

97. In medieval India, the term 'Rajput' generally referred to a group of -
- (1) extremely chivalrous people who were of royal descent.
 - (2) warlike people who inhabited parts of medieval Rajputana.
 - (3) rulers, chieftains and warriors who claimed the status of Kshatriyas.
 - (4) people who represented the ruling class all over the subcontinent.
98. Which of the following statements is **not** true about castes in medieval India?
- (1) People were grouped into castes and sub-castes on the basis of their heritage and occupations.
 - (2) Irrespective of the power and resources controlled by the members of a caste, caste rankings in the society were fixed permanently.
 - (3) Castes framed their own rules and regulations to manage the conduct of their members.
 - (4) Along with the rules and regulations of their respective castes people were also required to follow the rules of villages in which they lived.
99. Which of the following statements about the Mughal rule in India is **not** true?
- (1) The Mughals imposed structures of administration and ideas of governance that outlasted their rule.
 - (2) The Mughals celebrated their genealogy pictorially, with each ruler getting a picture made of Timur and himself.
 - (3) The careful balance between defeating and not humiliating their opponents enabled the Mughals to extend their influence over many kings and chieftains.
 - (4) The Mughals copiously followed the rule of primogeniture to ensure smooth succession.
100. Which of the following statements is **true** about the new religious developments in medieval India?
- (1) New religious developments were hindered in medieval India due to the inherent orthodoxy of the major religious groups in India.
 - (2) This was an age when Islam, Brahmanical Hinduism, Sufism and the various strands of 'bhakti' influenced one another.
 - (3) New religious developments in medieval India were made possible essentially because of the liberal political attitude of rulers like Akbar.
 - (4) Despite the propagation of liberal ideas like human equality and universal brotherhood no 'sufi' or 'bhakti' saint actually rejected the prevalent orthodox religions.
101. Which one of the following factors most helped the rise of the Marathas in the Deccan?
- (1) The conquest of Muslim territories of the South.
 - (2) Their appointments of Muslims on higher judicial posts.
 - (3) Their training in the arts of administration and war.
 - (4) Their insistence about maintaining equality in social affairs.
102. Under the British, written records were maintained and preserved primarily because -
- (1) the British wanted to prove their administrative superiority over the earlier Indian rulers.
 - (2) through written records the British wanted to claim legal legitimacy for their rule in India.

- (3) the British administration in India was accountable to the Home government in London.
- (4) the culture of keeping administrative records helped the British in studying and deciding policies.
103. In the context of the British rule in India the term 'colonial' meant :
- (1) India's status as a dependent country under Britain
 - (2) Britain's rule in India as a victorious power in war
 - (3) Britain's holding of territory in India for economic interests
 - (4) Complete subjugation of India by Britain in all spheres
104. Which of the following statements is **true** about the lives of tribal groups during the British rule?
- (1) The tribal chiefs retained much of their traditional administrative power but lost their land titles.
 - (2) 'Jhum' cultivators who took to plough cultivation often reaped good harvests.
 - (3) The Forest Department established forest villages in many regions to ensure a regular supply of cheap labour.
 - (4) The opening up of the forest areas to trade improved the economic condition of the tribal people.
105. Which of the following statements is **not true** about Gandhiji's leadership in Indian freedom movement?
- (1) Throughout India's freedom movement Gandhiji wished to build class unity and not class conflict.
 - (2) During the course of the freedom struggle sometimes people thought of Gandhiji as a kind of messiah.
 - (3) At times, using Gandhiji's name, tribals and peasants undertook actions that did not conform to Gandhian ideals.
 - (4) Throughout India's freedom movement Gandhiji's leadership remained uncontested.
106. Which climatic region has the **least** temperature range?
- (1) Equatorial region
 - (2) Monsoon region
 - (3) Tropical region
 - (4) Tundra region
107. The core of the Earth is:
- (1) Solid
 - (2) Liquid
 - (3) Gaseous
 - (4) Plasma
108. In plantation farming-
- (1) a single cash crop is grown and processed for export
 - (2) the farming is practised in semi-arid areas and therefore crop failure is common.
 - (3) number of crops are grown.
 - (4) there is no special emphasis on any one crop.

109. The sea between Sri Lanka and India is known as:
(1) Palk Isthmus
(2) Palk Strait
(3) Tuticorin
(4) Gulf of Kuchchh
110. Which one of the following is the most porous rock?
(1) Basalt
(2) Granite
(3) Sandstone
(4) Slate
111. Which layer of the Earth is **most suitable** for flying jet aircraft?
(1) Troposphere
(2) Stratosphere
(3) Thermosphere
(4) Exosphere
112. If the axis of the earth were perpendicular to the plane of the ecliptic, then-
(1) all parts of the world would have only days.
(2) half of the world would have only days and other half would have only nights.
(3) all parts of the globe would have equal days and nights at all times of the year.
(4) all parts of the world would have varying lengths of days and nights.
113. Most of the countries adopt their respective standard time from the –
(1) longitude of the country.
(2) latitude of the country.
(3) central meridian of the country.
(4) longitude and Latitude both of the country.
114. Fossils of animals, plants and other micro organisms are found in:
(1) Plutonic rocks
(2) Sedimentary rocks
(3) Metamorphic rocks
(4) Igneous rocks
115. For a time of one hour the longitudinal distance is equal to-
(1) 15°
(2) 30°
(3) 45°
(4) 60°
116. Which one of the following is called a great Circle?
(1) The Arctic Circle
(2) The tropic of Cancer
(3) The Tropic of Capricorn
(4) The Equator

