

NATIONAL TALENT SEARCH EXAMINATION-2019-20, PUNJAB SCHOLASTIC APTITUDE TEST (SAT) PAPER & HINTS & SOLUTION

PHYSICS

101. A small source of light casts a sharp shadow on an opaque object shows
1. Ray Nature of Light
2. Wave Nature of Light
3. Particle Nature of Light
4. Dual Nature of Light

Sol. (1) Ray nature of light.

Shadow formation is result of rectilinear propagation of light.

102. In Domestic Electric Circuits appliances are always connected in
1. Series
2. Parallel
3. Mixed
4. Bulbs in Series and Fans in Parallel

Sol. (2) Parallel

Home appliances are connected in parallel combination so all appliances have same potential difference.

103. A force of 40 N acts on a body, and body moves through a distance of 2 metre at an angle of 45° in the direction of the force. The work done by the force is

1. $40/\sqrt{2}$ J 2. $20/\sqrt{2}$ J 3. $80/\sqrt{2}$ J 4. $40/\sqrt{2}$ J

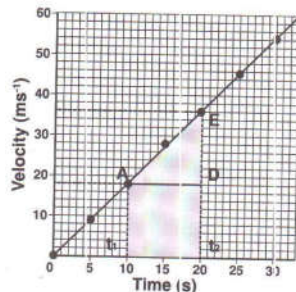
Sol. (3) $80/\sqrt{2}$ Joule.

$$W = FS \cos \theta$$

$$= 40 \times 2 \times \cos 45^\circ$$

$$W = \frac{80}{\sqrt{2}} \text{ Joule.}$$

104.



In the above graph what is the value of Acceleration?

1. 360 ms^{-2} 2. 180 ms^{-2} 3. 0.9 ms^{-2} 4. 1.8 ms^{-2}

Sol. (4)

$$1.8 \text{ m/s}^2$$

$$a = \frac{\Delta v}{\Delta t} = \frac{9 \times 2}{10} = 1.8 \text{ m/s}^2$$

105. A Person cannot see the object beyond 50 cm, The power of lens to correct this defect will be

1. +2 D 2. -2D 3. +5 D 4. +0.5 D

Sol. (2) -2D

Far point of person $v = -50 \text{ cm}$

$$u_e = \infty$$

$$\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$$

$$\frac{1}{f} = \frac{1}{-50} - \frac{1}{\infty}$$

$$f = -50 \text{ cm}$$

$$\text{Power } P = \frac{100}{f} = \frac{100}{-50}$$

$$P = -2D$$

106. If the frequency of wave is trippled, then its wav length?
 1. Becomes Double 2. Becomes Half
 3. Becomes Cne third of original 4. Remains same.

Sol. (3) Becomes one third of original speed of wave $V = n\lambda$.

If medium is same, then speed of wave remains same.

If frequency is trippled then wavelength be λ .

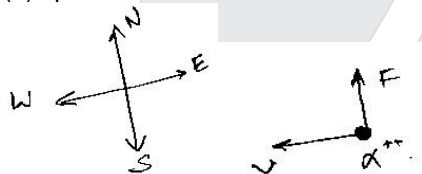
$$V = (3n)\lambda'$$

$$(3n)\lambda' = n\lambda$$

$$\lambda' = \frac{\lambda}{3}$$

107. A positively charged particle (alpha particle) projected towards west is deflected towards north by magnetic field. The direction of magnetic field is
 1. Downwards 2. Towards South 3. Towards East 4. Upwards

Sol. (4) upwards



By Fleming's left hand rule.

108. If distance between Earth and Moon is increased by Six time, then force of gravitation between both will.....
 1. Increased 1/36 times 2. Decrease 1/36 times
 3. Increase 36 times 4. Decrease 6 times

Sol. (1)

Increase $\frac{1}{36}$ times.

