

CHAMARAJANAGARA ZILLA PANCHAYATH

OFFICE OF THE DEPUTY DIRECTOR OF PUBLIC INSTRUTICON CHAMARAJANAGAR DISTRICT CHAMARAJANAGARA

COLLABORATION

DISTRICT INSTITUTE OF EDUCATION AND TRAINING
CHAMARAJANAGARA

Multiple Choice Question Based

Model Question Papers

SSLC Examination 2020-21

SCIENCE

#### Department of Public Instruction, Chamarajanagar DistrictInstituteofEducationalTraining, Chamarajanagar

2020-21 SSLC Science Model Question paper - 1

**Marks** : 40

_	Cho	ose the correct answer		
41	An e	electric bulb is rated 220 v and 100	w. V	When it is operated on 110v, What will
		ne power consumed?		•
		100 w	B)	75 w
	,	50 w	D)	25w
42.	Cou	lomb is the SI unit of.		
	A)	Electric current	B)	Electric charge
	C)	Potential difference	D)	Resistance
43.			drav	w from a 220v source, if the resistance
		the bulb filament is $1200\Omega$ ?		
		0.18A	B)	
	C)	0.16A	D)	0.17A
44.	The	function of voltmeter in an electric	oiro	nit
++.				
	,			Measures the national difference
	C)	equipment	D)	Measures the potential difference
45.	The	total resistance in the parallel circu	ıit	
15.		Increases	B)	
	C)	Neutral	,	Zero
46.	,		,	(e) projected towards west is deflected
10.	_			1. The direction of the magnetic
		l is	11010	The direction of the magnetic
		Towards South	B)	Towards East
	C)	Downward	D)	Upward
	<i>C</i> )	20,111,414	2)	op ward
47	In F	lemings left hand rule, the thumb r	epres	ents
	A)	Electric Current	B)	The direction of the motion of the
				Conductor
	C)	Magnetic field	D)	None of the above

48	The	function	on of the com	ımutator i	.S			
	A)	Incre	ases the flo			B)	Decreases the flow of elec	etric current
	C)	Curre Curre direc	ent flows in	the for	ward	D)	Reverses the direction current	of flow of
49	Wh	ere th	e image form	ed when	an ohi	ect n	laced beyond 2F1 of a con	vex lens ?
Τ.).	A)		tween $F_2$ and		an ooj	B)	<u> </u>	VCX ICIIS :
	C)		and $2F_2$	<b>-1</b> 2		D)	<b>=</b>	
50.	The	nower	of a concave	lense of	focal 1	enot	h 2m	
50.	A)	+0.51		iclise of	10001	B)	-0.25D	
	C)	+0.51				D)	-0.5D	
<i>5</i> 1	Oha	amra th	a givan tahla					
51.	Obse	erve un	e given table In mater		ım		Refractive index	7
				P			1.52	
				Q			1.44	
				R			2.42	
				S			1.33	
	In w	hich N	Aaterial medi	um the sp	eed of	ligh	t is very low?	<del></del>
	A)	Q				B)	S	
	C)	R				D)	P	
52.	Wha	at hapı	pens when a i	av of ligh	nt pass	es th	rough the optical centre of	the lens
	A)		acted from co		_		The light passes through of other side of the lens	
	C)	Rav	of light trav	elling pa	rallel	D)	Ray of light that are	travelling
	σ,	to pr	•				parallel o its principal axis	•
53.	Func	rtion o	f solar cell is					
55.	A)		verts solar en		 heat	B)	Converts heat energy int	o electrical
	/	energ		67		_,	energy	
	C)	Conv	-	energy	into	D)	Converts solar energy interest	o Chemical
54	Δ Τι	ırhine	cannot be rot	ated by				
J <del>-1</del> .	A)		ing water	aca by		B)	Heat of sun	
	C)	Stear	_			D)	Moving wind	
DIET	Chama	rajanag	ar				-	
		- 0						