117. Which one of the following countries is Not land-locked?
(1) Afghanistan
(2) Myanmar
(3) Nepal
(4) Switzerland
118. The Centre from which the earthquake waves originate is called the:
(1) Seismic Epicentre
(2) Seismic Focus
(3) Seismic Centre
(4) Seismic Core
119. An important mountain range of Europe is:
(1) The Andes
(2) The Atlas
(3) The Alps
(4) The Rockies
120. Raw materials required for Iron and Steel Industry are:
(1) Iron-ore + Lime + Coal
(2) Iron-ore + Lime + Tin
(3) Iron-ore + Lime + Bauxite
(4) Iron-ore + Steel + Coal
121. Regions in India are culturally diverse because of -
(1) social reasons.
(2) political reasons.
(3) economic reasons.
(4) historical reasons.
122. Which of the following statements displays our prejudice against life in Indian villages?
(1) People in villages are traditional.
(2) People in villages are undemanding.
(3) People in villages are simple.
(4) People in villages are backward.
123. Democratic governments in our times are usually referred to as:
(1) People's democracy
(2) Participatory democracy
(3) Representative democracy
(4) Parliamentary democracy
124. On which of the following counts can an individual be not discriminated against as per the Indian law?
(1) the language a person speaks.
(2) the way a person worships.
(3) the caste that a person belongs to.
(4) the food habits of a person maintains.

125. Which of the following is **not** a key element of a democratic government?
- (1) People's participation through voting in elections.
 - (2) Resolution of conflicts through the rule of law.
 - (3) Commitment to equality and justice.
 - (4) Unquestionable authority of the government to rule.
126. People in India generally experience inequality in terms of -
- (1) their right to exercise political freedom.
 - (2) their social status owing to caste identity.
 - (3) their economic status owing to material circumstances.
 - (4) their right to practice and profess a faith of their choice.
127. Which of the following is **not** a correct statement?
- (1) The Gram Sabha plays a key role in making the Gram Panchayat responsible.
 - (2) The elected representatives from each ward to the Gram Panchayat are called Panchs.
 - (3) The Secretary of the Gram Sabha is appointed by the government.
 - (4) The Sarpanch is responsible for calling the meeting of the Gram Sabha.
128. The Indian Constitution recognises that citizens are equal in terms of Their -
- (1) legal status.
 - (2) cultural status.
 - (3) economic status.
 - (4) social status.
129. In regard to urban administration, which of the following is **not** a correct statement:
- (1) Groups of councillors who form committees debate and decide issues.
 - (2) The decisions of the municipal corporation are implemented by the Commissioner.
 - (3) The terms 'Municipal Corporation' and 'Municipal Council' are synonymous.
 - (4) Whereas the municipal 'Councillors' are elected, the 'Commissioner' is appointed.
130. Which of the following statements about Members of the Legislative Assemblies is **not** true?
- (1) She/He can ask questions of the government in the Assembly.
 - (2) She/He can debate an issue of public importance in the Assembly.
 - (3) She/He can vote on a money bill and other bills as and when required.
 - (4) She/He can defect from her/his party without inviting disqualification.
131. Which of the following is **not** a key feature of the Indian Constitution?
- (1) Parliamentary form of government.
 - (2) Independent Judiciary.
 - (3) A set of written rights for the citizens.
 - (4) Supremacy of the Executive.

- (1) All societies hold the same views similarly about the roles that the boys and girls play.
 - (2) Our society does not differentiate between boys and girls when they are growing up.
 - (3) The work that women do at home is valued as much as what men do outside home.
 - (4) Care-giving work is not a part of the larger system of social inequality.
133. Which of the following statements is **not** true:
- (1) The Fundamental Rights are the conscience of the Constitution.
 - (2) Directive Principles of State Policy are directions to the government.
 - (3) Secularism is a principle that does not allow a state religion.
 - (4) Federalism refers to equality of status between the Central and State governments.
134. It is important to separate religion from the state because it -
- (1) helps the state in protecting the democratic rights of citizens irrespective of their religion.
 - (2) enables the state to prevent anyone from changing her / his religion.
 - (3) helps the state to enact any legislation that may even run contrary to the religious sensibilities of any particular group.
 - (4) helps the state to effectively regulate the activities of different religious organizations.
135. The basic idea of a representative democracy is that:
- (1) The government takes steps to ensure who the people will choose as their representatives.
 - (2) The people decide for themselves who their representatives will be through free and fair elections.
 - (3) The representatives of people decide what type of government the state will have.
 - (4) The government seeks the opinion of the people's representatives to formulate state policies.
136. The independence of judiciary in India has been ensured by -
- (1) vesting the courts with the power to resolve disputes.
 - (2) accepting the courts as the final interpreter of the Constitution.
 - (3) providing for the enforcement of Fundamental Rights by the courts.
 - (4) Instituting the scheme of separation of powers in the Constitution.
137. The Supreme Court and the High Courts in India have the power to modify or cancel laws if -
- (1) people, who think such laws are not fair, approach any of these courts to decide on the issue.
 - (2) such laws are perceived to be in favour of the interests of certain groups and against the interests of others.
 - (3) on appeal, any of these courts is satisfied that such laws do not adhere to the basic tenets of the Constitution.
 - (4) such laws become controversial on account of a lack of consensus among the political parties.

