#### PART-3

#### **SCHOLASTIC APTITUDE TEST**

### (MATHS)

101.	$U = \{x \mid x \in N, x < 5\}, A = \{x \mid x \in N, x \le 2\}$ THEN a' =							
	(A) {1,2}	(b) {1,2,3,4,5}	(C) {3,4}	(D) {3,4,5}				
102.	0.235 is a	_ number						
	(a) Natural	(B) Integer	(C) Rational	(D) Irrational				
103.	Which one is the	constant term of $4x^3 - 3x^2 + 3$	2x -5					
	(a) 4	(b) -5	(c) 2	(c) 2 (d) -3				
104.	Point (4,0) lies on							
	(A) $\overrightarrow{XO}$	(b) $\overrightarrow{YO}$	(c) $\overrightarrow{OX}$	(D) $\overrightarrow{OY}$				
105.	Line y = 4 is							
	(a) Parallel is Y-Ax	kis	(b) Parallel to X –Axis					
	(c) Intersecting bo	oth axes	(c) Passes throw origin					
106.	was the mo	ost logical and abstract creato	or of Euclid's geometry ap	pproach.				
	(a) Hilbert	(B) Bhaskaracharya	(C) Thelus	(D) Pythagoras				
107.	If P-Q-R, Then	is the opposite ray of	$\overrightarrow{QR}$					
	(a) $\overrightarrow{PQ}$	(b) $\overrightarrow{QP}$	(C) $\overrightarrow{RQ}$	(D) $\overrightarrow{PR}$				
108.	An angle is the ur	nion set of						
	(a) Lines	(B) Line segments	(c) Rays	(d) A line segment and a ray				
109.	The sum of all six	exterior angles of a triangle	is_					
	(a) 180	(b) 360	(c) 720	(d) 90				

110.	If diagonals of a known as	quadrilateral are not conjug	ate and bisect at right ang	gle, then such quadrilateral is
	(a) Square	(b) rectangle	(c) trapezium	(d) rhombus
111.	□ ABCD is a rhor	mbus. If ABCD = 160 and AC	= 16 then BD =	
	(a) 10	(b) 20	(c) 15	(d) 25
112.	The length of mi	nor arc $\widehat{AB}$ of $\odot$ (P, 7) is 1	4. Find the length of majo	or arc $\widehat{AB}$
	(a) 18	(b) 21	(c) 28	(d) 30
113.	The length of the	e edge of equilateral triangle	is 8cm. Then semi circun	nference of such triangle is _cm.
	(a) 4	(b) 24	(c) 12	(d) 36
114.	The formula of la	ateral surface area of cylinde	eris	
	(a) A = 2πrh	(b) A= 2πr	(c) $A = \pi r^2$	(d) $A=2\pi r^2 h$
115.	Upper limit of cla	ass '41-50' is		
	(a) 41	(b) 50	(c) 45	(d) 91
116.	G.C.D of 4 and 19	9 is		
	(a) 1	(b) 4	(c) 19	(d) 76
117.	The polynomial I	having 3 degree is known as		
	(a) Linear	(b) Quadratic	(c) Polynomial	(d) Trinomial (cubic)
118.	If $\frac{x+y}{xy}$ =2 and	$\frac{x-y}{xy} = 6 \text{ then y} = \underline{\qquad}$		
	(a) 1/4	(b) -1/2	(c) -1/4	(d) 1/3
119.	Find the produc	t of zeros of the quadratic po	olynomial: $x^2 - 4x + 3$	
	(a) 1	(b) 3	(c) 4	(d) -4
120.	In ΔABC, ∠B is ri	ght angle. If a =16 and c =12	then b =	
	(a) 8	(b) 18	(c) 20	(d) 28