55.	A)	he pH value of solution decreases Number of OH <sup>-</sup> ions increases Number of H <sup>+</sup> ions decreases	,	Number of H <sup>+</sup> ions increases Equal number of OH <sup>-</sup> and H <sup>+</sup> ions
56.	Whi	ch of the following is used for trea	ting i	indigestion
20.	A)	Antibiotic	B)	_
	C)	Antacid	D)	Antiseptic
	,		,	1
57.	The	acid present in the stinging hair of	nettl	e leaves that causes burning pain
	A)	Citric acid	B)	
	C)	Methanoic acid	,	Tartaric acid
	,			
58.	The	process used to convert metal carb	onate	es into oxides is
	A)	Calcination	B)	Roasting
	C)	Refining	D)	Reduction
50	<b>XX71.</b> :	ah af tha fallawing mathada is suit	ملمام	for any souting on inconfining non-france
59.		•	able	for preventing an iron frying pan from
	rusti	_	D)	Applying point
		Applying grease Applying a coating of zinc		Applying paint All of the above
	C)	Applying a coating of zinc	D)	An of the above
60.	Con	nponents of an alloy solder		
00.	A)	-	B)	Lead & Tin
	C)	Copper & Zinc	,	Copper & Aluminum
	- /		,	
61.	The	functional group present in the But	tanor	ne is
	A)	Carboxylic acid	B)	Aldehyde
	C)	Ketone	D)	Alcohol
62.	Unsa	aturated Compounds are		
	i)	Propane	ii)	Propene
	iii)	Propyne	iv)	Chloropropane
	<b>A</b> N	• • • •	D'	0
	A)	i& ii	B)	ii & iv
	C)	i& iv	D)	ii & iii
63.	The	salf linkaga of carbon carbon stor	ne to	form large chains is called
03.		self-linkage of carbon, carbon ator Isomerism	ns to B)	Allotropes
	A)	1501116115111	D)	Anonopes

	C)	Catenation	D)	Hydrogenation
64.	A)	eral formula of alkane $C_nH_{2n+2}$ $C_nH_{2n-2}$	B) D)	$\begin{array}{c} C_n H_{2n} \\ C_n H_{2n-1} \end{array}$
65.		what basic Mendeleev Constructed	-	
	A) C)	Atomic mass number Number of Neutrons	B) D)	Atomic number All of the above
66.		ich two elements are placed in the		
	A) C)	Cobalt & Nickel Nickel & Chromium	B) D)	Copper and Nickel Cobalt & Chromium
67.			-	s of the human body to the heart are
	A)	Arteries	,	Veins
	C)	Capillaries	D)	Pulmonary Arteries
68.	The	Correct path of oxygenated blood to	from	the lungs to the heart
	A)	Pulmonary artery → Right atrium		_
	B)	Pulmonary artery → Right ventric		_
	C) D)	Pulmonary vein $\rightarrow$ Left ventricle Pulmonary vein $\rightarrow$ Left atrium $\rightarrow$		
	D)	Tumonary vem / Left atrium	LCI	t ventriele
69.	By tl	his process, the plants loses excess	of w	rater from its body
	A)	Photosynthesis	B)	Transpiration
	C)	Respiration	D)	Diffusion
70.	The	part of the brain maintain body bal	ance	is
	A)	Cerebellum	B)	Cerebrum
	C)	Pons	D)	Medulla
71.	Mov	ement of sunflower towards the di	rectio	on of sun is
	A)	Geotropism	B)	
	C)	Chemotropism	D)	Phototropism
72.	Hor	mone which inhibits the growth of	plan	t is
	A)	Gibberlin	B)	
	C)	Auxin	D)	Abscisic acid

73.	Whi	ch part of flower develops into frui	it afte	er fertilization
	A)	Ovule	B)	Ovary
	C)	Stigma	D)	Style
74.		male reproductive part which sec	retes	the fluid and provide nourishment to
	A)	Testicles	B)	Prostate gland
	C)	Gall bladder	D)	All of the above
75.	An e	example of homologous organs		
	A)	Our arm and four legs of the dog	B)	Our teeth and elephant ivory
	C)	A butterfly wings and bats wing	D)	A & B
76.	Gene	otypic ratio of Mendel's monohybi	rid cr	oss is
	A)	9:3:3:1	B)	3:1
	C)	2:1	D)	1:2:1
77.	Spec	ciation, occurs when this factor is a	ccon	npanied by variation
	A)	Natural selection	B)	Geographical isolation
	C)	Heredity	D)	All the above
78.	Facto	or to be followed to ensure the und	lergro	ound water is
	A)	Construction of thermal nuclear plant	B)	Afforestation
	C)	1	D)	Deforestation
79.	Bio	diversity hotspot is		
	A)	River	B)	Forest
	C)	Sea	D)	Desert
80.	An e	example for non biodegradable was	ste is	
	A)	DDT	B)	Plastic
	C)	Glass	D)	Agricultural waste