Newton's law of gravitation

$$F \propto \frac{1}{r^2}$$

$$F^1 = \frac{F}{(6)^2} = \frac{1}{36} \times F$$

109. A bullet of mass 20g is horizontly fired with velocity of 150 ms⁻¹ from pistol of mass 2 kg. What is the recoil velocity of the Pistol.
 1. -1.5 ms⁻¹ 2. -1.5 ms⁻¹ 3. -3.0 ms⁻¹ 4. 0 ms⁻¹

Sol. (1)
 -1.5 m/s By conservation of linear momentum

$$m_1 v_1 = -m_2 v_2$$

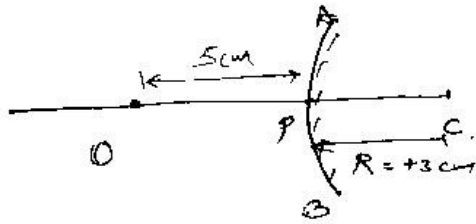
$$v_2 = \frac{-m_1 v_1}{m_2} = -\frac{0.02 \times 150}{2} = -1.5 \text{ m/s}$$

110. A object is placed 5 cm in front of Convex mirror, whose radius of curvature is 3cm. Find the Position and Nature of Image.

1. +1.15 cm, Real and Erect.
2. +1.15 cm, Virtual and inversed
3. +1.15 cm, Virtual and Erect
4. -1.15 cm, Virtual and Erect.

Sol.

(3)
+1.15, virtual and erect.



$$R = +3 \text{ cm}$$

$$\text{So, } f = \frac{R}{2} = \frac{3}{2} \text{ cm}$$

$$u = -5 \text{ cm}$$

Mirror formula

$$\frac{1}{v} = \frac{1}{f} - \frac{1}{u}$$

$$\frac{1}{v} = \frac{2}{3} - \frac{1}{-5}$$

$$\frac{1}{v} = \frac{2}{3} + \frac{1}{5}$$

$$\frac{1}{v} = \frac{13}{15}$$

$$v = \frac{15}{13} = +1.15 \text{ cm}$$

111. A current of 0.5 A is drawn by a filament of an electric bulb for 10 minutes. find the no of electrons flows through the circuit are

1. 6×10^{18} Electrons
2. 18×10^{18} Electrons
3. 6×10^{20} Electrons
4. 18×10^{20} Electrons

Sol. (4)

18×10^{20} electrons

$$I = \frac{Q}{t}$$

$$I = \frac{ne}{t}$$

$$n = \frac{It}{e} = \frac{0.5 \times 10 \times 60}{1.6 \times 10^{-19}}$$

$n = 18 \times 10^{20}$ electrons

112. Which of following cannot hear ultrasound waves?
1. Bats 2. Human 3. Dolphins 4. Dogs

Sol. (2) Humans
(Theoretical)
Ultra sound area above audible range.

113. Refractive Indexes (indices) of Water = 1.33, Kerosene = 1.44, Ruby = 1.71 & Diamond = 2.42 are respectively, in which of these velocity of light is minimum?

1. water 2. Kerosene 3. Ruby 4. Diamond

Sol. (4) Diamond
 $n_{Diamond} > n_{Ruby} > n_{Kerosene} > n_{water}$

Since, Diamond is densest, So, speed/ velocity of light is minimum in diamond.

CHEMISTRY

114. Among Mg, Mg²⁺, Al, Al³⁺ which will have the largest and smallest size respectively?
1. Mg²⁺, Al 2. Al³⁺, Mg 3. Mg, Al³⁺ 4. Al, Mg²⁺

Sol. (3)
Size decrease across the period and cations are smaller than parent atom.

115. Which of the following statements about the modern periodic Table is /are incorrect
1. The elements in the Modern periodic table are arranged on the basis of their decreasing atomic number.
2. The elements in the Modern periodic table are arranged on the basis of increasing atomic masses.
3. Isotopes are arranged in adjoining or different groups in the Modern periodic table.
4. The elements in the Modern periodic table are arranged on the basis of their increasing atomic number.

1. 1 only 2. 1, 2 and 3 3. 1, 2 and 4 4. 4 only
Sol. (2)
Modern periodic table is arranged on basis of increasing atomic number.

116. In Alumino-Thermite process aluminium is used as
1. Oxidising agent 2. Ore 3. Reducing agent 4. Catalyst

Sol. (3)

117. The greater number of water molecule will be in
1. 18 gm to H₂O 2. 18 moles of water
3. 18 molecules of water 4. 1.8 gram of water

Sol. (2)
18 moles of water will have maximum number of H₂O molecules.

