

# CDS I 2020: General Knowledge

- 1. The Government of India has recently constituted a civilian award in the name of Sardar Vallabhbhai Patel in the field of contribution to
- A. Unity and integrity of India
- B. Art and culture
- C. Social work
- D. Entrepreneurship
- 2.BRICS Summit, 2020 will be hosted by
- A. India
- B. China
- C. Russia
- D. Brazil
- 3. Which one of the following was the host country for World Tourism Day, 2019?
- A. USA
- B. India
- C. Russia
- D. Canada
- 4.Match List-I with List-II and select the correct answer using the code given below the Lists:

### List-I

# (Market structure)

- A) Perfect
- B) Monopoly
- C) Monopolistic
- D) Oligopoly

#### List-II

## (Characteristic)



- 1) Only one competition producer selling one commodity
- 2) Few producers selling similar or almost similar products
- 3) Many producers Competition selling Differentiated products
- 4) Many producers selling similar products

#### Code:

- A. A-4 B-3 C-1 D-2
- B. A-4 B-1 C-3 D-2
- C. A-2 B-1 C-3 D-4
- D. A-2 B-3 C-1 D-4
- 5. Suppose an agricultural laborer earns ₹ 400 per day in her village. She gets a job to work as a babysitter in a nearby town @ ₹ 700 per day. She chose to work as an agricultural laborer. Which one of the following is the opportunity cost of the agricultural laborer?
- A. ₹1,100
- B. ₹700
- C. ₹400
- D. ₹300
- 6.According to the Census 2011, in India, what is the percentage of people (approximately) considered to be migrants (internal), i.e., now settled in a place different from their previous residence?
- A. 25%
- B. 35%
- C. 45%
- D. 55%
- 7. Which one of the following is the nodal agency in India for the United Nations Environment Programme?
- A. The Ministry of Environment, Forest and Climate Change
- B. The Ministry of Science and Technology
- C. The Ministry of Earth Sciences
- D. The Ministry of Home Affairs



- 8. Which one of the following is the latest addition to the AYUSH group of health care systems?
- A. Unani
- B. Siddha
- C. Sowa-Rigpa
- D. Reiki
- 9. The formulation of policy with respect to Intellectual Property Rights (IPRs) is the responsibility of
- A. The Ministry of Law and Justice
- B. The Department of Science and Technology
- C. The Department for Promotion of Industry and Internal Trade
- D. The Ministry of Human Resource Development
- 10. Which one of the following is the correct sequence of formation of the Commissions starting from the earliest?
- A. Finance Commission, Planning Commission, Investment Commission, Election Commission
- B. Election Commission, Planning Commission, Finance Commission, Investment Commission
- C. Planning Commission, Election Commission, Finance Commission, Investment Commission
- D. Investment Commission, Finance Commission, Planning Commission, Election Commission
- 11. The National Water Academy (NWA) is located at
- A. Dehradun
- B. Hyderabad
- C. Bhopal
- D. Khadakwasla
- 12. Which one of the following rivers does not drain into the Black Sea?
- A. Volga
- B. Dnieper
- C. Don
- D. Danube



- 13. The provisions of the Constitution of India pertaining to the institution of Panchayat do not apply to which one of the following States?
- A. Meghalaya
- B. Tripura
- C. Assam
- D. Goa
- 14. The 11<sup>th</sup> Schedule of the Constitution of India distributes powers between
- A. The Union and the State Legislatures
- B. The State Legislatures and the Panchayat
- C. The Municipal Corporation and the Panchayat
- D. The Gram Sabha and the Panchayat
- 15. The power to legislate on all matters relating to elections of Panchayats lies with
- A. The Parliament of India
- B. The State Legislatures
- C. The State Election Commission
- D. The Election Commission of India
- 16. The Hunter Commission (1882) appointed to survey the state of education in India
- A. Deprecated University education
- B. Overruled the Despatch of 1854
- C. Enclosed the Despatch of 1854 with greater emphasis on primary education
- D. Criticized the grants-in-aid system of schooling
- 17. The State of Hyderabad in the Deccan officially acceded to the Indian Union in the year
- A. 1948
- B. 1950
- C. 1949
- D. 1947
- 18. Who founded the 'Seva Samiti' at Allahabad in 1914?