## **Key answers**

41	42	43	44	45	46	47	48	49	50
D	В	A	D	В	D	В	D	A	D
51	52	53	54	55	56	57	58	59	60
С	C	С	В	В	С	C	A	C	В
61	62	63	64	65	66	67	68	69	70
С	D	C	A	Α	A	В	D	В	A
71	72	73	74	75	76	77	78	79	80
D	D	В	В	D	D	D	В	В	D

#### Department of Public Instruction, Chamarajanagar DistrictInstituteofEducationalTraining, Chamarajanagar

#### 2020-21 SSLC Science Model Question paper - 02

**Marks** : 40

	nswer the follow swer below	ing sentence	s / incomp	olete sentences	by choosing the correct
am		our acids P,Q	,R,S are 2	,5,3,6 which on	e of the above is strong
	A)P	B) Q	C) R	D) S	
42	The two products A) Water and sa and carbon of	alt B) salt aı	_		etion is nd Hydrogen D) Water
43	Bases changes A) Red-blue	-	-		w D) Red – Green
44	In the reactivity A) Na,Au	y series, more B) K, Au		and less reactiv C) Ca, Cu	e elements respectively D) Zn, K
45	the characterist A) Dissolved in D) all the ab	n water B)	-		poiling point C) solid state
46	An alloy made A) Brass	-	e of Copp ize		metal D) Amalgum
	The correct electric A)			•	D) : N · · N :
48	The catalyst use A) Sodium Chlorine			oil is rmanganate	C) Nickle D)
49	The bottom of (A) Food is inco C)Fuel is wet	mpletely coo		B) Incompl	ete combustion of fuel ete combustion of fuel

50 The functional group present in this compound is A) Aldehyde B) Alcohol C) Ketone D) Carboxylic acid 51 The element not belong to 18<sup>Th</sup> group is A) Helium B) Neon C) Carbon D) Argon 52 Sodium, Potassium, Magnesium, Rubidium are arranged in the increasing order of their atomic radii is A) Mg<K<Na<Rb B) Mg<Na<K<Rb C) Mg<Na<Rb<K D) Na<K<Rb<Mg 53 The part "A" labelled in the Nephron is A) Bowmann capsule B) Glomorulus C) collection duct D) Capillary 54 A person is having wounds which is not healing due to more sugar in the blood. The harmone which control sugar in blood is A) Thyroxin B) Adrinaline C) Insulin D) Growth harmone 55 The group which contains only biodegradable substance is A) Wood, Fruit peel ,plastic cover B) Wood, lemon juice, flower C) Fruit peel, grass, plastic chair D) DDT, skin, wood 56 The parts present in the female part of flower is 1) Stigma 2) Anther 3) Ovary 4) Style B) 1,2,& 3 only C) 1 & 4 only D) 1,2,3,& 4 all A) 1,3 & 4 only 57 Old wood furnitures are used by painting warnish is A) Recycling C) Re purpose B) Re use D) Reduce 58 Heridity Index can select new species in nature because

