<u>Math</u> 1.	<u>ematics</u> Which the smallest nur	mber that devises 1512 is	the complete the cube?	
	(a) 5	(b) 6	(c) 7	(d) 9
2.	Which number is the in	verse of the opposite of -	$-\frac{5}{8}$?	
	(a) $\frac{5}{8}$ 8	(b) $1\frac{3}{5}$	(c) $2\frac{2}{5}$	(d) $-\frac{8}{5}$
3.	What is value of (a ¹⁰) ³ (a) a	÷ (a ⁶) ⁵ ? (b) a2	(c) 1	(d) 1/a
4.	If $x = \sqrt[4]{16} + \sqrt[4]{625}$ th (a) 7	nan what is x = ? (b) 29	(c) 12	(d) 5
5.	What is the co-efficient	t of $(x+y)^2$ in the expan	ision of x ² y ² ?	
	(a) 3	(b) 4	(c) 5	(d) 6
6.	The proportion of the (a) Parallelogram	angles a quadratic is 2;; (b) Rhombus	5;7;4. What type of quad (c) cyclic quadrilateral	lratic is that? (d) Trapezium
7.	what is the formula for (a) 2 π Rh	finding the area of an of π r ² h	open cylinder with bas (c) π r (24+r)	se ? (d) 2 π r (4+r)
8.	The diameter of roller i many square meter d (a) 440 sq meter	s 1 meter and length is 2.3 oes if press? (b) 220 sq meter	8 meter. If it roles 100 ro (c) 880 sq meter	ounds in a same direction. How (d) 4400 sq meter
9.	lf universal set U={3.4 (a) {4,6)	4.5.6.7} set A={5,7.8} and (b) {3,6)	B = {4,5,8} A' ∩ B' ? (c) {3.7}	(d) {3,4)
10.	The printed prize of a s	sari is Rs.2000. If after di	scount of 10% the prof	it is 20 % Then what is the net
	(a) Rs.1600	(b) Rs.1200	(C) Rs.1500	(D) Rs. 1800
11.	The median of 7, 5, 8, (a) 10	x,12, 17 is 10. Then what (b) 11	is the value of X (c) 12	(d) 9
12.	0 of which quadratic (a) x ² + 7x + 12	polynomial are 4 and 3. (b) $x^2 - 7x+12$	(c) $x^2 + 7x-12$	(d) x ² -7x-12
13.	If $\frac{x}{3}$ + 7=15 $-\frac{x}{5}$ then	find the solution ?		
	(a) x=20	(b) x=15	(c) x=21	(d) x=18
14.	There are 5 red, 2 yel probability of the se	llow and 7 shite roses election of white rose	in a flower vase. Lf a ?	rose is selected randomly. The
	(a) $\frac{5}{14}$	(b) $\frac{1}{7}$	(c) $\frac{1}{2}$	(d) 1
15.	If one factor of $27x^{3}$ -(a) ($3x^{2}$ -4y)	+ 64y ³ is (3x+4y) what is (b) (3x ² +12xy+4y ²)	the second factor ? (c) (9x ² +12xy-16y ²)	(d) (9x ² -12xy+16y ²)