118. Consider the following equation of chemical reaction of a metal M
 $4M + 3O_2 \rightarrow 2M_2O_3$

The equation represents:-
1. Combination reaction as well as oxidation reaction
2. Combination reaction as well as reduction
3. Decomposition reaction as well as oxidation
4. Oxidation reaction as well as displacement

Sol. (1)
combination as well as oxidation reaction.

119. Identify the correct oxidant and reductant in the following reaction
 $PbS + 4H_2O_2 \rightarrow PbSO_4 + 4H_2O$

1. PbS	-	Oxidant
H ₂ O ₂	-	Reductant
2. PbS	-	Reductant
PbSO ₄	-	Oxidant
3. PbS	-	Reductant
H ₂ O ₂	-	Oxidant
4. H ₂ O ₂	-	Oxidant
H ₂ O	-	Reductant

- Sol. (3)**
Phs gains oxygen and reduces H₂O₂ loses oxygen and oxidizes.
- 120.** Silver articles become black on prolonged exposure to air. This is due to the formation of
1. Ag₃N 2. Ag₂O 3. Ag₂S 4. Ag₂S and Ag₃N

Sol. (3)
Forms Ag₂S due to H₂S.

- 121.** How many moles of NaOH are present in 160g of NaOH
1. 4 mole 2. 2 mole 3. 1 mole 4. 3 mole

Sol. (1)
Number of moles = $\frac{160}{40} = 4$

- 122.** When a vegetative oil is treated with Hydrogen in the presence of Nickel catalyst it forms fat (Vegetable Ghee). This is an example of
1. Displacement reaction
2. Decomposition reaction
3. Addition Reaction
4. Double displacement reaction

Sol. (3)
Hydrogenation is addition reaction.

- 123.** This electronic configuration 2, 8, 6 represents element
1. Calcium 2. Sulphur 3. Oxygen 4. Magnesium

Sol. (2)

- 124.** The Soap molecule has a
1. Hydrophobic head and Hydrophobic tail
2. Hydrophobic head and Hydrophilic tail
3. Hydrophilic head and Hydrophilic tail
4. Hydrophilic head and Hydrophobic tail

Sol. (2)
Head is polar and tail is non-polar.

- 125.** pH is defined as
1. -Log [H₃O⁺] 2. -Log [H₂O]
3. +Log [H⁺] [OH] 4. -Log [H⁺] | [OH]

Sol. (1)

- 126.** Which gas boils out first during fractional distillation of air.
1. Argon 2. Nitrogen 3. Oxygen 4. Carbondioxide

Sol. (2)
Nitrogen Boiling point os nitrogen = $-195.8^{\circ}C$

BIOLOGY

- 127.** Which of the following is a plant hormone
1. Insulin 2. Thyroxine 3. Estrogen 4. Cytokinin

Sol. (4)
Other hormones-insulin, thyroxine, estrogen are animal hormones.

- 128.** The shape of guard cells changes due to change in the
1. Protein composition of cells
2. Temperature of cells
3. Amount of water in cells
4. Position of nucleus in the cells

Sol. (3)
Water makes turgid the guard eell when water loss it become flaccid.

- 129.** Which of the following; is a true statement
 1. Ovary releases three eggs in every month
 2. The eggs are produced in the uterus
 3. If the egg is not fertilized, it lives for about ore day
 4. The fertilization takes place in the ovaries

Sol. (3) True if the egg is not fertilized, it lives for about one day.

Other options 1, 2, 4 are flase.

1. Ovary releases only one egg in evergmonth.
2. The eggs are produced in the ovaries not in the uterus.
3. The fertilization takes place in fallopian tube, ampulla not in the ovaries.

- 130.** The tissues that helps in the movement of body are

1. Muscular tissues
2. Skeletal tissues
3. Connective tissues
4. Conducting tissues.

Sol. (1)

The tissues

Muscular tissues, because they directly attached to the bones, while other are not.

- 131.** Match the terms in column (A) with those in column (B)

Column A

(1) Trypsin

(2) Amylase

(3) Bile Juice

(4) Pepsin

(1) (i) a

(2) (i) b

(3) (i) a

(4) (i) b

Column B

(a) Pancreas

(b) Liver

(c) Gastric glands

(d) saliva

(ii) d

(ii) c

(ii) b

(ii) c

(iii) b

(iii) d

(iii) c

(iii) a

(iv) c

(iv) a

(iv) d

(iv) d

Sol. (1)

1. Trypsin – Pancreas digest proteins
2. Amylase – Saliva digest 70% carbohydrate
3. Bile juice – liver – digest food in didenum and pancreas (emulrification of fat)
4. pepsin – Gastric glands. Digest proteins in stomach.