138. In which one of the following is prevention of Atrocities Act 1989 not violated?
- (1) Forcing a member of SC/ST to drink or eat any inedible items
 - (2) Forcing any one not to vote or to vote for a particular candidate
 - (3) Provision of employment in Govt. Sector organisations
 - (4) Forcing to remove clothes from the person of a member of a SC/ST community
139. In which year were the fundamental duties added to our constitution?
- (1) 1976
 - (2) 1950
 - (3) 1947
 - (4) 1977
140. The Head of State of which of the following countries is not called a President
- (1) USA
 - (2) India
 - (3) Germany
 - (4) France

141. People are more likely to be healthy if -
- (1) the public distribution system is made more efficient.
 - (2) they have proper housing facilities.
 - (3) appropriate sanitation facilities are provided.
 - (4) they get minimum education and work opportunity.
142. Health service is called public when such services are -
- (1) owned by the members of the public.
 - (2) available to the general public without discrimination.
 - (3) provided by the government to all citizens.
 - (4) provided to the people by philanthropic organizations.
143. Agricultural labourers in villages are forced to accept low wages because -
- (1) labourers are available in abundance in villages.
 - (2) they do not own their own farm lands to grow crops.
 - (3) they work in others' fields as servants.
 - (4) they are unskilled workers.
144. In which of the following ways does the media not play an important role?
- (1) In covering news and discussing events taking place in the country and the world.
 - (2) In mobilizing public opinion by focusing on a particular story.
 - (3) In setting an agenda for the government to pursue.
 - (4) In giving primacy to uncritical news and views favouring the government.
145. In the context of cotton cultivation and the marketing of cotton cloth in India the merchants make a lot of profit because -
- (1) the cotton producers are mostly ignorant about how the market operates.
 - (2) the cotton producers remain mostly busy in production activities and have no time for marketing activities.
 - (3) the cotton producers remain mostly dependent on merchants for both raw materials and markets.
 - (4) the government does not help the cotton producers in marketing their products.
146. In India the government bears the primary responsibility for providing public facilities because -
- (1) there is a general lack of private initiatives in providing essential public facilities in India.
 - (2) provision of such facilities can be shared by all.
 - (3) the government collects taxes for providing such facilities to general public.
 - (4) people cannot afford the facilities provided for by private parties.
147. Multinational companies are eager to set up production bases in India because -
- (1) they want to contribute to the process of economic development in India.
 - (2) the cost of production in India is much lower than in the developed countries.
 - (3) they can get around laws in India to do profitable business.
 - (4) there is a good communication system available in India.

148. "Malls" are:
- (1) the markets of consumer durables.
 - (2) places with eating joints and fitness saloons.
 - (3) a place where whole sale buying and selling takes place.
 - (4) an enclosed shopping centre with many shops.
149. Which of the following is not a common means of livelihood in traditional villages?
- (1) Services
 - (2) Fishing
 - (3) Farming
 - (4) Weaving
150. The scrutiny of which type of content is NOT a part of Censorship of TV Programmes?
- (1) Interests of Political Parties
 - (2) Vulgarity and violence
 - (3) National Integration
 - (4) Communal harmony.

91. Which set shows the given numbers ordered from greatest to smallest

$\frac{3}{8}$, 38%, 0.0038, -3.8

(1) -3.8, $\frac{3}{8}$, 38%, 0.0038

(2) 38%, $\frac{3}{8}$, 0.0038, -3.8

(3) -3.8, $\frac{3}{8}$, 38%, 0.0038

(4) 0.0038, -3.8, 38%, $\frac{3}{8}$

92. Which expression is true?

(1) $-16 > -15$

(2) $-16 < -20$

(3) $-16 > 1$

(4) $-16 < -3$

93. In 1997, the population of China was approximately 1,240,000,000. How is this population written in scientific notation?

(1) 1.24×10^9

(2) 124×10^7

(3) 1.24×10^8

(4) 12.4×10^8

94. The sides of a right-angled triangle are in the ratio 5:12:13. The sum of the shortest side and the longest side is 144 cm, what is the length of the third side of the triangle?