- A. Hridayanath Kunzru
- B. G. K. Gokhale
- C. Shri Ram Bajpai
- D. T. B. Sapru
- 19. The creation of a Federal Court in India was advocated by which of the following Acts/Commissions?
- A. The Government of India Act, 1919
- B. The Lee Commission, 1923
- C. The Government of India act, 1935
- D. The Indian Councils Act, 1909
- 20. The maiden trilateral naval exercise involving India, Singapore and Thailand was held at
- A. Port Blair
- B. Chennai
- C. Panaji
- D. Kochi
- 21.Rustom-2, which crashed in Karnataka recently, was a/an
- A. Fighter aircraft
- B. Helicopter
- C. Transport aircraft
- D. Unmanned aerial vehicle
- 22. The Vijaynagar Advanced Landing Ground of the Indian Air Force, which was reopened recently, is located in
- A. Jammu and Kashmir
- B. Arunachal Pradesh
- C. Karnataka
- D. Himachal Pradesh
- 23. Hilsa is the national fish of
- A. Pakistan
- B. India
- C. Bangladesh



- D. Nepal
- 24. Who among the following is the Chairman of the Economic Advisory Council to the Prime Minister (EAC-PM)?
- A. Ratan P. Watal
- B. Bibek Debroy
- C. Ashima Goyal
- D. Sajjad Chinoy
- 25. The power of the Supreme Court to decide in the case of a dispute between two or more States is called
- A. Original jurisdiction
- B. Inherent Jurisdiction
- C. Plenary jurisdiction
- D. Advisory jurisdiction
- 26. Who among the following stated in the Constituent Assembly that on 26<sup>th</sup> January 1950, India was going to enter a life of contradictions?
- A. Dr. B. R. Ambedkar
- B. Jawaharlal Nehru
- C. Mahatma Gandhi
- D. S. P. Mukherjee
- 27. The First Delimitation Commission in India was constituted in
- A. 1949
- B. 1950
- C. 1951
- D. 1952
- 28. The Ministry of Heavy Industries and Public Enterprises consists of
- A. The Department of Heavy Industry and the Department for Promotion of Industry and Internal Trade
- B. The Department of Public Enterprises and the Department for Promotion of Industry and Internal Trade
- C. The Department of Scientific and Industrial Research and the Department of Heavy Industry
- D. The Department of Heavy Industry and the Department of Public





### **Enterprises**

- 29. What is the ground on which the Supreme Court can refuse relief under Article 32?
- A. The aggrieved person can get remedy from another court
- B. That disputed facts have to be investigated
- C. That no fundamental right has been infringed
- D. That the petitioner has not asked for the proper writ applicable to his/her case
- 30. Which one of the following Articles were defended by Dr. B. R. Ambedkar on the plea that it would be used as 'a matter of last resort'?
- A. Article 352
- B. Article 359
- C. Article 356
- D. Article 368
- 31. The major part of Central Asia is dominated by which one of the following language families?
- A. Indo-European
- B. Sino-Tibetan
- C. Austric
- D. Altaic
- 32. Which one of the following is not among the principal languages of Jammu and Kashmir?
- A. Urdu
- B. Gujari
- C. Koshur
- D. Monpa
- 33. Which one of the following climatic types is found in Central Spain?
- A. Subarctic
- B. Mediterranean dry hot summer
- C. Subtropical Steppe
- D. Humid continental warm summer



- 34. Which of the following statements with regard to Coal India Limited (CIL) is/are true?
- I. CIL has its headquarter at Kolkata.
- II. CIL operates through 82 mining areas spread over twenty provincial States of India.
- III. CIL is the single largest coal-producing company in the world.

Select the correct answer using the code given below.