- 132.** Adenosine triphosphate (ATP) produces during _____ in living organisms and also during _____ in plants

- | | |
|--------------------------------|--------------------------------|
| 1. Photosynthesis, Absorption | 2. Respiration, Nutrition |
| 3. Photosynthesis, Respiration | 4. Respiration, Photosynthesis |

Sol. (4)

Because in living organisms mitochondria and cytoplasm of cell do respiration to produce ATP and during photosynthesis light phase ATP are generated.

- 133.** Muscles contain special protein called _____

1. Contractile Proteins
2. Vacuole Proteins
3. Globular Protein
4. Vesical Protein

Sol. (1)

Because, due to this protein muscles undergoes into contraction and relaxation.

- 134.** Which of the following groups have naked embryos.

1. Bryophytes and Pteridophytes
2. Bryophytes and Gymnosperms
3. Angiosperms and Pteridophytes
4. Pteridophytes and Angiosperms

Sol. (1)

Because in Gymnosperms seeds are not enclosed by carpels.

135. Which of the following cellular component of blood containing haemoglobin

- (1) Red blood Cell (2) White blood Cell
(3) Plasma (4) Cytoplasm

Sol. (1) **Red blood cell.**

Red colour of blood due to the pigment hemoglobin (a conjugated protein) while WBCs, Plasma and cytoplasm are not red in colour.

136. Recessive characters will appear in

1. F₁ generations 2. F₂ generations
3. both F₁ and F₂ 4. F₃ only

Sol. (2) **F₂-generation**

As per mendel's 1st law of dominance only dominant characters appear in F₁ not the recessive, they will get chance of expression in next generation i.e. F₂

137. Which of the following statements is correct

1. Prokaryotic cells have a well defined nucleus
2. Eukaryotic cells have no Mitochondira
3. Prokaryotic cells having Mitochondira
4. Eukaryotic cells having membrane boun organelles

Sol. (4)

All the organells in the eukaryotic cells are membranal while in prokaryotic cells, organells are naked and instead of mitochondria mesosomes are present.

138. Pineal gland is located

- (1) On the kidney (2) In the Brain (3) Near Thyroid (4) In Pancreas

Sol. (2) **Pineal gland is located in the brain.**

The Illrd ventricle diencephalon have the outgrowth upper side as pineal gland and lowerone is pituitary gland.

139. Which of the following is body's largest blood vessel.

1. Aorta 2. Pulmofiary Vein 3. Capillaries 4. Heart

Sol. (1) **Aorta**

It supplies pure blood to all over parts of the body.

140. Which of the following is not a raw material for photosynthesis

1. Carbon dioxide 2. Water 3. Oxygen 4. Chlorophyl

Sol. (3) **Oxygen**

1, 2 and 4 are necessary to conduct photosynthesis.

MATHEMATICS

141. The pair of equations

X=0 and x= - 3/4 has

1. One Solution 2. Two solutions
3. Infinitely many solutions 4. No solution

Sol. (4)

Lines of equations are parallel to each other & y-axis therefor no solution.

142. If a point (a,b) is equidistant from points (x+y ,y-x) and (x-y, x+y) then which of the following is true ?

1. ay= bx 2. ax=by 3. a+b = x+y 4. a²y=b²x

Sol. (1)

Let A (x - y, x + y), B (a, b) & C (x + y, y - x)

Given AB = BC

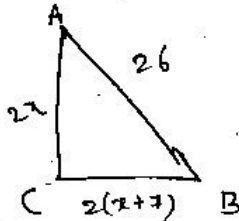
By using distance formula

$$= \sqrt{(x + y - a)^2 + (x - y - b)^2}$$

Solving this equation we get, ay = bx

143. For going to a city B from city A, there is a route via city C such that $AC \perp CB$. $AC=2x$ km and $CB=2(x+7)$ km. it is proposed to construct a 26km highway which directly connects the two cities A and B. Find how much distance will be saved in reaching city B from city A after the construction of the highway.
 1. 5 km 2. 6 km 3. 8 km 4. 12 km