### **SCIENCE AND TECHNOLOGY**

121.	For which of the following physical quantities, it is necessary to indicate direction along with its magnitude?					
	(a) Speed	(b) Path length	(c) Displacement	(d) Temperature		
122.	Which Newton's	law of motion gives magnitu	de of force?			
	(a) First	(b) Second	(c) Third	(d) None of these		
123.	Which of the follo	owing physical quantity is sca	alar quantity?			
	(a)Mass	(b) Force	(c) Impulse of force	(d) Momentum		
124.	Give the SI unit o	f Density?				
	(a) Kg	(b) m2	(c) kg/m <sup>2</sup>	(d) kg/m		
125.	What is the full for	orm of PNG?				
	(a) Petrol Natura	l Gas	(b) Pressurize Natural Ga	as		
	(c) Pipe Natural G	Gas	(d) Pure Natural Gas			
126.	Which of the follo	owing is a monatomic molec	ular?			
	(a) Nitrogen	(b) Hydrogen	(c) Helium	(d) Oxygen		
127.	Which Newton's	law of motion defines force?				
	(a) First	(b) Second	(c) Third	(d) None		
128.	Density of water	is				
	(a) 1000kg/m <sup>3</sup>	(c) 1kg/m <sup>3</sup>	(c) 1000g/cm <sup>2</sup>	(d) 100kg/m <sup>3</sup>		
129.	What is the appro	oximate diameter of human	hair?			
	(a) 500nm	(b) 5000nm	(c) 50nm	(d) 50000nm		
130.	What is the orbit	al period of Halley 's Comet?	•			
	(a) 66years	(b) 76years	(c) 86years	(d) 96years		
131.	Where is the ima	ge of an object formed in hu	man eye?			
	(a) Iris	(b) Pupil	(c) Retina	(d) Cornea		

132.	What is the unit of electric potential difference?						
	(a) Volt	(b) coulomb	(c) Joule	(d) Watt			
133.	In which state of	a substance, it has the shape	e?				
	(a) Liquid	(b) Liquid and Gas	(c) Gas	(d) Solid			
134.	Which of the foll	owing is correct for X-rays?					
	(a) It is beam of e	electrons	(b) It is electromagnetic	waves			
	(c) It is positively	charged particle	(d) It is negatively charg	e particle			
135.	State the atomic	mass of H <sub>2</sub> O?					
	(a) 16 U	(b) 17 U	(d) 18 U	(d) 15 U			
136.	Who was the scie	entist to make attempts for g	giving explanatory definiti	on of element?			
	(a) Rontgen	(b) Dalton	(c) Rutherford	(d) Laveziour			
137.	Which bond is pr	esent in oxygen atom?					
	(a) Ionic bond		(b) covalent divalent boo	nd			
	(a) Ionic bond (c) Covalent bond	d	<ul><li>(b) covalent divalent bo</li><li>(d) covalent trivalent bo</li></ul>				
138.							
138.	(c) Covalent bond						
138. 139.	(c) Covalent bond  1 kWh =	(b) 36 x 10 <sup>6</sup>	(d) covalent trivalent bo	nd			
	(c) Covalent bond  1 kWh =  (a) 3.6 x10 <sup>6</sup>	(b) 36 x 10 <sup>6</sup>	(d) covalent trivalent bo	nd			
	(c) Covalent bond  1 kWh =  (a) 3.6 x10 <sup>6</sup> Who discovered  (a) Rutherford	(b) $36 \times 10^6$ $\gamma$ -rays?	(d) covalent trivalent bo (c) 3.6 x 10 <sup>7</sup>	nd (d) 3.6 x 10 <sup>5</sup>			
139.	(c) Covalent bond  1 kWh =  (a) 3.6 x10 <sup>6</sup> Who discovered  (a) Rutherford  Which radiation	(b) $36 \times 10^6$ $\gamma$ -rays?	(d) covalent trivalent bo (c) 3.6 x 10 <sup>7</sup>	nd (d) 3.6 x 10 <sup>5</sup>			
139.	(c) Covalent bond  1 kWh =  (a) $3.6 \times 10^6$ Who discovered  (a) Rutherford  Which radiation  (a) $\alpha \& \beta$	(b) $36 \times 10^6$ $\gamma$ -rays? (b) Thomson was discovered by Rutherfor	(d) covalent trivalent bo  (c) $3.6 \times 10^7$ (c) Willard  d?  (c) $\alpha \& \gamma$	nd (d) 3.6 x 10 <sup>5</sup> (d) Dalton			
139. 140.	(c) Covalent bond  1 kWh =  (a) $3.6 \times 10^6$ Who discovered  (a) Rutherford  Which radiation  (a) $\alpha \& \beta$	(b) $36 \times 10^6$ $\gamma$ -rays?  (b) Thomson  was discovered by Rutherfor  (b) $\beta \& \gamma$	(d) covalent trivalent bo  (c) $3.6 \times 10^7$ (c) Willard  d?  (c) $\alpha \& \gamma$	nd (d) 3.6 x 10 <sup>5</sup> (d) Dalton			
139. 140.	(c) Covalent bond  1 kWh =	(b) $36 \times 10^6$ $\gamma$ -rays?  (b) Thomson  was discovered by Rutherfor  (b) $\beta \& \gamma$ s formed when non metallic	(d) covalent trivalent bo  (c) $3.6 \times 10^7$ (c) Willard  d?  (c) $\alpha \& \gamma$ oxides react with water?  (c) Minerals	nd $ \text{(d) } 3.6 \times 10^5 $ $ \text{(d) Dalton} $ $ \text{(d) } \alpha, \beta \& \gamma $			

