   (c) Swami Ramakrishna Paramhansa
   (d) None of the above

94. The Indian Civil Service was introduced by
   (a) Dalhousie
   (b) Bentinck
   (c) Cornwallis
   (d) Ripon

95. The Colonial govt. took first step for the spread of modern education in
   (a) 1793
   (b) 1813
   (c) 1833
   (d) 1835

96. Who was the President of the Indian National Congress at the Surat session in 1907 ?
   (a) Lala Lajpat Rai
   (b) Rash Behari Bose
   (c) Dadabhai Naoroji
   (d) Rash Behari Ghose

97. Who called M.A. Jinnah as an 'ambassador of Hindu-Muslim Unity' ?
   (a) B.G. Tilak
   (b) Annie Besant
   (c) Sarojini Naidu
   (d) Gandhi

98. Who wrote the book, "A Nation in the Making" ?
   (a) Tilak
   (b) W.C. Bonnerjee
   (c) S.N. Banerjea
   (d) A.C. Banerjee

99. The Hunter Committee was appointed by the Colonial govt. to inquire into
    (a) The Bardoli Satyagraha
    (b) Jallianwala Bagh incident
    (c) Khilafat Agitation
    (d) Chauri-Chaura incident

100. "The defeat was more mine than his ....." Gandhiji said it for
    (a) Sardar Patel
    (b) C. Rajagopalachari
    (c) Pattabhi Sitaramayya
    (d) Maulana Azad

101. Which State in India, among the following, had the lowest sex ratio as per 2001 census ?
    (a) Haryana
    (b) Punjab
    (c) Andhra Pradesh
    (d) Kerala

102. The Union Budget 2006-07 has introduced some of the following changes :
    1. MAT rate was increased
    2. STT was increased
    3. One-by-six scheme was abolished
    4. Service tax rate was increased from 10 per cent of 12 per cent
    Which of the above are correct ?
    (a) 1 and 2
    (b) 1 and 3
    (c) 1, 2 and 3
    (d) 1, 2, 3 and 4

103. The date set for national level Goods and Service Tax (GST) in India is
    (a) April 1, 2008
    (b) April 1, 2009
    (c) April 1, 2010
    (d) April 1, 2011

104. In the services sector, which one registered the highest growth rate in India during 2005-06 ?
    (a) Construction
    (b) Trade, Hotels, Transport, Communication etc.
    (c) Financing, Insurance, real estate and business services
    (d) Community, social and personal services

105. Which of the following tax is expected to yield maximum revenue to the Centre during 2006-07 ?
    (a) Union excise duties
    (b) Customs duty
    (c) Income tax
    (d) Corporation tax

106. In which of the following year, growth rate in India exceeded 8 per cent ?
    (a) 2001-02
    (b) 2002-03
    (c) 2004-05
    (d) 2005-06

107. The 12th Finance Commission has recommended that the share of states in the total divisible pool of gross tax revenue be fixed at
(a) 30·5 per cent
(b) 29·5 per cent
(c) 27·5 per cent
(d) 26·5 per cent

108. Agricultural Sector in Orissa provides employment directly or indirectly as per 2001 census to around
(a) 45%
(b) 30%
(c) 65%
(d) 80%
of the total work force.

109. The State of Orissa has more than 90% production in the following mineral
(a) Coal
(b) Iron ore
(c) Bauxite
(d) Chromite

110. The Revised Long Term Action Plan (RLTAP) has been introduced in Orissa to benefit the people of
(a) Coastal districts
(b) Tribal districts
(c) KBK districts
(d) Western Orissa districts

111. The percentage share of resources estimated to be transferred from Central Government in the form of shared taxes and grants in Total estimated Revenue Receipts is nearly
(a) 60%
(b) 50%
(c) 80%
(d) 40%

112. The latest introduced Employment Generation Programme in the State is
(a) Sampurna Gramin Rojgar Yojana
(b) National Employment Guarantee Programme
(c) Swarnajayanti Gram Swarojgar Yojana
(d) National Food for Work Programme

113. The tariff in power sector at present is determined by
(a) Distribution agencies
(b) Orissa Power Generation Corporation
(c) Orissa Electricity Regulatory Commission
(d) Orissa Hydro Power Corporation

114. Which of the following is in ascending order ?
(a) $\dfrac{5}{7}, \dfrac{7}{8}, \dfrac{9}{11}$

(b) $\dfrac{5}{7}, \dfrac{9}{11}, \dfrac{7}{8}$

(c) $\dfrac{7}{8}, \dfrac{5}{7}, \dfrac{9}{11}$

(d) $\dfrac{9}{11}, \dfrac{7}{8}, \dfrac{5}{7}$

115. The least perfect square number which is divisible by 3, 4, 5, 6 and 8 is
(a) 900
(b) 1200
(c) 2500
(d) 3600

116. At what rate per cent per annum will a sum of money double in 8 years ?
   (a) 10%
   (b) 10½%
   (c) 12%
   (d) 12½%