Sol. (3)



Using Pythagoras theorem $AC^2 + BC^2 = AB^2$
 $\therefore 4x^2 + 4x^2 + 196 + 56x = 676$
 $x^2 + 7x - 60 = 0$
 By quadratic formula $x = 5$
 Distance saved = Actual distance – shortcut
 $= 2x + 2x + 14 - 26$
 $= 4x + 14 - 26$
 $= 8 \text{ km } (x = 5)$

144. In quadrilateral ABCD, $\angle B = 90^\circ$, $\angle C - \angle D = 60^\circ$ and $\angle A - \angle C - \angle D = 10^\circ$. Find the measure of the smallest angle of this quadrilateral
 1. 35° 2. 25° 3. 50° 4. 55°

Sol. (1)

Given $\angle B = 90^\circ$, $\angle C - \angle D = 60^\circ$, $\angle A - \angle C - \angle D = 10^\circ$
 We know
 $(\angle A + \angle B + \angle C + \angle D = 360)$
 $4 \times \angle D = 360 - 220$ \rightarrow By putting values.
 $\angle D = 35$

145. Find a natural number whose square diminished by 84 is equal to thrice of 8 more than the given number
 1. -3 2. 12 3. 6 4. 9

Sol. (3)

146. Find the common difference of an AP whose first term is 1 and the sum of the first four terms is one third of the sum of the next four terms.

1. 2 2. 4 3. 1.5 4. -2

Sol. (1)

$a = 1$, $S_4 = \frac{1}{3}(S_8 - S_4)$
 $S_4 = 4 + 6d$, $S_8 = 8 + 28d$
 $4 + 6d = \frac{1}{3}(4 + 22d)$
 $\therefore d = 2$

147. The mean weight of students of a particular class is 52 kg. The mean weight of boys of this class is 56 kg and that of girls is 50 kg. Find the ratio of number of boys to the number of girls in the class.

1) 1:2 2) 2:1 3) 1:1 4) 2:3

Sol. (1)

Let number of boys equal to x and sum of weights is A.

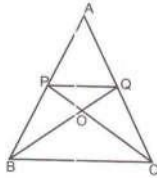
Let number of girls equal to y and sum of weights is B .

$$\frac{A}{x} = 56, \quad \frac{B}{y} = 50$$

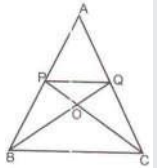
$$\frac{A+B}{x+y} = 52 \quad \rightarrow 56x + 50y = 52x + 52y$$

$$\frac{x}{y} = \frac{1}{2}$$

148. In figure $PQ \parallel BC$. $AP:PB = 4 : 3$. Find the ratio of areas of $\triangle BOC$ and $\triangle POQ$.



Sol.



$$\triangle ABC \sim \triangle APQ$$

(by Δ criteria)

$$\therefore \frac{PQ}{BC} = \frac{AP}{AB}$$

$$\frac{PQ}{BC} = \frac{4}{7}$$

In $\triangle PQO$ & $\triangle BOC$

$$\angle POQ = \angle BOC \quad \dots\dots \text{(Vertically opp. Angles)}$$

$$\angle PQO = \angle OBC \quad \dots\dots \text{(alternate angles)}$$

$$\angle QPO = \angle OCB \quad \dots\dots \text{(alternate angles)}$$

$$\therefore \triangle POQ \sim \triangle COB$$

$$\frac{PO}{CO} = \frac{OQ}{OB} = \frac{PQ}{CB} = \frac{4}{7}$$

$$\frac{A(\triangle COB)}{A(\triangle POQ)} = \left(\frac{BC}{PQ}\right)^2 = \frac{49}{16}$$

- 1) 16:9 2) 4:3 3) 49:16 4) 16:49

149. In $\triangle ABC$, $\angle C = 90^\circ$ and $\tan A = 1$ Find the value of $2\sin A \cos A$

Sol.

