# NTSE-2017



#### 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	e constant term of $4x^3 - 3x^2 +$	2x -5		
	(a) 4	(b) -5	(c) 2	(c) 2 (d) -3	
104.	Point (4,0) lies o	n			
	(A) $\overrightarrow{XO}$	(b) $\overrightarrow{YO}$	(c) $\overrightarrow{OX}$	(D) $\overrightarrow{OY}$	
105.	Line y = 4 is				
	(a) Parallel is Y-A	xis	(b) Parallel to X –Axis		
	(c) Intersecting b	ooth axes	(c) Passes throw origin		
106.	was the m	ost logical and abstract creat	tor of Euclid's geometry a	pproach.	
	(a) Hilbert	(B) Bhaskaracharya	(C) Thelus	(D) Pythagoras	
107.	If P-Q-R, Then	is the opposite ray of	f $\overrightarrow{QR}$		
	(a) $\overrightarrow{PQ}$	(b) $\overrightarrow{QP}$	(c) $\overrightarrow{RQ}$	(D) $\overrightarrow{PR}$	
108.	An angle is the u	nion set of			
	(a) Lines	(B) Line segments	(c) Rays	(d) A line segment and a ray	
109.	The sum of all size	x exterior angles of a triangle	e is_		
	(a) 180	(b) 360	(c) 720	(d) 90	

110.	If diagonals of a quadrilateral are not conjugate and bisect at right angle, then such quadrilateral is known as				
	(a) Square	(b) rectangle	(c) trapezium	(d) rhombus	
111.	□ ABCD is a rho	mbus. If ABCD = 160 and AC	= 16 then BD =		
	(a) 10	(b) 20	(c) 15	(d) 25	
112.	The length of m	inor arc $\widehat{AB}$ of $\odot$ (P, 7) is 1	4. Find the length of maj	or arc $\widehat{AB}$	
	(a) 18	(b) 21	(c) 28	(d) 30	
113.	The length of th	e edge of equilateral triangle	e is 8cm. Then semi circur	mference of such triangle is _cm.	
	(a) 4	(b) 24	(c) 12	(d) 36	
114.	The formula of I	ateral surface area of cylinde	er is		
	(a) A = 2πrh	(b) A= 2πr	(c) A = $\pi r^2$	(d) A=2πr <sup>2</sup> h	
115.	Upper limit of cl	ass '41-50' is			
	(a) 41	(b) 50	(c) 45	(d) 91	
116.	G.C.D of 4 and 1	.9 is			
	(a) 1	(b) 4	(c) 19	(d) 76	
117.	The polynomial	having 3 degree is known as			
	(a) Linear	(b) Quadratic	(c) Polynomial	(d) Trinomial (cubic)	
118.	If $\frac{x+y}{xy}$ =2 and	$\frac{x-y}{xy} = 6 \text{ then y} = \_$			
	(a) 1/4	(b) -1/2	(c) -1/4	(d) 1/3	
119.	Find the produc	ct of zeros of the quadratic p	olynomial: $x^2 - 4x + 3$		
	(a) 1	(b) 3	(c) 4	(d) -4	
120.	In ∆ABC, ∠B is ri	ight 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 in magnitude?			s, it is necessary to indicat	e direction along with its
		(a) Speed	(b) Path length	(c) Displacement	(d) Temperature
	122.	Which Newton's	a law of motion gives magnitu	ude of force?	
		(a) First	(b) Second	(c) Third	(d) None of these
	123.	Which of the fol	lowing physical quantity is sc	alar quantity?	
		(a)Mass	(b) Force	(c) Impulse of force	(d) Momentum
	124.	Give the SI unit o	of Density?		
		(a) Kg	(b) m2	(c) kg/m <sup>2</sup>	(d) kg/m
	125.	What is the full f	form of PNG?		
		(a) Petrol Natural Gas		(b) Pressurize Natural Gas	
		(c) Pipe Natural	Gas	(d) Pure Natural Gas	
	126.	Which of the fol	lowing is a monatomic moled	cular?	
		(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	ris		
		(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 app	roximate diameter of human	hair?	