117. A sum of money becomes Rs. 6,690 after three years and Rs. 10,035 after six years on compound interest. The sum is
   (a) Rs. 4,400
   (b) Rs. 4,445
   (c) Rs. 4,460
   (d) Rs. 4,520

118. A bag contains 25 paise, 10 paise and 5 paise coins in the ratio 1 : 2 : 3. If their total value is Rs. 30, the number of 5 paise coins is
   (a) 50
   (b) 100
   (c) 150
   (d) 200

119. Two vessels A and B contain milk and water mixed in the ratio 5 : 2 and 8 : 5 respectively. What is the ratio in which these mixtures are to be mixed to get a new mixture containing milk and water in the ratio 9 : 4 ?
   (a) 7 : 2
   (b) 6 : 3
   (c) 7 : 3
   (d) 5 : 2

120. If 3 men or 4 women can construct a wall in 43 days, what is the number of days that 7 men and 5 women take to construct it ?
   (a) 12 days
   (b) 18 days
   (c) 24 days
   (d) 30 days

121. One tap can fill a cistern in 2 hours and another can empty the cistern in 3 hours. How long will they take to fill the cistern if both the taps are opened ?
   (a) 5 hours
   (b) 6 hours
   (c) 7 hours
   (d) 8 hours

122. A train crosses a platform 100 metres long in 60 seconds at a speed of 45 km per hour. The time taken by the train to cross an electric pole is
   (a) 8 seconds
   (b) 30 seconds
   (c) 52 seconds
   (d) 60 seconds

123. The perimeter of an isosceles triangle is equal to 14 cm, the lateral side is to the base in the ratio 5 : 4. The area of the triangle is
   (a) $\frac{1}{2} \sqrt{21} \, cm^2$
   (b) $\frac{3}{2} \sqrt{21} \, cm^2$
   (c) $\sqrt{21} \, cm^2$
   (d) $2\sqrt{21} \, cm^2$

124. Ten people are randomly seated at a round table. What is the probability that a particular couple will sit next to each other ?

(a) $\frac{1}{9}$

(b) $\frac{2}{9}$

(c) $\frac{3}{9}$

(d) $\frac{4}{9}$

125. If boys and girls are born equally likely, what is the probability that in a family with three children, exactly one is a girl ?

(a) $\frac{1}{8}$

(b) $\frac{3}{8}$

(c) $\frac{5}{8}$

(d) $\frac{7}{8}$

126. For any three events A, B and C, consider the following two statements of probability :

S1 : $P(A \cup B) = P(A) + P(B) - P(A \cap B)$

S2 : $P(A \triangle B) = P(A) + P(B) - 2P(A \cap B)$

Then which of the following is correct ?

(a) Only S1 is true

(b) Only S2 is true

(c) Both S1 and S2 are true

(d) Both S1 and S2 are false

127. Suppose that a person chooses a letter at random from the word 'CUTTACK' and then chooses one at random from 'CALCUTTA'. What is the probability that the same letter is chosen ?

(a) $\frac{9}{56}$

(b) $\frac{10}{56}$

(c) $\frac{11}{56}$

(d) None of these

128. 60% of the people of a town read neither 'INDIAN EXPRESS' nor 'HINDU'. 20% read INDIAN EXPRESS and 30% read HINDU. If one person from the town is chosen randomly, what is the probability that the person reads both news papers ?

(a) 0·1

(b) 0·2

(c) 0·5

(d) None of these

129. A pair of fair dice are rolled. What is the probability that the second die lands on a higher value than does the first ?

(a) $\frac{1}{2}$

(b) $\frac{5}{18}$

(c) $\frac{5}{12}$

(d) $\frac{5}{6}$

130. If A and B are mutually exclusive events, then

   (a) $P(A \cap B) = P(A) \cdot P(B)$

   (b) $P(A \cap B) = 0$

   (c) $P(A \cap B) = P(A) + P(B)$

   (d) $P(A \cap B) = 1$

131. If A and B are independent events, then

   (a) $P(A \mid B) = P(A) \cdot P(B)$

   (b) $P(A \mid B) = P(B)$

   (c) $P(A \mid B) = P(A)$

   (d) None of these

132. Let $\Omega = \{1, 2, 3, 4\}$ with uniform probability and let $A = \{1, 2\}$. Then which of the following event is not independent of A ?