- 1) $\sqrt{2}$ 2) $\frac{1}{2}$ 3) 1 4) $1/\sqrt{2}$

(3)

$$\tan A = 1$$

$$A = 45^\circ$$

$$(\because \tan 45^\circ = 1)$$

$$\text{Now, } 2 \sin A \cos A = 2 \times \sin 45^\circ \times \cos 45^\circ$$

$$= 2 \times \frac{1}{\sqrt{2}} \times \frac{1}{\sqrt{2}} = 2 \times \frac{1}{2} = 1$$

150. Consider the following statements when two straight lines intersect:
 i) Adjacent angles are complementary.
 ii) Adjacent angles are supplementary
 iii) Vertically opposite angles are equal.
 iv) Vertically opposite angles are supplementary.
 1. (i) and (iii) are correct
 2. (ii) and (iii) are correct
 3. (i) and (iv) are correct
 4. (ii) and (iv) are correct

Sol. (2)
 (ii) & (iii) are correct.

151. $3.\overline{27}$ is _____
 1. an integer
 2. a rational number
 3. a natural number
 4. an irrational number

Sol. (2)
 Rational number

152. The sum of all odd natural numbers between 0 to 40 is _____
 1. 1600
 2. 420
 3. 400
 4. 210

Sol. (3)
 Series 1, 3, 5 39
 $a = 1, d = 2, T_n = 39$
 $a + (n - 1)d = 39$
 $1 + (n - 1)2 = 39$
 $(n - 1) \times 2 = 38$
 $n = 20$
 $\therefore S_{10} = 10[2 + 19 \times 2] = 400$

153. The empirical relation between mean, mode and median is _____
 1. mode = 3 median – 2 mean
 2. mode = 2 median – 3 mean
 3. median = 3 mode – 2 mean
 4. mean = 3 median – 2 mode

Sol. (1)

154. If the perimeter of a circle is equal to that of square, then find the ratio of their areas.
 1. 14:9
 2. 13:11
 3. 13:9
 4. 14:11

Sol. (4)
 Let side of square = x
 According to questions
 $2\pi r = 4x$
 $\therefore x = \frac{\pi r}{2}$

Now, $\frac{\text{Area of circle}}{\text{Area of square}} = \frac{\pi r^2}{x^2}$

After putting the value of x we get,

$$\frac{\text{Area of circle}}{\text{Area of square}} = \left(\frac{14}{11}\right)$$

155. Find the number whose square root is twice of its cube root.
 1) 64
 2) 128
 3) 16
 4) 4

Sol. (1)

$$\sqrt{x} = 2 \times \sqrt[3]{x}$$

$$(\sqrt{x})^6 = 2^6 \times (\sqrt[3]{x})^6$$

$$x^3 = 64 \times x^2$$

$$x = 64$$

156. Fill in the blank 49, 343, 64, _____, 81, 729

1) 1024

2) 512

3) 778

4) 182

Sol. (2)

$$49 = 7^2, 343 = 7^3, 64 = 8^2, \dots, 81 = 9^2, 729 = 9^3$$

According to pattern answer will be $8^3 = 512$.

157. In an examination a student scores 4 marks for each correct answer and loses 1 mark for each wrong answer. If he attempts total 60 questions and secures 130 marks. Find the number of questions he attempted correct.

1. 35

2. 38

3. 40

4. 42

Sol. (2)

Correct questions = x

Marks for correct ans = $4x$

$$4x - y = 130$$

$$5x = 190$$

$$x = 38$$

$$x + y = 60$$

158. A number consists of two digits. The sum of both digits is 11. If 27 added to the number then digit inter change their places. Find the number

1. 47

2. 65

3. 83

4. 92

Sol. (3)

159. If $\sqrt{2048} = \sqrt{2^x}$, $\sqrt{2187} = \sqrt{3^y}$ and $\sqrt{3125} = \sqrt{5^z}$ then the value of $x + y - z =$

1) 1

2) 9

3) 13

4) 23

Sol. (3)

160. Find the value of y in terms of x $\frac{3x+4y-3}{7} = \frac{-3x+4y-7}{9}$.

1) $\frac{-24x-11}{4}$

2) $\frac{-11x-24}{4}$

3) $\frac{-4x-11}{24}$

4) $\frac{-24x-4}{11}$

161. Who was the first Viceroy of India?

(1) Robert Clive

(2) Lord William Bentick

(3) Warren Hastings

(4) Charles John Canning

Sol. (4)