		(a) 500nm	(b) 5000nm	(c) 50nm	(d) 50000nm
	130.	What is the orbi	tal period of Halley 's Comet	?	
		(a) 66years	(b) 76years	(c) 86years	(d) 96years
	131.	Where is the image	age of an object formed in hu	uman 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?				
	(a) Liquid	(b) Liquid and Gas	(c) Gas	(d) Solid	
134.	Which of the fol	lowing is correct for X-rays?			
	(a) It is beam of electrons (b) It is elec			c waves	
	(c) It is positively	y charged particle	(d) It is negatively char	ge particle	
135.	State the atomic	c mass of $H_2O$ ?			
	(a) 16 U	(b) 17 U	(d) 18 U	(d) 15 U	
136.	Who was the sc	ientist to make attempts for	giving explanatory definit	tion of element?	
	(a) Rontgen	(b) Dalton	(c) Rutherford	(d) Laveziour	
137.	Which bond is p	resent in oxygen atom?			
	(a) Ionic bond				
	(a) Ionic bond		(b) covalent divalent bo	ond	
	(a) lonic bond (c) Covalent bor	nd	(b) covalent divalent bo (d) covalent trivalent bo	ond	
138.	(a) lonic bond (c) Covalent bor 1 kWh =	nd	(b) covalent divalent bo (d) covalent trivalent bo	ond	
138.	(a) lonic bond (c) Covalent bor 1 kWh = (a) 3.6 x10 <sup>6</sup>	nd (b) 36 x 10 <sup>6</sup>	(b) covalent divalent bo (d) covalent trivalent bo (c) 3.6 x 10 <sup>7</sup>	and ond (d) $3.6 \times 10^5$	
138. 139.	<ul> <li>(a) Ionic bond</li> <li>(c) Covalent bor</li> <li>1 kWh =</li> <li>(a) 3.6 x10<sup>6</sup></li> <li>Who discovered</li> </ul>	the definition of the definit	(b) covalent divalent bo (d) covalent trivalent bo (c) 3.6 x 10 <sup>7</sup>	ond ond (d) 3.6 x 10 <sup>5</sup>	
138. 139.	(a) lonic bond (c) Covalent bor 1 kWh = (a) $3.6 \times 10^6$ Who discovered (a) Rutherford	the definition of the definit	(b) covalent divalent bo (d) covalent trivalent bo (c) 3.6 x 10 <sup>7</sup> (c) Willard	ond ond (d) 3.6 x 10 <sup>5</sup> (d) Dalton	
138. 139. 140.	<ul> <li>(a) Ionic bond</li> <li>(c) Covalent bor</li> <li>1 kWh =</li> <li>(a) 3.6 x10<sup>6</sup></li> <li>Who discovered</li> <li>(a) Rutherford</li> <li>Which radiation</li> </ul>	nd (b) 36 x $10^6$ d $\gamma$ -rays? (b) Thomson was discovered by Rutherfo	(b) covalent divalent bo (d) covalent trivalent bo (c) 3.6 x 10 <sup>7</sup> (c) Willard rd?	ond ond (d) 3.6 x 10 <sup>5</sup> (d) Dalton	
138. 139. 140.	(a) lonic bond (c) Covalent bor 1 kWh = (a) $3.6 \times 10^6$ Who discovered (a) Rutherford Which radiation (a) $\alpha \& \beta$	the definition of the formula of th	(b) covalent divalent bo (d) covalent trivalent bo (c) 3.6 x $10^7$ (c) Willard rd? (c) $\alpha \& \gamma$	ond ond (d) 3.6 x 10 <sup>5</sup> (d) Dalton (d) $\alpha$ , $\beta$ & γ	
138. 139. 140. 141.	(a) Ionic bond (c) Covalent bor 1 kWh = (a) $3.6 \times 10^6$ Who discovered (a) Rutherford Which radiation (a) $\alpha \& \beta$ Which chemical	the definition of the second state of the sec	(b) covalent divalent bo (d) covalent trivalent bo (c) $3.6 \times 10^7$ (c) Willard rd? (c) $\alpha \& \gamma$ c oxides react with water	and (d) $3.6 \times 10^5$ (d) Dalton (d) $\alpha, \beta \& \gamma$	
138. 139. 140. 141.	(a) Ionic bond (c) Covalent bor 1 kWh = (a) $3.6 \times 10^6$ Who discovered (a) Rutherford Which radiation (a) $\alpha \& \beta$ Which chemical (a) Metal	the definition of the second	(b) covalent divalent bo (d) covalent trivalent bo (c) 3.6 x $10^7$ (c) Willard rd? (c) $\alpha \& \gamma$ c oxides react with water (c) Minerals	and and (d) $3.6 \times 10^5$ (d) Dalton (d) $\alpha, \beta \& \gamma$ (d) Acid	
138. 139. 140. 141.	(a) Ionic bond (c) Covalent bor 1 kWh = (a) $3.6 \times 10^6$ Who discovered (a) Rutherford Which radiation (a) $\alpha \& \beta$ Which chemical (a) Metal What is the mol	hd (b) $36 \times 10^{6}$ (b) $36 \times 10^{6}$ (c) Thomson (c) Thomson (c) $\beta \& \gamma$ (c) $\beta \& \gamma$ (c) Base (c) Base (c) Base	(b) covalent divalent bo (d) covalent trivalent bo (c) $3.6 \times 10^7$ (c) Willard rd? (c) $\alpha \& \gamma$ c oxides react with water? (c) Minerals ce?	and (d) $3.6 \times 10^5$ (d) Dalton (d) $\alpha, \beta \& \gamma$ (d) Acid	

143.	. How many elements 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 large	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 mechanica	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 belo	ongs to 'Retro virus group'?		