   (a) $\{1, 3\}$

   (b) $\{1, 4\}$

   (c) $\{2, 3\}$

   (d) $\{3, 4\}$

133. A man has two children, one of whom is a girl. What is the probability that the other child is a boy ?

   (a) 0

   (b) $\frac{1}{3}$

   (c) $\frac{1}{2}$

   (d) $\frac{2}{3}$

134. Find out the one which does not belong to the group, from the words with their letters jumbled up

   (a) ITS

   (b) TIH

   (c) TIK

   (d) FIT

   (e) NITK

135. Find out which one does not belong to the group

   (a) One-rupee note

   (b) Five-rupee note

   (c) Ten-rupee note

   (d) Hundred-rupee note

136. Find out the number of squares that can be drawn by joining the centres of all the circles in the diagram
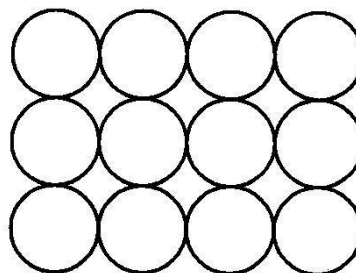

   (a) 09

   (b) 12

   (c) 06

   (d) 10

137. Some capital letters are placed on one another. Examine the following figure carefully and find out the number letters (English Alphabets)
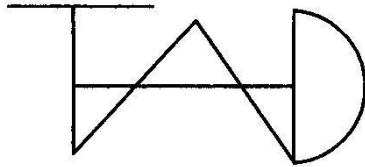
(a) 3

(b) 4

(c) 5

(d) 6

138. The following figures are different views of the cube, which has a letter engraved on each of its six faces. In the last figure, one letter is missing. Study carefully all the views and find the missing letter to fill the blank face.
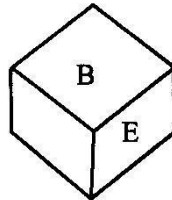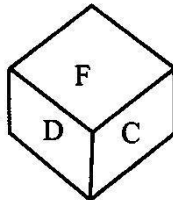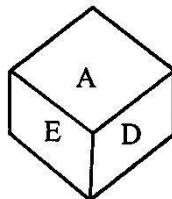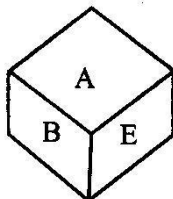
(a) D

(b) C

(c) A

(d) F

139. The year in which the British Crown took over the administration of India from East India Company

(a) 1947

(b) 1858

(c) 1860

(d) 1857

140. In which session of the Congress, "the Socialistic Pattern of Society" was adopted ?

(a) Nagpur

(b) Tirupati

(c) Avadi

(d) Bombay

141. From which Constitution, "Fundamental Rights" were adopted ?

(a) American

(b) British

(c) Australian

(d) Swiss

142. Who proposed the system of election to the President of India ?

(a) Nehru

(b) Ambedkar

(c) Gandhi

(d) Gopalaswamy Iyyengar

143. What was the commission appointed by Indira Gandhi to study Centre-State Relations ?

(a) Rajamannar

(b) Sarkaria

(c) Tyagi

(d) A.R.C.

144. Under which Article of the Indian Constitution, the Finance Commission came into existence ?
(a) 360
(b) 265
(c) 280
(d) 356

145. The present Local Government structures are based on the recommendations of
(a) R.R. Diwakar Committee
(b) Ashok Mehta Committee
(c) Balwant Rai Mehta Committee
(d) L.M. Singhvi Committee

146. Which one, of the following Amendment Acts of the Constitution of India, confers constitutional status on the village Panchayat ?
(a) 75th Amendment Act
(b) 74th Amendment Act
(c) 73rd Amendment Act
(d) 42nd Amendment Act

147. Which one, of the following, is not a part of the three tier structure of the Panchayati Raj ?
(a) Zilla Parishad
(b) Panchayat Samiti
(c) Tehsil Board
(d) Gram Panchayat

148. The Municipal Corporation, in a State in India, is created by
(a) The President of India
(b) The Governor of the State
(c) Act of the State-Legislature
(d) Act of the Parliament

149. Which one, of the following, is not a source of revenue for the Municipality ?
(a) Grants from the State Government
(b) Octroi
(c) Tax on property, animals and vehicles
(d) Tax on Agricultural Income

150. Which one, of the following parts of the Constitution of India, contains provisions on the structure and functions of Urban Local Self Government ?
(a) Part III
(b) Part IV
(c) Part IX-A
(d) Part X

SPACE FOR ROUGH WORK

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