162. By which name was Punjab known in Ramayan and Mahabharat?

(1) Panchnad

(2) Sapat Sindhu

(3) Panta Potamia

(4) Lahore Suba

Sol. (2)

163. In which year was Guru Teg Bahadur Ji born?

(1) 1605

(2) 1628

(3) 1656

(4) 1621

Sol. (4)

164. To whom did Guru Har Rai Ji sent Delhi when he was called by Mughal Emperor Aurangzeb?

(1) Prithi Chand

(2) Ram Rai

(3) Dhirmal

(4) Harkrishanji

Sol. (2)

- 165.** Who is credited for demanding Swaraj from the Congress platform for the first time
 (1) Sutinder Nath Banerjee (2) Gopal Krishan Gokhale
 (3) Dadabhal Naroji (4) V.D. Savarkar

Sol. (3)

- 166.** Which Guru Sahib started the Manji System?
 (1) Guru Ama'das ji (2) Guru Anged Dev ji
 (3) Guru Ram Das ji (4) Guru Arjur Dev ji

Sol. (1)

- 167.** Which of the following cities was the capital during Banda Singh Bahadur's Rule?
 (1) Khanna (2) Sirhind (3) Lohgarh (4) Kethal

Sol. (3)

- 168.** When was the 'Gadar Party' formed?
 (1) 1914 (2) 1913 (3) 1920 (4) 1929

Sol. (2)

- 169.** During the middle of 19th Century Italy was divided into how many states and which one was ruled by the Italian Princely house-
 (1) 7, Sardinia-Piedmont (2) 6, Sardinia-Piedmont
 (3) 5, Florence (4) 6, Habsburg

Sol. (1)

- 170.** In France the female allegory was named as
 (1) Germania (2) Maria (3) Alice (4) Marianne

Sol. (4)

- 171.** A liberal colonial officer who formulated new rules to restore the freedom of the Press in India was-
 (1) Warren Hastings (2) Thomas Macaulay
 (3) William Bentick (4) Robert Clive

Sol. (2)

- 172.** Which one of the following countries is not a member of South Asian Association for Regional Co-operation (SAARC)
 (1) Bhutan (2) India (3) Nepal (4) China

Sol. (4)

- 173.** By what name the coastal plains from Daman to Goa are known as?
 (1) Malabar Coast (2) Konkan Coastal plains
 (3) Eastern Coastal plains (4) Northern coastal plains

Sol. (2)

- 174.** Which one of the following districts is the smallest in area?
 (1) Ludhiana (2) Bathinda (3) Gurdaspur (4) Pathankot

Sol. (4)

- 175.** Which one of the following regions normally experience the convectional type of rainfall?
 (1) Equatorial region (2) South Polar-Region
 (3) North Polar Region (4) Glaciated region

Sol. (1)

- 176.** Ravi, Jhelum and Chenab are distributaries of which river
 (1) Godavari (2) Ganga (3) Yamuna (4) Sindhu

Sol. (4)

- 177.** Which one of the following agents causes the formation of V-shaped valley ?
 (1) Snow (2) Wind (3) River (4) Sea waves

Sol. (3)