16.	The HCF is $6x^2y^2$ and LCM $36x^3y^3$ of two terms (a) $18x^2y^2$ (b) $18x^3y^2$ (c)	s. If one term is 12x ³ y ² wl c) 36x ² y ³ (d)	nat is the second term? 36x ³ y ²
17.	If $p(x)=2x^3-3x^2+5x-4$ is divided by (x-2), what is re (a) 12 (b) 8 (c)	emainder? c) 10 (d)	-10
18.	Two concentric circles are circle (p, s) and circle(p of the big circle. What is the length of it ? (a) 12 (b) 15 (c)	0.13) The tangent of the	small circle is the chord 24
19.	Mother was at the age if 30 when the son was circle. What is the age of the son? (a) 5 Years (b) 10 Years (c	born. Now the small circle c) 15 Years (d)	e is the chord of the big 20 Years
20.	Which is not the identify true for trigonomer (a) $\sin^2 \theta + \cos^2 \theta = 1$ (b) (c) $\sec^2 \theta + \tan^2 \theta$	tric rations b) tan θ = cos+ (90- θ) d) cosec ² θ - cot ² =1	
<u>Che</u>	<u>nistry</u>		
21.	How many meters is equal to 1 neno mete?	0	10
	a) 10^{-9} meters b) 10^{-10} meters	c) 10 ⁹ meters	d)10 ¹⁰ meters
22	A light ray enters from denser medium to rarer me	edium. What is the angle of	incidence called that has 90 °
	angle of reflection?	h) critical angla	
	a) angle of deviation	d) angle of reflection	
23	Which motion does the graph of distance and time	shows for accelerated mo	tion?
	· · · · · · · · · · · · · · · · · · ·	1	
	Distence	lime	
	a) non uniformly accelerated	b) constant accelerated	
	c) uniformly accerated	d) uniformly retarded mo	otion
24.	Which law of newton gives the of force?		
	a) first law b) second law	c) third law	d) forth law
25.	Due to which motion of light does the tynadall effe	ect occur ?	
	a) incidence b) refraction	c) scattering	d) distersion
26.	The absolute refractive index of any medium is		
	a) 1 b) >1	c) <2	d) 0
27.	Which fundamental particles did Chadwick invent	in 1932	_ 、
	A) electron B) proton	c) neutron	D) all the three
28.	What is gaseous fuel used at home called?		лу - Ц
20	a) ipg b) cng	c) png	a) all
29.	what is the measuring equipment called that mea	sure the electric current pa	d) voltmeter
20	a) wall mater D) dimineter	cy gaivanonneter	uj volumeter
50.	a) titan and cheron	h) titan demos	
	c) phohes and demos	d) sheron and phobes	
31	Farthquake waves are of shich type?	ay sheron and phoses	
51.	a) Infrasonic b) Ultrasonic	c) Supersonic	d) Intrasonic

32.	Which branch of science is associated with the use of X- ray and gamma rays for the diagnosis and treatment?			
	a) urology	b) radiology	c) histology	d) pathology
33.	The initial velocity of th	e free falling object is	?	d = 0.8 m/c
	a) more	b) less	C) 2010	u) 9.811/S
<u>Phy</u> ։ 34.	sics During a chemical react	ion between acid and base	, Salt and water are formed	I. What is the process called?
	(A) Newtralization	(B) Corrosion	(C) Hydrolysis	(D) Ionization
35.	Which of the following	is a strong acid?		
	(A) Acitic Acid	(B) Cytric Acid	(C) Nitric Acid	(D) Oxalic Acid
36.	Which method is used f	or concentration of those of	ores obtained in the Sulphic	le form?
	(A) Magnetic separation	n (B) Centrifugation	(C) Froth Flotation Met	hod (D) Calcinations
37.	Which of the following	pairs is not suitable for org	anic functional group of the	e carbonic compound?
	(A) Carboxylic acid – CC	ЮН	(C) Aldehyde -CHO	
	(B) Ketone - > C=0		(D) Ester OH	
38.	What is the chemical na	ame of the quick line ?		
	(A) Calcium Oxide		(C) Calcium Hydroxide	
	(B) Calcum Carbonate		(D) Carbon Dioxide	
39.	Which of the following	is a compound?		
	(A) Iron	(B) Washing Soda	(C) Air	(D) Mercury
40.	While preparing CO_2 in	laboratory on which of the	following substances hydro	ochloride acid is poured?
	(A) Pieces of Zinc		(B) The practices of cop	per Sulphur
	(C) Pieces of marble		(D) Ammonium Chlorid	e
41.	Which of the following	gases is used to show the c	louds or artificial smoke in	film or drama?
	(A) Carbon Dioxide	(B) Oxygen	(C) Nitrogen	(D) Hydrogen
42.	Which of the following	relations between mole an	d mass correct?	
	(A) $Mass = \frac{Weight}{Mass}$		(B) $Weight = \frac{Mass}{Mole}$	
	(C) $Mole = \frac{Weight}{Atomic we}$	ight	(D) All of them	
43.	From which following re	elation between mole and	mass correct?	