143.	How many eleme	ents are there in non metal?		
	(a) 14	(B) 18	(c) 88	(D) 114
144.	What percentage	e of carbon in Bituminous Co	al?	
	(a) 28-30%	(b) 28%	(c) 78-86%	(d) 94-98%
145.	Which is the larg	est cell in human body?		
	(a) Liver cell	(b) Nerve cell	(c) Muscle cell	(d) Kidney cell
146.	Who has given th	ne word 'Cell'?		
	(a) Robert Hook	(c) Robert Brown	(c) Watson and Crick	(d) Flamming
147.	Which is the livin	g component of xylem?		
	(a) Tracheid	(b) Xylem fibre	(c) Xylem parenchyma	(d) Trachea
148.	Living mechanic	al tissue is		
	(a) Parenchyma	(b) Collenchyma	(c) Sclerenchyma	(d) Chlorenchyma
149.	Which of the tiss	ue has deposition of Pectin?		
	(a) Collenchyma	(b) Sclerenchyma	(c) Phloem	(d) Xylem
150.	Where is the place	ce of Ciliated epithelium Tiss	ue?	
	(a) Ureter	(b) Liverduct	(C) Fallopian tube	(d) Bileduct
151.	Bone is	-		
	(a) Epithelium tis	sue (b) connective tissue	(c) Muscular tissue	(d) Nervous tissue
152.	Which one of the	e infections disease?		
	(A) T.B	(b) Goiter	(c) Diabetes	(d) Hypertension
153.	Which one is bel	ongs to 'Retro virus group'?		
	(a) Dengue Virus	(b) Hepatitis virus	(c) Influenza virus	(d) HIV
154.	Who is responsib	ole for malaria?		
	(a) Bacteria	(b) Virus	(c) Plasmodium	(d) Worm

155.	. Where is the Gaseous exchange takes place during respiration is human being?						
	(a) Bronchi	(b) Pharynx	(c) Larophaynx	(d) Trachea			
156.	How many cham	bers are present in human h	eart?				
	(a) 2	(b) 3	(c)4	(d) 6			
157.	The spinal cord of	originates from where?					
	(a) Cerebrum	(b) Cerebllum	(c) Medulla oblongata	(d) Pones			
158.	In which of the fo	ollowing living organisms spo	ore information take place	e?			
	(a) Mucor	(b) Planaria	(c) spirogyra	(d) Potato			
159.	The countinuity	of features from one general	tion to another is known a	as			
	(a) Evolution	(b) Mutation	(c) Generation	(d) Heredity			
160.	Which specie of	Italian honey bee is useful fo	r honey production?				
	(a) Epis serena ir	ndica (b) Epis flora	(c) Epis corseta	(d) Epis meliphera			

