- 1. Consider the following pairs:
  - 1. Proton e⊖
  - 2. β-Particle H<sup>1</sup>
  - 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<sup>239</sup> present in its atmosphere
- 3. Cholesterol is present in
  - (a) Animal fats
  - (b) Vegetable fats
  - (c) Waxes
  - (d) Drying oils
- The combination which can not act as a Buffer solution is
  - (a) Sodium acetate, HCl
  - (b) Borax, Boric acid
  - (c) Na<sub>2</sub>HPO<sub>4</sub>, Na<sub>3</sub>PO<sub>4</sub>
  - (d) CH<sub>3</sub>CO<sub>2</sub>H, CH<sub>3</sub>CO<sub>2</sub>Na
- 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
- 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
- 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

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C.

(Contd.)

11.	Soil	Soil erosion on a sloppy terrain can be prevented by doing		Gerontology is the science dealing with	
	prev			the problem of	
	(a)	Deforestation		(a)	Aging
	(b)	Check dam		(b)	Social changes in a community
	(c)	Terracing		(c)	Health and sanitation
	(d)	in situ conservation		(d)	Public awareness
12.	The promotion of visitors in a forest land		17.	Ger	ne therapy was first tested for the
	without affecting the subtle ecosystem of			crip	pling symptoms of
	the area is known as			(a)	Phenylketonurea
	(a)	Ecotourism		(b)	Retinoblastoma
	(b)	Eco-expedition		(c)	Epiloia
	(c)	Eco-management		(d)	Sickle-celled anemia
	(d)	Deep ecology	18.	The	maximum strength of Lok Sabha and
13.	Botulism is a disease caused by a			Raj	ya Sabha respectively is
				(a)	500 and 250
	(a)	Virus		(b)	525 and 238
	(b)	Bacterium		(c)	545 and 250
	(c)	Nematode		(d)	537 and 275
	(d)	Fungus	19.	Two	members to Lok Sabha belonging to
14.	Elephantiasis is caused by the infection of a nematode parasite at			Anglo-Indian Community are nominated	
				in t	erms of the article
		Kidney Lungs Liver		(a)	331
				(b)	80
				(c)	370
	200			(d)	333
	(a)	Lymph nodes	20.	Whi	ich of the following has banned Floor
15.	is a severe mental illness altering		20.	crossing by the members elected on a party	
	the whole personality.			ticket to the Legislature?	
	(a)	(a) Alzheimer's disease		(a)	
	(b)	Schizophrenia		(a) (b)	Peoples Representation Act
	(c)	Down's syndrome		` '	
				(c)	National Security Act

(d) Turner's syndrome

(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 afternoon 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

- Nuclear Non-Proliferation Treaty (NPT) came into force in
  - (a) 1968
  - (b) 1972
  - (c) 1970
  - (d) 1974
- 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
- 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 Sutlei
  - (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
- 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
  - Service tax rate was increased from
     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)  $\frac{5}{7}$ ,  $\frac{7}{8}$ ,  $\frac{9}{11}$
  - (b)  $\frac{5}{7}$ ,  $\frac{9}{11}$ ,  $\frac{7}{8}$
  - (c)  $\frac{7}{8}$ ,  $\frac{5}{7}$ ,  $\frac{9}{11}$
  - (d)  $\frac{9}{11}$ ,  $\frac{7}{8}$ ,  $\frac{5}{7}$
- 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) 101/2%
  - (c) 12%
  - (d) 121/2%
- 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)  $\frac{1}{2}\sqrt{21} \text{ cm}^2$
  - (b)  $\frac{3}{2}\sqrt{21} \text{ cm}^2$
  - (c)  $\sqrt{21} \text{ cm}^2$
  - (d)  $2\sqrt{21} \text{ cm}^2$

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

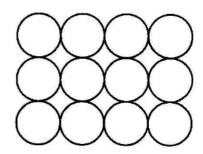
Then which of the following is correct?

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

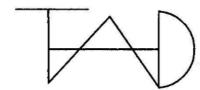
- 130. If A and B are mutually exclusive events, then
  - (a)  $P(A \cap B) = P(A) \cdot P(B)$
  - (b)  $P(A \cap B) = 0$
  - (c)  $P(A \cap B) = P(A) + P(B)$
  - (d)  $P(A \cap B) = 1$
- 131. If A and B are independent events, then
  - (a)  $P(A \mid B) = P(A) \cdot P(B)$
  - (b)  $P(A \mid B) = P(B)$
  - (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

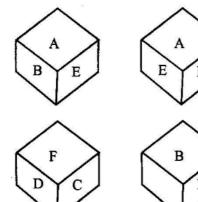


- (a) 09
- (b) 12
- (c) 06
- (d) 10

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