- A. 1 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3
- 35. The College of Military Engineering affiliated to Jawaharlal Nehru University is situated at
- A. New Delhi
- B. Dehradun
- C. Nainital
- D. Pune
- 36. Who among the following was the first to arrive in Africa as traders that eventually led to European colonization of Africa?
- A. French
- B. Spanish
- C. Portuguese
- D. Dutch
- 37.'Gandhi Solar Park' is located at
- A. New York
- B. Vladivostok
- C. Thimphu
- D. Houston
- 38. The Global Goalkeeper Award is given by



- A. The Bill and Melinda Gates Foundation
- B. The United Nations Environment Programme
- C. The Kellogg School of Management
- D. The World Meteorological Organization
- 39. Which one of the following is India's official entry for the Best International Feature Film category in the 92<sup>nd</sup> Academy Awards?
- A. Bulbul Can Sing
- B. Super Deluxe
- C. Gully Boy
- D. And The Oscar Goes To
- 40.'Naropa' is an annual festival of
- A. Sikkim
- B. Ladakh
- C. Arunachal Pradesh
- D. Nagaland
- 41. What was the code name given to the first ever tri-service military exercise between India and USA?
- A. Lion Triumph
- B. Elephant Triumph
- C. Tiger Triumph
- D. Bison Triumph
- 42. The 'Tattvabodhini Sabha' was established by
- A. Devendranath Tagore in 1839
- B. Keshab Chandra Sen in 1857
- C. Akshay Kumar Datta in 1850
- D. Dwarakanath Tagorer in 1840
- 43. Who believed that the Russian designs were 'an imminent peril to the security and tranquility' of the Indian Empire in 1836?
- A. Lord Auckland
- B. Lord Palmerston
- C. Lord Canning



#### D. Alexander Burnes

- 44. The work Siyar-ul-Mutakherin, which describes the Battle of Plassey, 1757, was written by
- A. Salabat Jung
- B. Qasim Khan
- C. Ghulam Husain
- D. Ram Mohan Roy
- 45. From which one of the following factory sites were limestone and chert blades mass produced and sent to various Harappan settlements in Sindh?
- A. Sukkur and Rohri Hills
- B. Khetri in Rajasthan
- C. Chagai Hills
- D. Hills of Baluchistan
- 46. Consider the following statements about Stone Age in India:
- I. Different periods are identified on the basis of the type and technology of stone tools.
- II. There are no regional variations in the type and technology of tools in different periods.
- III. Stone Age cultures of different periods evolved uniformly in a neat unilinear fashion all over the subcontinent.

Which of the statements given above is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 3 only
- D. 1, 2 and 3
- 47. Which one of the following Articles of the Constitution of India protects a person against double jeopardy?
- A. Article 20
- B. Article 21
- C. Article 22





- D. Article 23
- 48. Which one of the following was added as a fundamental duty through the Constitution (86<sup>th</sup> Amendment) Act, 2002?
- A. To strive towards excellence in individual and collective activity
- B. To provide opportunities for education to one's child between the age of 6 and 14 years
- C. To work for the welfare of women and children
- D. To promote peace and harmony
- 49. Which of the following are considered to be the four pillars of human development?
- A. Equity, inclusion, productivity and empowerment
- B. Equity, productivity, empowerment and sustainability
- C. Productivity, gender, inclusion and equity
- D. Labour, productivity, inclusion and equity
- 50. Which one of the following is not a feature of the Ayushman Bharat Scheme?
- A. There is no cap on family size and age.
- B. The scheme includes pre- and post-hospitalization expenses.
- C. A defined transport allowance per hospitalization will also be paid to the beneficiary.
- D. The scheme provides a benefit cover of ₹ 10 lakh per family.
- 51.Overseas Indians can exercise franchise in an election to the Lok Sabha under which of the following conditions?
- I. They must be citizens of India.
- II. Their names must figure in the electoral roll.
- III. They must be present in India to vote.

Select the correct answer using the code given below.