	(a) Dengue Virus	(b) Hepatitis virus	(c) Influenza virus	(d) HIV
154.	Who is responsib	le 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	neart?	
	(a) 2	(b) 3	(c)4	(d) 6
157.	The spinal cord o	originates from where?		
	(a) Cerebrum	(b) Cerebllum	(c) Medulla oblongata	(d) Pones
158.	In which of the f	ollowing living organisms spo	ore information take plac	e?
	(a) Mucor	(b) Planaria	(c) spirogyra	(d) Potato
159.	The countinuity	of features from one genera	tion to another is known	as
	(a) Evolution	(b) Mutation	(c) Generation	(d) Heredity
160.	Which specie of	Italian honey bee is useful fo	or honey production?	
	(a) Epis serena ir	ndica (b) Epis flora	(c) Epis corseta	(d) Epis meliphera

## **SOCIAL SCIENCE**

161	. Who discovered	Who discovered "Cape of Good Hope" island?				
	(a) Columbus	(b) Bartholomew Diaz	(c) Vasco – de- Gama	(d) Amerigovesupuchi		
162	. When did Britisl	hers establish the Head Qua	rter in Bombay?			
	(a) 1613	(b) 1608	(c) 1680	(d) 1667		
163	. When did the Fi	rst World War start?				
	(a) 1 <sup>st</sup> August,19 Aug.,1914	914	(b) 8 <sup>th</sup> August 1914	(c) 14 <sup>th</sup> Aug.,1914 (d) 20 <sup>th</sup>		
164	. Who established	d 'Fascism' in Italy?				
	(a) Hitlor	(b) Mussolini	(c) Lanin	(d) Nepolian		
165	. In which countr	y was national flag hoisted p	prepared by madam Cama	?		
	(a) France	(b) Russia	(c) Germany	(d) Japan		
166	. Which festival w	vas there is in Punjab when J	Iallianwala Bagh massacre	e occurred?		
	(a) Baishakhi	(b) Diwali	(c) Holi	(d) Ramazan Id		
167	. Which one of th	e following not included in t	he state known as 'seven	sisters'?		
	(a) Assam	(b) Sikkim	(c) Manipur	(d) Tripura		
168	. Which day is cel	lebrated as "Human Rights D	)ay"?			
	(a) 19 Decembe	r (b) 12 December	(c) 15 December	(d) 10 December		
169	. Which kind of d	emocracy governance system	m there in our country?			
	(a) Presidential	(b) Parliamentary	(c) Independent	(d) Neutral		
170	. Where is India li	ies on in Asia continent?				
	(a) South	(b) North	(c) East	(d) West		
171	. Which canal has	s reduced the distance betwo	een Europe and India?			