(1) 104cm

(2) 96cm

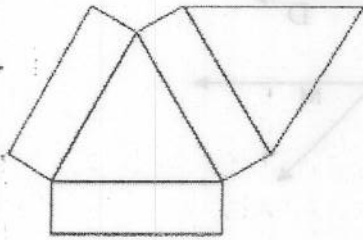
(3) 40cm

(4) 6cm

95. The prime factorization of two numbers is $2 \times 3^2 \times 7 \times 13$ and $3 \times 7^2 \times 13^3 \times 17$. Which of the following is NOT a common factor?
- (1) 147
 - (2) 637
 - (3) 1911
 - (4) 1326
96. The circumferences of the front wheel and the rear wheel of a tricycle are 60cm and 45cm respectively. When Bobby begins to ride the tricycle, the point P on the front wheel and the point Q on the rear wheel touch the ground. What is the minimum distance travelled before P and Q will touch the ground again at the same time?
- (1) 105 cm
 - (2) 180 cm
 - (3) 210 cm
 - (4) 360 cm
97. A shopkeeper earns a profit of Rs.2 per pen and incurs a loss of 50 paise per pencil while selling pens and pencils of her old stock. In a particular month she incurred a loss of Rs.10. In this month she sold 45 pens. How many pencils did she sell in the month?
- (1) 90 pencils
 - (2) 120 pencils
 - (3) 160 pencils
 - (4) 200 pencils
98. The weight of a 3 month old baby is 6.08 kg. This is 190% of her weight at birth. What was her weight at birth?
- (1) 3.2 kg
 - (2) 3.02 kg
 - (3) 2.3 kg
 - (4) 2.03 kg

- (1) 63.5×10^5
- (2) 653×10^4
- (3) 730000
- (4) 0.065×10^9

100. How many faces are there of the solid formed with the following net?

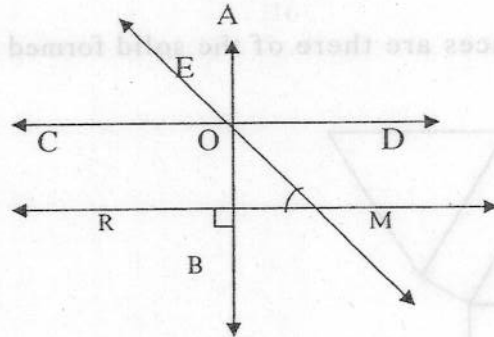


- (1) Eight
- (2) Six
- (3) Five
- (4) Four

101. Which of the following will give : $x \leq 12$?

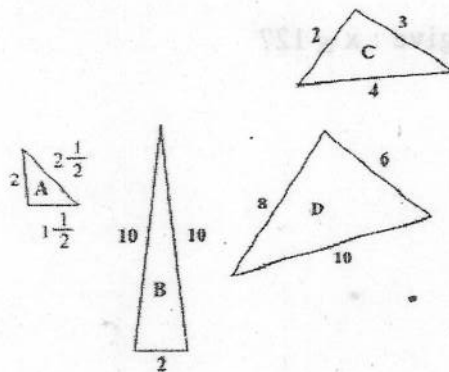
- (1) $3x + 3 \geq 12$
- (2) $6x \geq 2x + 8$
- (3) $4x - 12 \leq 3x$
- (4) $\frac{1}{2}x + 6 \geq 24x$

102. Lines AB and RM are perpendicular to each other. Line CD is parallel to line RM. If $\angle AOE$ is 43.5° , what is the measure of $\angle 2$?



- (1) 43.5°
- (2) 46.5°
- (3) 50.5°
- (4) 90°

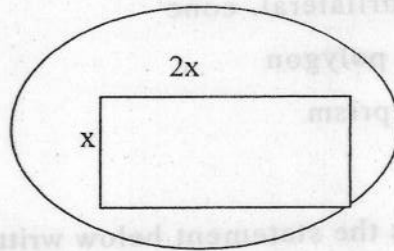
103. Which two triangles are similar?



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

104. Which of the following lists contains only the three-dimensional objects?
- (1) pentagon, sphere, octahedron
 - (2) pyramid, quadrilateral, cone
 - (3) prism, circle, polygon
 - (4) sphere, cone, prism
105. Which choice shows the statement below written in algebraic form?
"The sum of ten times a number and sixteen is greater than four fifth of the number."
- (1) $10(n + 16) > 4n - 5$
 - (2) $10(n + 16) \leq 4\left(\frac{n}{5}\right)$
 - (3) $10n + 16 - 4(n - 5)$
 - (4) $10n + 16 > \frac{4}{5}n$
106. The exact value of $\square(64 \times 10^{-6})$
- (1) 24×10^{-3}
 - (2) 24×10^{-2}
 - (3) 4×10^{-3}
 - (4) 4×10^{-2}
107. Which conclusion about the roots of the equation $(x-1)^2 = -1$ is correct?
- (1) The roots are real and unequal.
 - (2) The roots are real and equal.
 - (3) The roots are imaginary and equal
 - (4) The roots are imaginary and unequal.