- A. 1, 2 and 3
- B. 2 and 3 only
- C. 1 and 2 only



- D. 1 only
- 52. Which one of the following soils is characterized by very high content of organic matter?
- A. Vertisol
- B. Histosol
- C. Gelisol
- D. Spodosol
- 53.In the Hadley cell thermal circulation, air rises up and finally descends at
- A. Intertropical convergence zone
- B. Doldrums
- C. Subtropical high-pressure cells
- D. Equatorial troughs
- 54.In India, how many States/Union Territories have more than two international boundaries?
- A. 1
- B. 2
- C. 3
- D. 4
- 55. Which of the following are warm ocean currents?
- A. Kuroshio and California Current
- B. North Atlantic Drift and Brazil Current
- C. Canaries and Benguela Current
- D. West Wind Drift and Falkland Current
- 56. Which one of the following groups of cities does not have Sclerophyll as its natural vegetation cover?
- A. Valparaiso and Cape Town
- B. Lisbon and Perth
- C. Los Angeles and Adelaide
- D. Las Vegas and Queensland



- 57. Geomorphic factors influencing plant and animal distributions are
- A. Slope angle and relief only
- B. Slope aspect and relative relief
- C. Slope angle, slope aspect and relief
- D. Slope angle, slope aspect and relative relief
- 58. Which one of the following statements about the famous text of Panchatantra is correct?
- A. It is a philosophical text reflecting the debates of the time and refuting rival positions.
- B. It is a text ushering in linguistics as a formal science.
- C. It is a text discussing developments in various spheres of natural sciences.
- D. It is a text showing through illustration what should and should not be done.
- 59. Which of the following rulers were identified through matronymics (names derived from that of the mother)?
- A. Mallas of Pava
- B. Videhas of Mithila
- C. Yaudheyas
- D. Satavahanas
- 60. Which one of the following pairs is not correctly matched?
- A. Kuddapah-kar: Rocky Wastelands
- B. Nancai : Wet fields C. Puncai : Dry fields
- D. Tottakal: Garden lands
- 61. Which of the following statements about 'Mughal Mansab' system are correct?
- 1. 'Zat' rank was an indicator of a Mansabdar's position in the imperial hierarchy and the salary of the Mansabdar.
- 2. 'Sawar' rank indicated the number of horsemen the Mansabdar was required to maintain.



3. In the seventeenth century, Mansabdars holding 1000 or above 'Sawar' rank were designated as nobles (Umara).

Select the correct answer using the code given below.

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3
- 62. The famous Mughal painting, depicting Jahangir embracing the Safavid king Shah Abbas, was painted by which one of the following Mughal painters?
- A. Abd al-Samad
- B. Abul Hassan
- C. Dasavant
- D. Bishandas
- 63.Amitabh Bachchan was recently conferred with the prestigious Dada Saheb Phalke Award. Who among the following was the first recipient of the award?
- A. Prithviraj Kapoor
- B. Devika Rani
- C. Sohrab Modi
- D. Naushad
- 64.Recently the Reserve Bank of India has imposed limitations, initially for a period of six months, on the withdrawal of amount by account holders of which one of the following banks?
- A. IndusInd Bank
- B. Dhanlaxmi Bank
- C. Punjab and Maharashtra Cooperative Bank
- D. South Indian Bank
- 65.Greta Thunberg, a teenaged environment activist who was in the news recently, hails from
- A. Sweden
- B. Germany
- C. USA





#### D. Canada

- 66.In September 2019, which one of the following travel giants declared itself bankrupt?
- A. Expedia
- B. Cox & Kings
- C. SOTC
- D. Thomas Cook
- 67. Who among the following won the Best Men's Player Award of FIFA Football Awards, 2019?
- A. Cristiano Ronaldo
- B. Virgil van Dijk
- C. Lionel Messi
- D. Xavi
- 68.In economics, if a diagram has a line passing through the origin and has  $45^{\circ}$  angle with either axis and it is asserted that along the line X = Y, what is tacitly assumed?
- A. Both variables are pure numbers.
- B. Both variables are in the same unit.
- C. Both variables are in different units.
- D. At least one variable is a pure number.
- 69. The Cash Reserve Ratio refers to
- A. The share of Net Demand and Time Liabilities that banks have to hold as liquid assets
- B. The share of Net Demand and Time Liabilities that banks have to hold as balances with the RBI
- C. The share of Net Demand and Time Liabilities that banks have to hold as part of their cash reserves
- D. The ratio of cash holding to reserves of banks
- 70. Which one of the following is not correct about Repo rate?
- A. It is the interest rate charged by the Central Bank of overnight loan.
- B. It is the interest rate paid by the commercial banks on overnight borrowing.