	(A) Aluminum		(B) Manganese Dioxide	
	(C) Zinc Phosphide		(D) Potassium Permanga	nate
44.	Which are the compone	ents of stainless steel?		
	(A) copper, zinc, nickel		(B) Iron, Carbon, Tin	
	(C) Iron, Chromium, Nic	kle	(D) copper, chromium, Ti	n
45.	What is the electronic c	onfiguration of Sulphur?		
	(A) 2, 6, 8	(B) 2, 4, 8	(C) 2, 8, 6	(D) 2, 6, 4
46.	How many atoms are th	nere in a compound of a mole	e?	
	(A) 60.22×10^{-23}	(B) 602.2×10 ⁻²³	(C) 6.022×10^{23}	(D) 6022×10 ²³
Bio	logy			
47.	Which of the following	factors does a plant use for t	he process of photosynthe	sis?
	(A) Sunlight	(B) Chlorophyll	(C) CO_2 and H_2O	(D) All of them
48.	During chemical reactio (A) Neutralization	n between acid and base, Sa (B) Corrosion	lt and water are formed. W (C) Hydrolysis	/hat is the process called? (D) Ionization
49.	Which is the longest or	gan of the digestive system?		
	(A) Oesophagus		(B) Stomach	
	(C) Small Intestine		(D) Large Intestine	
50.	What is the name of the	e blood vessels that provide	nutrition of the heart wall?	
	(A) Pulmonary Arteries	(B) Coronary arteries	(C) Pulmonary Veins	(D) Descending
51.	Which organelle is cons	idered as a suicide bag?		
	(A) Centrosome	(B) Mososomes	(C) Lysosomes	(D) chromosome
52.	Which one of the follow	ving pairs is not correct?		
	(A) The pituitary gland -	- Adrenalin	(B) Pancreas – Insulin	
	(C) Ovary – Estrogen		(D) Testis – Testosterone	
53.	Which is the common n	nethod of artificial reproduct	ion is plants?	
	(A) Cutting	(B) Layering	(C) Grafting	(D) All of them
54.	With what are the diese	es like Swine Flu, Dengue and	l Chikungunya Fever spread	1?
	(A) Bacteria	(B) Virus	(C) Parasites	(D) Fungi

55.	Living mechanical tissue is:			
	(A) Parenchyma	(B) collenchymas	(C) Sclerenchyma	(D) Chlorenchyma
56.	Which plant leaves have	e a parallel venation?		
	(A) Peepal leaves		(B) Hibiscus leaves	
	(C) Banana leaves		(D) Banyan tree leaves	
57.	For which of the follow	ing diseases vaccine has not l	peen invented yet?	
	(A) Jaundice	(B) cholera	(C) Typhoid	(D) Chikungunya
58.	The inner layer of the p	harynx of a frog is made of _	Epithelium.	
	(A) Squamous	(B) Cuboidal	(C) Ciliated	(D) columnar
59.	Which of the following	gases mainly increases globa	I warming?	
	(A) Carbon monoxide	(B) Nitrous oxide	(C) Carbon dioxide	(D) Sulphur dioxide
60.	Which of the following	is the example of the waste b	pio-decomposition of living	beings?
	(A) Vegetable	(B) Glass	(C) Plastic	(D) Metal
Soc	ial Science			
61.	Which method is used t	o known the time line of the	chronological remains?	
	(A) Dropping method	(B) Metric Dating Method	(C) Carbon dating metho	d (D) All of them
62.	With which governor G	enral's efforts did the teachir	ng of English language begi	n in India?
	(A) Lord Cornwallis	(B) Lord Ripon	(C) Lord Macaulay	(D) Lord Hastings
63.	Who started the 'Dak C	hoki' Tapal method which me	eans 'Ghodesvar Sathe tapa	ili no halkaro?
	(A) Gyasuddin Tugluk	(B) Allauddin Khilji	(C) Razia Sultana	(D) MOhd. Tuglak
64.	Which of the following	symbols in map indicates Rai	lway?	
	(A)	(B) <u>+++++++++</u> (C)	••••••(D) /	, ,
65.	Where is the headquar	ters of the United Nation (UN	I)?	
	(A) rome	(B) Paris	(C) Washington	(D) New York
66.	By which pass of the Hi	malayas can we easily travel	for the pilgrimage of the Ka	illash Mansarovar?
	(A) The Shitkila Ghat	(B) The Nathula Ghat	(C) The Jelpala Ghat	(D) The Karakoram Ghat
67.	Which institution has b	een formed by justice Mahad	lev Govind Ranade for socia	al reform?
	(A) The Brahmosamai	(B) The Arvasamai	(C) The Prarthanasamai	(D) The Satvasodhaksamai