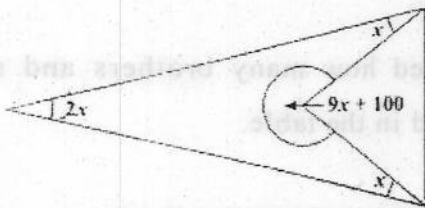
108. If the area of the rectangle given in the figure is 32cm^2 , what will be the circumference of the Circle in case?



- (1)
(2)
(3)
(4)
109. A rectangular piece of card measures 20cm by 14cm . Squares of side x cm are cut from the four corners and the card is folded to make an open box. What is the volume of the box?

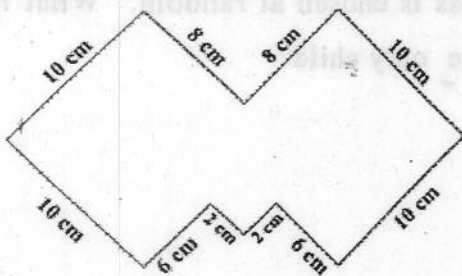
- (1) $4X(10-x)(7-x)$
(2) $4X+(10-x)+(7-x)$
(3) $4X[(10-x)+(7-x)]$
(4) $4X(10-x)^2(7-x)$
110. What is the sum of internal angles of a polygon of 20 sides?

- (1) 360°
(2) 720°
(3) 1620°
(4) 3240°



- (1) 20°
- (2) 25°
- (3) 30°
- (4) 35°

112. What is the area of this shape?



- (1) 140cm^2
- (2) 160cm^2
- (3) 180cm^2
- (4) 200cm^2

113. Cherie rolls a dice ten times and writes down her scores:

2 5 2 5 6 2 1 5 4 2

What is the median of this data?

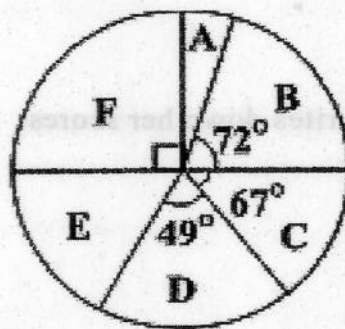
- (1) 2
- (2) 3
- (3) 3.4
- (4) 4

114. A class of 32 students noted how many brothers and sisters they had. Their results are summarized in the table.

		Brothers			
		0	1	2	3
Sister	0	4	5	1	0
	1	7	6	3	0
	2	0	4	0	0
	3	1	0	0	1

One student from the class is chosen at random. What is the probability that this student will be the only child?

- (1) $1/8$
 (2) $5/32$
 (3) $7/32$
 (4) $41/32$
115. The pie chart represents the votes cast for six candidates in a school council election:



What fraction of the votes was cast for candidate E?

- (1) $64/360$
 (2) $1/20$
 (3) $1/4$
 (4) $29/90$

116. Which of the following expressions on simplification gives $(3x+4)$?

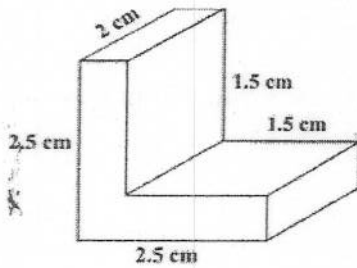
(1) $\frac{3(x+4)+4(3x+2)}{5}$

(2) $\frac{2(5x-6)+4(x-5)}{5}$

(3) $\frac{3(x+4)+4(3x+7)}{5}$

(4) $\frac{(5x+15)+4(3-4x)}{5}$

117. What is the surface area of this solid?



- (A) 18cm^2
- (B) 22cm^2
- (C) 28cm^2
- (D) 32cm^2

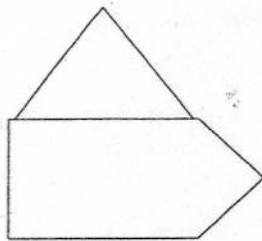
118. A group of boys and girls planted a total of 148 trees. Each boy planted 7 trees and each girl planted 5 trees. There were 4 more boys than girls in the group. How many girls were there in the group?

- (1) 10
- (2) 14
- (3) 8
- (4) 12

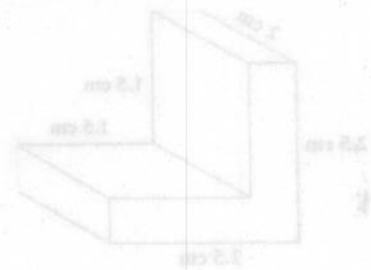
119. A shirt and skirt cost Rs.1380. Three shirts and two skirts cost Rs.3310. What is the cost of a skirt?

- (1) Rs.1930
- (2) Rs.550
- (3) Rs.830
- (4) Rs.1020

120. Hexagon ABCDEF has a perimeter of 40cm. Equilateral triangles BCD and DEF have perimeters of 18cm and 12cm respectively. What is the area of rectangle ABDF?