- C. It is the interest rate agreed upon in the loan contract between a commercial bank and the Central Bank.
- D. It is the cost of collateral security.
- 71. Which one of the following is the biggest cause of the incidence of migration of female persons in India?
- A. Employment
- B. Education
- C. Marriage
- D. Business
- 72. The "Basel Convention' is aimed at protecting human health and environment against the adverse effect of which of the following?
- A. Hazardous wastes
- B. Persistent Organic Pollutants (POPs)
- C. Mercury
- D. Chemicals and pesticides
- 73. Saubhagya, a Government of India Scheme, relates to which of the following areas?
- A. Achieving universal household electrification
- B. Providing clean cooking fuel to poor households
- C. Rationalizing subsidies on LPG
- D. Stopping female foeticide
- 74. Which of the following statements is not correct regarding the Members of Parliament Local Area Development Scheme (MPLADS)?
- A. Members of the Parliament (MPs) sanction, execute and complete works under the scheme.
- B. Nominated Members of the Parliament can recommend works for implementation anywhere in the country.
- C. The scheme is fully funded by the Government of India.
- D. The annual entitlement per MP is ₹ 5 crore.
- 75. Which one of the following is the earliest launched scheme of the Government of India?



- A. Deendayal Antyodaya Yojana
- B. Pradhan Mantri Gram Sadak Yojana
- C. Saansad Adarsh Gram Yojana
- D. Deendayal Upadhyaya Grameen Kaushalya Yojana

76. Which of the following statements with regard to the functioning of the Panchayats is not correct?

- A. Panchayats may levy, collect and appropriate taxes, duties, tolls, etc.
- B. A person who has attained the age of 25 years will be eligible to be a member of a Panchayat.
- C. Every Panchayat shall ordinarily continue for five years from the date of its first meeting.
- D. A Panchayat reconstituted after premature dissolution shall continue only for the remainder of the full period.
- 77. Which one of the following is not an objective of the MGNREGA?
- A. Providing up to 100 days of skilled labour in a financial year
- B. Creation of productive assets
- C. Enhancing livelihood security
- D. Ensuring empowerment to women
- 78. Which one of the following is not a land-use category?
- A. Forestland
- B. Pasture land
- C. Marginal land
- D. Barren and wasteland
- 79. Which one of the following is not a type of commercial agriculture?
- A. Dairy farming
- B. Grain farming
- C. Livestock ranching
- D. Intensive subsistence agriculture
- 80. Which one of the following rivers joins Ganga directly?
- A. Chambal
- B. Son
- C. Betwa





- D. Ken
- 81. The number of people per unit area of arable land is termed as
- A. Agricultural density
- B. Arithmetic density
- C. Physiological density
- D. Economic density
- 82.In the field of tourism, which one of the following Indian States is described as 'One State Many Worlds'?
- A. Assam
- B. West Bengal
- C. Karnataka
- D. Rajasthan
- 83. Nyishi tribe is found mainly in
- A. Andaman and Nicobar
- B. Arunachal Pradesh
- C. Nilgiri-Kerala
- D. Kashmir Valley
- 84.In the region of the eastern shore of Adriatic Sea, a cold and dry wind blowing down from the mountain is known as
- A. Mistral
- B. Bora
- C. Bise
- D. Blizzard
- 85. Who among the following Mongol leaders/commanders did not cross Indus to attack India?
- A. Chenghiz Khan
- B. Tair Bahadur
- C. Abdullah
- D. Qutlugh Khwaja