#### **SOCIAL SCIENCE**

161.	Who discovered	"Cape of Good Hope" island	?	
	(a) Columbus	(b) Bartholomew Diaz	(c) Vasco – de- Gama	(d) Amerigovesupuchi
162.	When did British	ers establish the Head Quart	er in Bombay?	
	(a) 1613	(b) 1608	(c) 1680	(d) 1667
163.	When did the Fire	st World War start?		
	(a) 1 <sup>st</sup> August,191 Aug.,1914	14	(b) 8 <sup>th</sup> August 1914	(c) 14 <sup>th</sup> Aug.,1914 (d) 20 <sup>t</sup>
164.	Who established	'Fascism' in Italy?		
	(a) Hitlor	(b) Mussolini	(c) Lanin	(d) Nepolian
165.	In which country	was national flag hoisted pr	epared by madam Cama?	
	(a) France	(b) Russia	(c) Germany	(d) Japan
166.	Which festival wa	as there is in Punjab when Ja	llianwala Bagh massacre	occurred?
	(a) Baishakhi	(b) Diwali	(c) Holi	(d) Ramazan Id
167.	Which one of the	e following not included in th	e state known as 'seven s	sisters'?
	(a) Assam	(b) Sikkim	(c) Manipur	(d) Tripura
168.	Which day is cele	ebrated as "Human Rights Da	y"?	
	(a) 19 December	(b) 12 December	(c) 15 December	(d) 10 December
169.	Which kind of de	mocracy governance system	there in our country?	
	(a) Presidential	(b) Parliamentary	(c) Independent	(d) Neutral
170.	Where is India lie	es on in Asia continent?		
	(a) South	(b) North	(c) East	(d) West
171.	Which canal has	reduced the distance betwee	en Europe and India?	
	(a) Panama	(b) Alaska	(c) Suez	(d) Nile

172.	By which name is	the delta region of the Gan	ga and Brahmputra know	n as?
	(a) Taheri	(b) Pamir	(c) Vrundavan	(d) Sundarvan
173.	By which name is	the some rainfall at Malaba	ar coast known as?	
	(A) Amra Vrushti	(b) Ana Vrushti	(c) Him Vrushti	(d) Cyclone
174.	In which state are	e wild goats and musk(Kastu	ri) deer found?	
	(a) Andhra Prade	sh (b) Gujarat	(c) Jammu and Kashmir	(d) Assam
175.	Which fair of Guj	arat is famous for buy and sa	ale of donkeys?	
	(a) Tarnetar	(B) Siddhapur	(c) Bhavnath	(d) Vautha
176.	What does 'Tsun	ami' means in Japanese lang	uage/	
	(a) Upward tidal	waves	(b) Destructive waves	
	(c) Spiral waves		(d) Downward tidal wav	es
177.	In which sea "Lak	shadweep" Island located?		
	(a) Bay of Bengal	(b) Arabian Sea	(c) Indian Ocean	(d) Pacific ocean
178.	After gaining inde	ependence which state was	the first to join Indian Uni	on?
	(a) Morbi	(b) Junagadh	(c) Patiyala	(d) bhavanagar
179.	Who established	a political party "Forward Bl	loc"?	
	(a) subhashchand	dra Bose	(b) Khudiram bose	
	(c) Rashbihari bo	se	(d) Satyendranath bose	
180.	Which British sys	tem was like "sweet poison"	<b>'</b> ?	
	(a) Revenue Polic	cy	(b) Policy of annexation	
	(c) Subsidiary Alli	ance	(d) Permanent Deposit F	Policy
181.	Who was the pio	neer of armed revolution in	Gujarat/	
	(a) Barindra Ghos	sh (b) Mohanlal Panday	(c) chhotubhai Purani	(d) Aurbindo Ghose
182.	When did the pe	ople of Germany broke dow	n the "Berlin Wall"?	
	(a) 1990	(B) 1991	(c) 1989	(d) 1992