68.	Which of the following rivers does not meet the Ganga?			
	(A) The Koshi	(B) The Chambal	(C) The Shon	(D) The Gandak
69.	Whose statue is there ir	n front of the Vidhan Sabha c	of Gujarat in sitting posture	?
	(A) Vitthalbhai Patel	(B) Vallabhbhai patel	(C) Mahatma Gandhi	(D) Dr. Jivraj Mehta
70.	Which of the following	rivers meets the river Krishna	a?	
	(A) The Tungbhadra	(B) The Koyna	(C) The Ghatprabha	(C) All of them
71.	In which states there is	'Amravrishti' at the end of th	ne summer and just before	the setting of the monsoon?
	(A) Tamilnadu and Telar	ngana	(B) Kerala and Karnatka	
	(C) Andhrapradesh and	Tamilnadu	(D) Andhrapradesh and T	elangana
72.	By which name is the Bł	hagirathi Ganga known as afi	ter it orginates from the Ga	ngotri?
	(A) Padma	(B) Jamuna	(C) Meghna	(D) All of three
73.	Which country has the l	argest written constitution?		
	(A) Britain	(B) France	(C) India	(D) America
74.	What was the name of t Vijaynagar on the shore	the inspiring guru of Harihar of Tungbhadra?	and Bukkaray that had setu	up the Hindu Maharajya-
	(A) Acharya Shibhadra Swami	(B) Swami Ramtirtha	(C) Vidyaranya Swami	(D) Guru Virajanand
75.	What is the position of I	India in the world with refere	ence to area?	
	(A) 6 th	(B) 7 th	(C) 8 th	(D) 9 th
76.	Which country is called	the land of 'Midnight Summ	er'?	
	(A) Sweden	(B) Norway	(C) Spain	(D) Portugal
77.	Where did Vastupal and	d Tejpal, the ministers of the	Rana Vir Dhaval of Dholka,	built the Jain temple?
	(A) Delwara (Abu)	(B) Palitana	(C) Girnar	(D) All of them
78.	Which Veda of the Arya	s is called the 'Gangotri of m	usic?	
	(A) The Rigveda	(B) The Yajurveda	(C) The Samveda	(D) The Atharvaveda
79.	In which state of India v	vas the Panchayat Raj was es	stablished first?	
	(A) Gujarat	(B) Rajasthan	(C) Maharashtra	(D) Madhya Pradesh
80.	Of which Indian classica the waist the characteri	Il dance is the plaited green o istics?	coloured petticoat, kumin, s	silk blouse and belt around