- 86. Who among the following Sultans succeeded in finally breaking and destroying the power of Turkan-i-Chihalgani?
- A. Iltutmish
- B. Balban
- C. Alauddin Khalji
- D. Muhammad bin Tughluq
- 87. Who among the following was one of the founders of the Indian Society of Oriental Art?
- A. Rabindranath Tagore
- B. Abanindranath Tagore
- C. Dwarakanath Tagore
- D. Bankim Chandra Chattopadhyaya
- 88. Which one among the following was demanded by the All India Depressed classes Leaders' Conference at Bombay in 1931?
- A. Universal adult suffrage
- B. Separate electorates for untouchables
- C. Reserved seats for the minorities
- D. A unitary State in India
- 89. Which one of the following Acts reserved seats for women in Legislatures in accordance with the allocation of seats for different communities?
- A. The Government of India Act, 1858
- B. The Indian Councils Act, 1909
- C. The Government of India Act, 1919
- D. The Government of India Act, 1935
- 90.On 31<sup>st</sup> December, 1929, in which one of the following Congress Sessions was the proclamation of Purna Swaraj made?
- A. Ahmedabad
- B. Calcutta
- C. Lahore
- D. Lucknow



- 91. Who among the following scientists introduced the concept of immunization to the medical world?
- A. Edward Jenner
- B. Robert Koch
- C. Robert Hooke
- D. Carl Linnaeus
- 92. Which one of the following cell organelles contains DNA?
- A. Golgi apparatus
- B. Mitochondrion
- C. Lysosome
- D. Endoplasmic reticulum
- 93. Which of the following endocrine glands is not found in pair in humans?
- A. Adrenal
- B. Pituitary
- C. Testis
- D. Ovary
- 94. Which one of the following is the correct sequence of organs that occur in the path of urine flow in the human body?
- A. Kidney, ureter, urinary bladder, urethra
- B. Kidney, urinary bladder, ureter, urethra
- C. Kidney, ureter, urethra, urinary bladder
- D. Urinary bladder, kidney, urethra, ureter
- 95. The electromagnetic waves, which are used for satellite communication, are
- A. infrared radiations
- B. ultraviolet radiations
- C. radio waves
- D. visible lights



- 96. The resistivity p of a material may be expressed in units of
- A. ohm
- B. ohm/cm
- C. ohm-cm
- D. ohm-cm<sup>2</sup>
- 97.If x is the temperature of a system in Kelvin and y is the temperature of the system in °C, then the correct relation between them is

A. 
$$x = 273 - y$$

B. 
$$x = 273 + y$$

C. 
$$x = 173 + y$$

D. 
$$x = 173 - y$$

- 98. Silver articles become black after some time when exposed to air because
- A. Silver gets oxidized to silver oxide
- B. Silver reacts with moist carbon dioxide in the air to form silver carbonate
- C. Silver reacts with sulphur in the air to form a coating of silver sulphide
- D. Silver reacts with nitrogen oxides in the air to form silver nitrate
- 99. The number of water molecules associated with copper sulphate molecule to form crystals is
- A. 2
- B. 4
- C. 5
- D. 6



100.Match List-I with List-II and select the correct answer using the code given below the Lists:

	List-I	List-II
	(Name)	(Formula)
A.	Bleaching powder	<ol> <li>NaHCO₃</li> </ol>
В.	Baking soda	2. Na <sub>2</sub> CO <sub>3</sub> . 10H <sub>2</sub> O
C.	Washing soda	3. Ca(OH) <sub>2</sub>
D.	Slaked lime	4. CaOCl <sub>2</sub>

- A. A-4 B-1 C-2 D-3
- B. A-4 B-2 C-1 D-3
- C. A-3 B-2 C-1 D-4
- D. A-3 B-1 C-2 D-4
- 101.Mahatma Gandhi's Dandi March, a great event in India freedom struggle, was associated with
- A. Iron
- B. Sodium chloride
- C. Sulphur
- D. Aluminium
- 102. Which one of the following is the first enzyme to mix with food in the digestive tract?
- A. Trypsin
- B. Cellulose
- C. Pepsin
- D. Amylase
- 103. Which one of the following is the 'energy currency' for cellular processes?
- A. Glucose
- B. ATP
- C. ADP