178. Which type of soil is extensively found in Punjab.
 (1) Black Soil (2) Alluvial Soil (3) Red soil (4) Laterite soil
Sol. (2)
179. Which is the first express way of India?
 (1) Delhi-Calcutta (2) Mumbai-Pune (3) Bengluru-Chennai (4) Delhi- Mumbai
Sol. (2)
180. The food needs of any country are determined by?
 (1) The size of population and its standard of living
 (2) The geographical size of area
 (3) The urbanized population
 (4) The rural population
Sol. (1)
181. Tropic of Cancer passes through _____ State.
 (1) Bihar (2) Utar Pradesh (3) Mizoram (4) Nagaland
Sol. (3)
182. The area with more concentration of Jute mills in India are of
 (1) Maharashtra (2) Gujrat (3) West Bengal (4) Uttar Pradesh
Sol. (3)
183. Which of the following countries does not have veto power
 1) France 2) India 3) China 4) Russia
Sol. (2)
184. The principle of 'Judicial Review ' has been taken from which country?
 1) United State of Ameiica 2) Germany
 3) France 4) England
Sol. (1)
185. How many members are taken for the Lok Sabha and Rajya Sabha from Punjab?
 (1) Lok Sabha-11 Rajyt Sabha-9
 (2) Lol Sabha-13 Rajya Sabha-7
 3) Lok Sabha-9 4) Lok Sabha-12
 Rajya Sabha-7
Sol. (2)
186. Who is included in the 'electoral college' or electorate for the election of our President
 1) All the members of Lok Sabha
 2) All the members of Rajya Sabha
 3) Elected members of Lok Sabha, Rajya Sabha and elected members from State Legis ative Assemblies and eledcted members from Unior Territories.
 4) All members of Lok Sabha, Rajya Sabha and State Legislative Assemblies
Sol. (3)
187. Peaceful Co-existence 'is the part of which agreement?
 1) Panchsheel 2) Simla Agreement
 3) Tashkand Agreement 4) Nehru Layakat Agreement
Sol. (1)
188. India opposes strongly at International lever for which issue?
 1) United Nations 2) Foreign Companies
 3) Common Weath Nations 4) Terrorism in all forms
Sol. (4)
189. Which rights are not given to foreigners?
 1) Political Rights 2) Economic Rights
 3) Social Rights 4) Economic Rights

Sol. (1)

190. The Chief Minister Generally belongs to -

- | | |
|-------------------------------|------------------------------|
| 1) Rajya Sabha | 2) Lok Sabha |
| 3) State Legislative Assembly | 4) State Legislative Council |

Sol. (3)

191. Right to 'Free and Compulsory Education' was implemented in all over India on _____?

- | | | | |
|---------------|---------------|-----------------|------------------|
| 1) March 2009 | 2) April 2010 | 3) January 2002 | 4) February 2011 |
|---------------|---------------|-----------------|------------------|

Sol. (2)

192. Which among the following is not a key feature of Parliamentary form of Govt. _____?

- 1) Close relationship between Legislature and Executive
- 2) The Power of Judicial Review by Judiciary/ Courts
- 3) Real and Nominal Executive
- 4) Responsibility of Executive towards Legislature

Sol. (2)

193. The extra ordinary increase in agriculture especially in the production of wheat and rice is called.

- | | |
|---------------------|---------------------|
| 1. Wheat Revolution | 2. Paddy Revolution |
| 3. Green Revolution | 4. White Revolution |

Sol. (3)

194. The reward given to the entrepreneur for his factor services is called:

- | | | | |
|-------------|---------|----------|-----------|
| 1. Interest | 2. Rent | 3. Wages | 4. Profit |
|-------------|---------|----------|-----------|

Sol. (4)

195. When more than required labourers are employed in any occupation, then these extra labourers is called which type of unemployed?

- | | |
|--------------------------|---------------------------|
| 1. Seasonal unemployed | 2. Distiguated Unemployed |
| 3. Industrial Unemployed | 4. Under Unemployed |

Sol. (4)

196. The Government policy related to its revenue and expenditure is called:

- | | | | |
|--------------------|------------------|-----------------|----------------------|
| 1. Monetary Policy | 2. Fiscal Policy | 3. Price Policy | 4. Industrial Policy |
|--------------------|------------------|-----------------|----------------------|

Sol. (2)

197. When was the New Industrial Policy launched in India?

- | | | | |
|---------|---------|---------|---------|
| 1. 1948 | 2. 1956 | 3. 1991 | 4. 2001 |
|---------|---------|---------|---------|

Sol. (3)

198. In India percent of p eople are living below poverty line.

- | | | | |
|---------|---------|---------|---------|
| 1. 21.9 | 2. 22.9 | 3. 23.9 | 4. 24.9 |
|---------|---------|---------|---------|

Sol. (1)

199. Under MNREGA Scheme of the Government how many days of employment is provided to the labourers in India?

- | | | | |
|--------|--------|--------|--------|
| 1. 100 | 2. 120 | 3. 150 | 4. 200 |
|--------|--------|--------|--------|

Sol. (1)

200. Barking Services are included in which of the following sectors of the economy?

- | | |
|-------------------|----------------------|
| 1. Primary Sector | 2. Secondary Sector |
| 3. Service Sector | 4. Industrial Sector |

Sol. (3)