		(A) Manipuri	(B) Kathak	(C) Bharatnatyam	(D) Kathakali
8	31.	Which of the followings	is not written by Mahakavi K	alidas in Sanskrit?	
		(A) Abhigyan Shakuntala	ım	(B) Kadambari	
		(C) Rutusamhar		(D) Kumarsambhavam	
8	32.	In which caves is the gre	at piece of the Indian sculpt	ure Kailash temple situated	?
		(A) Ajanta	(B) Ellora	(C) Elaphanta	(D) Bagh
8	33.	In which of the following	g is not our neighbor country	?	
		(A) Nepal	(B) Bhutan	(C) Iran	(D) Srilanka
8	34.	Which is the highest pos	ition in the Indian Army?		
		(A) Field Marshall	(B) Admiral	(C) Air Chief Marshall	(D) Lt. General
٤	35.	Which is the state of Ind	ia that has the largest area?		
		(A) Uttar Pradesh	(B) Maharashtra	(C) Rajasthan	(D) Madhya Pradesh
٤	36.	What amount of the nat	ion income of India is obtain	ed from agriculture?	
		(A) 65%	(B) 26%	(C) 62%	(D) 22%
٤	37.	Who was the first speak	er of the Lok Sabha in India?		
		(A) Neelam Sanjeev Red	dy	(B) Mirakumari	
		(C) Ganesh Vasudev May	vlankar	(D) Sumitra Mahajan	
8	38.	Of which religion is the '	Tripitika' the Holy Book belo	ngs?	
		(A) Jain	(B) Hindu	(C) Buddha	(D) Islam
8	39.	What is the 'Mahabhinis	hkkkramana'?		
		(A) The renunciation of I	Mahavir	(B) The Shankaracharya b	ecame Sanyasi
		(C) The renunciation of E	Buddha	(D) The renunciation of G	uru Nanak
ç	90.	Which Indian state has b	peen given special rights in o	ur constitution?	
		(A) kerala	(B) Assam	(C) Nagaland	(D) Jammu & Kashmir
ç	91.	Which right is not enliste	ed in the list of the Fundame	ntal rights?	
		(A) Right to Protection a	gainst Exploitation	(B) Right to Property	
		(C) Right to Liberty		(D) Right to Education and	l Culture

92.	What is the duration (Time limit) for the member of the Rajya Sabha?			
	(A) 4 Years	(B) 5 Years	(C) 6 Years	(D) 10 Years
93.	Who was the first chair	man of the Indian Constitution	on Assembly?	
	(A) Jawaharlal Nehru		(B) Dr. Rajendraprasad	
	(C) Dr. B. R. Ambedkar		(D) Dr. Sarvapalli Radhak	rishna
94.	The river Tsangop flor Barva'?	ws through Tibet, in which st	ate does it enter after takir	ng 'U' to from 'Namcha
	(A) Assam	(B) Meghalaya	(C) Arunchal Pradesh	(C) Nagaland
95.	The 16 th October is obs	erved as "Mourning day' wh	ich occurance is the reason	of it?
	(A) The Jaliyawala Bag I	Massacre	(B) The Dandi Kuch	
	(C) Bhang Bhang		(D) All of them	
96.	How many are the fact	ors of production?		
	(A) 3	(B) 4	(C) 2	(D) 5
97.	The concept of Human	development number was a	ccepted by	
	(A) WHO	(B) UNO	(C) UNDP	(D) UNICEF
98.	Which year was declare	ed 'The International women	's Year by the UNO?	
	(A) 1975	(B) 2002	(C) 1990	(D) 2001
99.	The Indian Standard Tir	me line passes from the city.	Which is that?	
	(A) Aurangabad	(B) Lucknow	(C) Allahabad	(D) Hyderabad
100.	In which state is the Ka	nchanajangha Park situated?		
	(A) Manipur	(B) Nagaland	(C) Sikkim	(D) Arunachal Pradesh

GUJARAT NTSE STG 1 (2015-16) Answer keys

SAT

	Ma	athematics	
1.C 5.D 9.B 13.B 17.C	2.B 6.B 10.C 14.C 18.D	3.C 7.B 11.C 15.D 19.C	4.D 8.C 12.B 16.* (18x ² y ³⁾ 20.C
		Physics	
1.A 5.C 9.B	2.D 6.B 10.C	3.A 7.C 11.A	4.B 8.A 12.B
13.C			
	C	Chemistry	
34.A 38.A	35.C 39.C	36.C 40.B	37.D 41.A
42.C 46.C	43.D/A	44.D	45.0
1010		Biology	
47.D	48.C	49.A	50.C
51.C	52.A	53.D	54.B
55.B	56.C	57.A	58.C
59.C	60.A		
	So	cial Science	
61.B	62.C	63.B	64.B
65.D	66.A	67.B	68.B
69.A	70.D	71.C	72.A
73.C	74.B	75.B	76.B
//.A	78.C	79.B	80.A
81.C	82.B	83.C	84.A
85.C	86.B	87.B	88.C
03.0	90.D 04 B	91.C 05 B	92.U 06 B
97 C	98 B	99 C	100 B
	00.2	00.0	