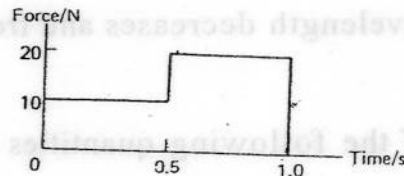
- (1) 12cm^2
- (2) 24cm^2
- (3) 30cm^2
- (4) 34cm^2



- (A) 18cm^2
- (B) 32cm^2
- (C) 38cm^2
- (D) 32cm^2

(Physics)

121. Force is applied to an object of mass 3 Kg. at rest on a friction free horizontal surface as indicated on the graph:



After one second, the speed of the object in ms^{-1} is :

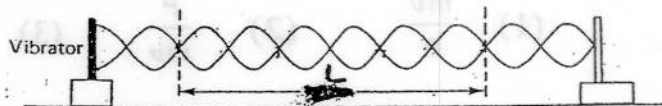
- (1) 5 (2) 10 (3) 15 (4) 20
122. A car of mass m has an engine which can deliver power P . The minimum time in which the car can be accelerated from rest to a speed v is:

- (1) $\frac{mv}{P}$ (2) $\frac{P}{mv}$ (3) $\frac{2P}{mv^2}$ (4) $\frac{mv^2}{2P}$

123. A star has a diameter of approximately 0.5 that of Earth and mass of 0.1 that of Earth. The force experienced by a body of mass 1 Kg. on the surface of that star compared to that on Earth is greater by factor:

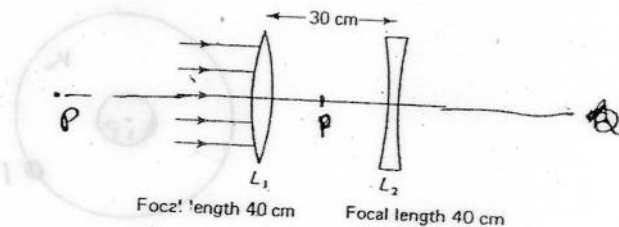
- (1) 0.2 (2) 0.4 (3) 0.8 (4) 1.5

124. When light enters glass from air:
- (1) Wavelength increases and velocity decreases.
 - (2) Wavelength decreases and velocity decreases.
 - (3) Wavelength increases and frequency decreases.
 - (4) Wavelength decreases and frequency increases.
125. Which of the following quantities must be determined in order that the thermal capacity of a body can be calculated when specific heat capacity of the body is known?
- (1) Latent heat.
 - (2) Temperature.
 - (3) Mass.
 - (4) Thermal conductivity.
126. A vibrator sets up standing waves in a string as shown in the diagram. If the frequency of vibrator is 'f' then the speed of the wave is:



- (1) $\frac{fL}{6}$
 - (2) $\frac{fL}{3}$
 - (3) $3fL$
 - (4) $6fL$
127. A diverging lens is prescribed by ophthalmologist to correct-
- (1) myopia.
 - (2) presbyopia.
 - (3) hyper metropia
 - (4) astigmatism.

128. A diagram represents two thin lenses L_1 and L_2 placed coaxially, 30 cm apart. A beam of light parallel to the axis is incident on L_1 . The final image formed by refraction through both the lenses is-



- (1) Real and between L_1 and L_2 .
 (2) Real and between L_2 and Q.
 (3) Virtual and between P and L_1 .
 (4) Virtual and between L_2 and Q.

129. Electric bill is paid for:

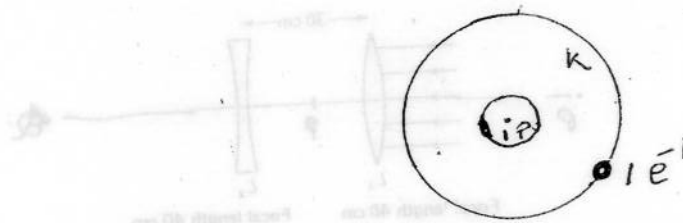
- (1) Power
 (2) Energy
 (3) Resistance
 (4) Current

130. The physical quantity which corresponds the rate of change of momentum is:

- (1) Mass.
 (2) Acceleration.
 (3) Impulse.
 (4) Force.

(CHEMISTRY)

131. The following atomic diagram represents:



- (1) Nitrogen atom
- (2) Helium atom
- (3) Hydrogen atom
- (4) Sodium atom

132. Which one of the following is an ionic compound?

- (1) H_2O
- (2) NH_3
- (3) CO_2
- (4) NaCl

133. The relative atomic masses of many elements are not whole numbers because -

- (1) elements are mixtures of isotopes.
- (2) elements are mixtures of isobars.
- (3) elements have fractional absolute masses.
- (4) all elements are not in gaseous state.