### D. Pyruvic acid

- 104. When air is blown from the mouth into a test tube containing limewater, the limewater turns milky. This is due to the presence of
- A. Water vapour
- B. Oxygen
- C. Carbon dioxide
- D. Carbon monoxide
- 105. Which one of the following is the correct sequence of events during sexual reproduction in plants?
- A. Seeding, formation of embryo, pollination, fertilization, division of the zygote
- B. Formation of embryo, seedling, pollination, fertilization, division of the zygote
- C. Pollination, fertilization, division of the zygote, the formation of embryo, seedling
- D. Seedling, the formation of the embryo, division of zygote, pollination, fertilization
- 106. Which one of the following animals has a three-chambered heart?
- A. Scoliodon
- B. Salamander
- C. Pigeon
- D. Human being
- 107. Which one of the following is not an epidemic disease?
- A. Cholera
- B. Malaria
- C. Smallpox
- D. Elephantiasis
- 108. The unit of the force constant k of a spring is
- A. N-m
- B. N/m



- C. N-m<sup>2</sup>
- D. N/m<sup>2</sup>

109. Which one of the following types of radiation has the shortest wavelength?

- A. Radio waves
- B. Visible light
- C. Infrared (IR)
- D. Ultraviolet (UV)

110.If the speed of light in air is 3 x  $10^8$  m/s, then the speed of light in a medium of refractive index  $\frac{3}{2}$  is

- A.  $2 \times 10^8 \text{ m/s}$
- $\frac{9}{8.4 \times 10^8}$  m/s
- $\frac{3}{2}$  C.  $\frac{3}{2}$  x 10<sup>8</sup> m/s
- D.  $3 \times 10^{8} \text{ m/s}$

111.In a periscope, the two plane mirrors are kept

- A. Parallel to each other
- B. Perpendicular to each other
- C. At an angle of  $60^{\circ}$  with each other
- D. At an angle of 45° with each other

112. Which one of the following is not true about the image formed by a plane mirror?



- A. It is of the same size as the subject.
- B. It is laterally inverted.
- C. It is real image.
- D. It is formed as far behind the mirror as the object is in front.
- 113. Which one of the following is not a property of the X-rays?
- A. They are deflected by electric fields.
- B. They are not deflected by magnetic fields.
- C. They have high penetration length in matter.
- D. Their wavelength is much smaller than that of visible light.
- 114. The property of the sound waves that determines the pitch of the sound is its
- A. Frequency
- B. Amplitude
- C. Wavelength
- D. Intensity
- 115.Match List-I with List-II and select the correct answer using the code given below the Lists:

## **List-I(Compound)**

- A) Boric acid
- B) Citric acid
- C) Magnesium
- D) Acetic acid

### List-II(Use)



- 1) Antiseptic
- 2) Food preservative
- 3) Antacid Hydroxide
- 4) Pickle
- A. A-1 B-2 C-3 D-4
- B. A-1 B-3 C-2 D-4
- C. A-4 B-3 C-1 D-2
- D. A-4 B-2 C-3 D-1
- 116. Which one of the following acids is produced in human stomach?
- A. Formic acid
- B. Sulphuric acid
- C. Nitric acid
- D. Hydrochloric acid
- 117.A solution having pH equal to zero is known as
- A. Highly alkaline solution
- B. Highly acidic solution
- C. Weakly acidic solution
- D. Neutral solution
- 118. Which one of the following chemical reactions is not feasible?
- A. Fe + CuSO<sub>4</sub> $\rightarrow$  FeSO<sub>4</sub> + Cu
- B.  $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$
- C. Cu + PbCl<sub>2</sub> $\rightarrow$  CuCl<sub>2</sub> + Pb
- D. Mg + CuSO<sub>4</sub> $\rightarrow$  MgSO<sub>4</sub> + Cu
- 119. The elements of which of the following pairs are isobars?



- 1 3
- A. 1H and 1H
  - 1 2
- B. **1**H and **1**H
  - 12 14
- C. 6 C and 6 C
  - 40 40
- D. 18Ar and 20Ca
- 120. Scattering of a-particles by a thin gold foil suggests the presence of
- A. Electron in an atom
- B. Proton in an atom
- C. Positively charged nucleus at the centre of an atom
- D. Isotopes of gold