	(a) Panama	(b) Alaska	(c) Suez	(d) Nile		

172.	By which name is the delta region of the Ganga and Brahmputra known as?			
	(a) Taheri	(b) Pamir	(c) Vrundavan	(d) Sundarvan
173.	By which name is	s the some rainfall at Malab	ar coast known as?	
	(A) Amra Vrushti	(b) Ana Vrushti	(c) Him Vrushti	(d) Cyclone
174.	In which state ar	e wild goats and musk(Kastı	uri) deer found?	
	(a) Andhra Prade	esh (b) Gujarat	(c) Jammu and Kashmir	(d) Assam
175.	Which fair of Guj	jarat is famous for buy and s	ale of donkeys?	
	(a) Tarnetar	(B) Siddhapur	(c) Bhavnath	(d) Vautha
176.	What does 'Tsun	ami' means in Japanese lan	guage/	
	(a) Upward tidal	waves	(b) Destructive waves	
	(c) Spiral waves		(d) Downward tidal wav	es
177.	In which sea "La	kshadweep" Island located?		
	(a) Bay of Bengal	(b) Arabian Sea	(c) Indian Ocean	(d) Pacific ocean
178.	After gaining ind	ependence which state was	the first to join Indian Uni	ion?
	(a) Morbi	(b) Junagadh	(c) Patiyala	(d) bhavanagar
179.	Who established	a political party "Forward B	lloc"?	
	(a) subhashchan	dra Bose	(b) Khudiram bose	
	(c) Rashbihari bo	se	(d) Satyendranath bose	
180.	Which British sys	stem was like "sweet poison	"?	
	(a) Revenue Polic	су	(b) Policy of annexation	
	(c) Subsidiary All	iance	(d) Permanent Deposit I	Policy
181.	Who was the pio	neer of armed revolution in	Gujarat/	
	(a) Barindra Gho	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 Hakum	at	(d) Federal Governmer	ıt.	
184.	In which district	Rangpur, having archaeolog	gical importance in situate	ed?	
	(a) Surendranag	ar (b) Ahmedabad	(c) Rajkot	(d) Patan	
185.	Who were the d culture?	lirect decendent of Stone Ag	e civilization and creator	of Mohenjo-Daro's sindhu	
	(a) Aryan	(b) Mongoloid	(c) Dravid	(d) Armenoid	
186.	The day of 21 <sup>st</sup> J	lune known as?			
	(a) Environment	t Day (b) World yoga Day	(c) Mother Day	(d) World Peace Day	
187.	Which Veda is k	nown as Gangotri of Music?			
	(a) Rigveda	(b) Atharveda	(c) Yajurveda	(d) Samveda	
188.	In which langua	ge did Abul Fazal write the A	kabarnama?		
	(A) Farsi	(b) Arabi	(c) Urdu	(d) Pali	
189.	Which ancient u	iniversity was situated at Ba	dgaon village of Patna dis	trict of Bihar?	
	(a) Takshshila	(b) Vallabhi	(c) Nalanda	(d) Bikramshila	
190.	Name the India	n mathematician who discov	ere zero?		
	(a) Aryabhatta	(b) Bhaskarachary	(c) Brahmgupta	(d) Lilawati	
191.	Which book of r	naths had been written by B	haskaracharya?		
	(a) Aryabhattiya	ım (b) Lilavati Ganit	(c) Dash Gitika	(d) Arya Siddhant	
192.	Who built the R	ed fort of Delhi?			
	(a) Akbar	(b) Humayun	(c) shahjahan	(d) Jahangir	
193.	Which wild life i	s totally extinct from Gujara	t forest area?		
	(a) Leopard	(b) Tiger	(c) Deer	(d) Lion	
194.	Which country i	s the highest exporter of in t	he 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	gest oil refinery of the world	is located?		
	(a) Dubai	(b) Gauhati	(c) Jamnagar	(d) Kuwait	
197.	Which Indian city	y is well-known as "Silicon Va	alley" of India?		
	(a) Hyderabad	(b) Nagpur	(c) Mumbai	(d) Bengaluru	
198.	Which term is us	sed for families living under t	he poverty line?		
	(a) APL	(b) BPL	(C) GPL	(D) CPL	
199.	Which economis	t of Indian origin propound t	the Human development	index?	
	(a) Dr. Amartya S	Sen (b) Dr. H.M Patel	(c) Dr. Manmohan Singh	n (d) Raghuram Rajan	
200.	Which poetry is	not written by kalidas?			
	(a) Kumarsambh	ava (b) Raghuvansh	(c) Dashkumarcharit	(d) Rutusamhar	