134. A solution 'x' reacts with crushed egg-shells to give a gas that turns lime water milky. The solution 'x' contains:
- (1) KCl (Aq)
 - (2) NaCl (Aq)
 - (3) HCl (Aq)
 - (4) LiCl (Aq)
135. In which of the following cases you expect can a displacement reaction be expected?
- (1) Zinc sulphate solution + Copper turnings
 - (2) Copper sulphate solution + Granulated zinc
 - (3) Zinc sulphate solution + Iron filings
 - (4) Ferrous sulphate solution + Copper turnings
136. A magnesium ribbon was burnt in air, its ash was dissolved in water. The resulting solution was tested with blue litmus paper, red litmus paper and phenolphthalein solution. Which of the following would be the expected outcome?
- (1) Blue litmus changes to red.
 - (2) Red litmus remains unchanged.
 - (3) Phenolphthalein solution remains colour less.
 - (4) Colour of phenolphthalein solution changes to pink.

137. Some of the observations are given below:

- (i) Copper sulphate solution gets decolourised by zinc metal.
- (ii) Copper sulphate solution gets decolourised by iron metal.
- (iii) Iron does not affect zinc sulphate solution.

In the context of the above statement which one of the following is the correct ascending (increasing) order of reactivity?

- (1) $\text{Cu} < \text{Fe} < \text{Zn}$
- (2) $\text{Cu} < \text{Zn} < \text{Fe}$
- (3) $\text{Fe} < \text{Cu} < \text{Zn}$
- (4) $\text{Fe} < \text{Zn} < \text{Cu}$

138. Which of the following is a neutralization reaction?

- (1) $2\text{Cu} + \text{H}_2\text{O} + \text{CO}_2 + \text{O}_2 \longrightarrow \text{Cu}(\text{OH})_2 + \text{CuCO}_3$
- (2) $\text{SO}_2 + \text{H}_2\text{O} \longrightarrow \text{H}_2\text{SO}_3$
- (3) $\text{HCl} + \text{NaOH} \longrightarrow \text{NaCl} + \text{H}_2\text{O}$
- (4) $\text{Zn} + \text{H}_2\text{SO}_4 \longrightarrow \text{ZnSO}_4 + \text{H}_2$

139. Which acid is secreted by the stomach wall to activate digestive enzymes?

- (1) Lactic Acid.
- (2) Hydrochloric Acid.
- (3) Sulphuric Acid.
- (4) Tartaric Acid.

140. An inorganic compound 'x' on strongly heating gave oxygen, an oxide of nitrogen and a residue. Compound 'x' does not dissolve in nitric acid but dissolves in ammonium hydroxide solution. On being treated with tap water it gave a white turbidity. The compound x is:

- (1) Ag NO_3
- (2) K NO_3
- (3) Na NO_3
- (4) $\text{NH}_4 \text{NO}_3$

(BIOLOGY)

141. Organic manure as a better option to the use than Chemical fertilizers because -
- (1) it improves soil texture.
 - (2) it helps to increase eco-friendly microbes in soil.
 - (3) it decreases the water holding capacity of soil.
 - (4) it increases the porosity of soil.
142. During the rainy season you and your friend find one small snake like worm moving on the ground. Your friend wonders whether it is a small snake or an earthworm. You point out to him that it is an Earthworm, as it has:
- (1) a mouth and an anus
 - (2) a clitellum near its mouth
 - (3) moist skin.
 - (4) soft skin.
143. After vigorous exercise, a person may experience pain in muscles due to -
- (1) break down of glucose and release of energy.
 - (2) accumulation of Pyruvic acid.
 - (3) formation and accumulation of Lactic Acid
 - (4) formation of ethyl alcohol.
144. Mosquitoes, Cockroaches and Butterflies are classified under the same phylum because all of them have -
- (1) 3 pairs of jointed legs.
 - (2) wings to fly.
 - (3) metamorphosis.
 - (4) mouth Parts
145. In human blood, a toxic substance called carbamino haemoglobin is formed by -
- (1) the combination of carbon dioxide with haemoglobin.
 - (2) the combination of carbon monoxide with haemoglobin.
 - (3) combination of methane with haemoglobin.
 - (4) combination of nitrogen with haemoglobin
146. Identify the correct pair :
- | | | |
|------------------|---|-----------------------------|
| (1) Puberty | - | Childhood |
| (2) Larynx | - | Adam's Apple |
| (3) Male Hormone | - | TSH |
| (4) Menarche | - | Stoppage of Menstrual cycle |

147. Which among the following statements about the process of fertilization is correct?
- (1) Fertilization always occurs inside the body of an organism.
 - (2) Fertilization also occurs during asexual reproduction.
 - (3) Fertilization does not occur in plants.
 - (4) Fertilization involves fusion of male and female gametes.
148. Which of the following is the correct sequence of the components starting from smaller to larger structures?
- (1) Chromosome – Gene – Nucleus – Protoplasm.
 - (2) DNA – Chromosome – Nucleus – Protoplasm.
 - (3) Chromosome – DNA – Gene – Nucleus.
 - (4) Nucleus – Protoplasm – Mitochondria – Cell wall.
149. Identify the incorrect pair:
- (1) Pancreas – endocrine gland
 - (2) Pancreas – exocrine gland
 - (3) Pancreas – digestive gland
 - (4) Pancreas – excretory gland.
150. An industrial unit is situated in a city near a river. It emits gases from the chimney and also other effluents without any treatment which of the following situations would be unlikely to happen in the city?
- (1) The river water will not be polluted at all.
 - (2) The percentage of pollutant gases will increase in air.
 - (3) The aquatic plants and animals of the river will be adversely affected.
 - (4) Chances for residents of the city to suffer from respiratory diseases will be higher.