183.	What type of government was established to join Indian union by the people of Junagadh?						
	(a) Responsible (	Govt.	(b) Independent Govt.				
	(c) Arzai Hakuma	nt	(d) Federal Governmen	t.			
184.	In which district	Rangpur, having archaeologi	cal importance in situate	d?			
	(a) Surendranaga	ar (b) Ahmedabad	(c) Rajkot	(d) Patan			
185.	Who were the di culture?	irect decendent of Stone Age	e civilization and creator c	of Mohenjo-Daro's sindhu			
	(a) Aryan	(b) Mongoloid	(c) Dravid	(d) Armenoid			
186.	The day of 21 <sup>st</sup> Ju	une known as?					
	(a) Environment	Day (b) World yoga Day	(c) Mother Day	(d) World Peace Day			
187.	Which Veda is kr	nown as Gangotri of Music?					
	(a) Rigveda	(b) Atharveda	(c) Yajurveda	(d) Samveda			
188.	In which languag	ge did Abul Fazal write the Ak	kabarnama?				
	(A) Farsi	(b) Arabi	(c) Urdu	(d) Pali			
189.	Which ancient u	niversity was situated at Bad	gaon village of Patna dist	rict of Bihar?			
	(a) Takshshila	(b) Vallabhi	(c) Nalanda	(d) Bikramshila			
190.	Name the Indian	mathematician who discove	ere zero?				
	(a) Aryabhatta	(b) Bhaskarachary	(c) Brahmgupta	(d) Lilawati			
191.	Which book of m	naths had been written by Bh	naskaracharya?				
	(a) Aryabhattiyaı	m (b) Lilavati Ganit	(c) Dash Gitika	(d) Arya Siddhant			
192.	Who built the Re	ed fort of Delhi?					
	(a) Akbar	(b) Humayun	(c) shahjahan	(d) Jahangir			
193.	Which wild life is	s totally extinct from Gujarat	forest area?				
	(a) Leopard	(b) Tiger	(c) Deer	(d) Lion			
194.	Which country is	the highest exporter of in th	ne world?				
	(a) China	(b) Pakistan	(c) America	(d) India			

195.	Which crop is known as "White Gold" in India?						
	(a) Cotton	(b) Millet	(c) Paddy	(d) White kidney beans			
196.	Where is the larg	est oil refinery of the world i	s located?				
	(a) Dubai	(b) Gauhati	(c) Jamnagar	(d) Kuwait			
197.	Which Indian city	is well-known as "Silicon Va	lley" of India?				
	(a) Hyderabad	(b) Nagpur	(c) Mumbai	(d) Bengaluru			
198.	Which term is use	ed for families living under th	ne poverty line?				
	(a) APL	(b) BPL	(C) GPL	(D) CPL			
199.	Which economist	of Indian origin propound tl	he Human development i	ndex?			
	(a) Dr. Amartya S	en (b) Dr. H.M Patel	(c) Dr. Manmohan Singh	(d) Raghuram Rajan			
200.	Which poetry is n	not written by kalidas?					
	(a) Kumarsambha	ava (b) Raghuvansh	(c) Dashkumarcharit	(d) Rutusamhar			

# **Scholastic Aptitude Test (SAT)**

#### **MATHEMATICS**

101	С	102	C	103	В	104	С	105	С
106	Α	107	В	108	С	109	С	110	D
111	В	112	D	113	С	114	Α	115	В
116	Α	117	D	118	Α	119	В	120	С

## **Science and Technology**

121	С	122	В	123	Α	124	bonus	125	В
126	С	127	Α	128	Α	129	D	130	В
131	С	132	Α	133	D	134	В	135	С
136	D	137	С	138	Α	139	С	140	Α
141	D	142	Α	143	В	144	С	145	В
146	Α	147	С	148	В	149	Α	150	С
151	С	152	Α	153	D	154	С	155	bonus
156	С	157	С	158	Α	159	D	160	D

#### **SOCIAL SIENCE**

161	С	162	bonus	163	Α	164	В	165	С
166	Α	167	В	168	D	169	В	170	Α
171	С	172	D	173	Α	174	С	175	D
176	С	177	В	178	С	179	Α	180	В
181	D	182	Α	183	В	184	Α	185	С
186	В	187	D	188	Α	189	С	190	Α
191	В	192	С	193	В	194	bonus	195	Α
196	С	197	D	198	В	199	Α	200	С