Question No.	Key	Question No.	Key
31	2	46	4
32	4	47	4
33	1	48	2
34	4	49	1
35	3	50	3
36	4	51	2
37	2	52	2
38	1	53	2
39	3	54	2
40	1	55	1
41	2	56	3
42	1	57	2
43	4	58	3
44	2	59	2
45	2	60	2

Section I

CHILD DEVELOPMENT AND PEDAGOGY

Q.No.	Key	Q.No.	Key
1.	2	16.	1
2.	2	17.	2
3.	2	18.	2
4.	4	19.	3
5.	1	20.	3
6.	2	21.	2
7.	2	22.	4
8.	3	23.	2
9.	3	24.	2
10.	4	25.	2
11.	3	26.	3
12.	2	27.	3
13.	2	28.	4
14.	4	29.	4
15.	3	30.	2

Section II

L-1 (Hindi)

Question No.	Key	Question No.	Key
31.	2	46.	4
32.	4	47.	4
33.	1	48.	2
34.	4	49.	1
35.	3	50.	3
36.	4	51.	2
37.	2	52.	2
38.	1	53.	2
39.	3	54.	2
40.	1	55.	1
41.	2	56.	3
42.	1	57.	2
43.	4	58.	3
44.	3	59.	2
45.	2	60.	2

Section II – Language 1

ENGLISH – 1, UPPER PRIMARY

Question No.	Key	Question No.	Key
31.	3	46.	4
32.	3	47.	2
33.	2	48.	3
34.	2	49.	1
35.	1	50.	2
36.	3	51.	4
37.	4	52.	2
38.	1	53.	3
39.	2	54.	1
40.	1	55.	2
41.	2	56.	2
42.	4	57.	3
43.	1	58.	2
44.	3	59.	3
45.	1	60.	2

Section III

Language 2 Hindi

Questions No.	Key	Questions No.	Key
61.	3	76.	2
62.	2	77.	3
63.	1	78.	1
64.	2	79.	2
65.	2	80.	2
66.	2	81.	2
67.	3	82.	4
68.	4	83.	2
69.	1	84.	2
70.	2	85.	3
71.	2	86.	1
72.	3	87.	2
73.	2	88.	1
74.	2	89.	4
75.	4	90.	4

English – Section III – Language 2

Questions No.	Key	Questions No.	Key
61.	3	76.	4
62.	1	77.	2
63.	3	78.	1
64.	3	79.	4
65.	2	80.	3
66.	4	81.	1
67.	3	82.	3
68.	1	83.	2
69.	2	84.	3
70.	4	85.	2
71.	3	86.	3
72.	1	87.	2
73.	3	88.	4
74.	3	89.	2
75.	2	90.	1

Section IVSOCIAL STUDIES – KEY

Question Number	Key	Question Number	Key
91.	D	121.	D
92.	C	122.	D
93.	D	123.	C
94.	B	124.	D
95.	D	125.	D
96.	C	126.	A
97.	C	127.	D
98.	B	128.	A
99.	D	129.	C
100.	B	130.	D
101.	D	131.	D
102.	D	132.	A
103.	D	133.	D
104.	C	134.	A
105.	D	135.	B
106.	A	136.	D
107.	A	137.	C
108.	A	138.	C
109.	B	139.	A
110.	C	140.	C
111.	B	141.	B
112.	C	142.	C
113.	C	143.	A

115.	A	145.	C
116.	D	146.	C
117.	B	147.	B
118.	B	148.	B
119.	C	149.	A
120.	A	150.	A

(Mathematics (Upper Primary))

Q.No.	Key	Q.No.	Key
91.	2	107.	4
92.	4	108.	3
93.	1	109.	1
94.	2	110.	4
95.	4	111.	1
96.	2	112.	4
97.	4	113.	2
98.	1	114.	1
99.	4	115.	1
100.	3	116.	1
101.	3	117.	3
102.	2	118.	1
103.	1	119.	3
104.	4	120.	2
105.	4		
106.	4		

Section IV

PHYSICS

<u>Q. No.</u>	<u>Key</u>
121.	1
122.	4
123.	2
124.	2
125.	3
126.	2
127.	1
128.	2
129.	1
130.	4

CHEMISTRY

<u>Q. No.</u>	<u>Key</u>
131.	3
132.	4
133.	1
134.	3
135.	2
136.	4
137.	1
138.	3
139.	2
140.	1

BIOLOGY

<u>Q.No.</u>	<u>Key</u>
141.	3
142.	2
143.	3
144.	1
145.	1
146.	2
147.	4
148.	2
149.	4
150.	4