C) Similarity

D) gene

A) Variation

B) Survival

59 The method of avoiding floods is A) Aforestation B) Remove top soil									
C) Cutting of trees	s D) Cultivate in	agricultural land							
60 The special tissue growing baby is	60 The special tissue which transfer nutrition through blood from mother to								
	B) Fallopian tube	C) placenta	D) Ovary						
1	61 Superior and inferior venacava transfer blood from A) Heart to cells B) Cells to Heart C) Heart to lungs D) Lungs to Heart								
-	ments the ratio of diagram of dia	hybrid cross in F <sub>2</sub> gend C) 2:1	eration is D) 9:3:1						
part	- 1	characteristics in male i							
A) Prostate giand	B) Scrotum C	() Seminal vesicles	D) Testis						
64 Centre of reflex a A) Fore brain	action is B) Cerebellum	C) pons D) Spina	l cord						
65 The sex chromos A) X- boy	some responsible fo B) Y-Girl	or detecting a child sex C) X-girl D) Y-girl							
66 Blood pressure, s by the brain part	salivary secretion, vo	omiting are involuntary	actions controlled						
A) Cerebellum	B) Medulla	C) Cerebrum	D) pons						
67 The SI unit of res A) Amphere	67 The SI unit of resistance is A) Amphere B) Ohm C) Coloumb D) volt								
68 In Flemings left hand rule, middle finger indicates A)Direction of magnetic feild B) Direction of induced current C) Direction of current D) Direction of motion of conductor									
69 A place in which convex lense is	an highly enlarged,	real and inverted imag	e obtain from the						
A) Between F <sub>1</sub>	and O B) At $2F_1$	C) At $F_1$ D) Be	etween $F_1$ and $2F_1$						

70 Snell's law is related to A) Refraction of light C) Dispersion of light		~	
71 which one is not a chara A) Do large amount of v c) Easily storage and Tr	vorkdone per unit v		•
72 How much work is done Potential difference is 12V	?		_
A) 24J	B) 6J	C) 14J	D) 10J
73 Which one is not the cha A) Magnetic field lines a B) The magnetic field line C) No two field-lines are D) The magnetic field-line	are crowded in pole nes are closed curv e found to cross eac	es es ch other	ge at the north pole
74 The colour of live wire in A) Green B) Blue	n the domestic elec C) Red D) bla		
75 An object is placed a length 15cm. The image distance and magnification A) -10Cm & B) +	respectively.		g lense of focal  D) -10Cm & 0.33
76 The formula of ohm's l A) V=IT B) H		C) V=RI	D) H=I2RT
77 The above circuit indicated the second of	ates respectively		
A) Ammeter and Batt	erv	B) Voltameter ar	nd Batterv
C) Ammeter and Elec	•	D) Voltameter an	•
78 Major gas present in Bio	ogas is		

A) Methane

C) Hydrogen

B) Carbon di oxideD) Hydrogen sulphide

- 79 Safety measure to take to avoid overload from the circuit
  - A) Many appliances are connected to single socket
  - B) Many appliences are connected to the different socket
  - C) Many appliences are not use at a time
  - D) B and C are correct
- 80 In which medium, light travels fastly

Medium	Refractive Index
Air	1.0003
Ice	1.31
Kerosene	1.44
Diamond	2.42

- A) Diamond -2.42
- B) Air -1.0003
- C) Ice-1.31
- D) Kerosene -1.44

## **Key Answers**

41	42	43	44	45	46	47	48	49	50
Α	A	Α	В	D	В	C	C	В	D
51	52	53	54	55	56	57	58	59	60
C	В	C	C	В	A	В	A	A	C
61	62	63	64	65	66	67	68	69	70
В	В	D	D	С	В	В	C	C	A
71	72	73	74	75	76	77	78	79	80
D	A	D	C	D	С	A	A	D	В

#### Department of Public Instruction, Chamarajanagar DistrictInstituteofEducationalTraining, Chamarajanagar 2020-21 SSLC Science Model Question paper - 03

**Marks** : 40

41. The element u	sed for making solar cel	lls is						
A. Sulphur	B. Phosphorous	C . Zirconium	D. Silicon					
42. The opposition	n to flow of electric curr	rent is called						
A. Volt	B. Electric current	C. Resistance	D. Ampere					
43. The function of	of electric generator is it							
A. Reverses	the direction of current							
B. Converts	electric energy into med	chanical energy						
C. Detects pr	resence of electric curren	nt in the circuit						
D. Converts	mechanical energy into	electrical energy						
44. Concave lens	always produces							
A. erect, dimi	nished and real image							
B. inverted, di	minished and real image	e						
C. erect, enlarg	ged and virtual image							
D. erect, dimini	shed and virtual image							
45. S I Unit of ele	ctric charge is							
A. Joule	B. Volt	C. Coulomb	D. Ampere					
46. A Ray of light is travelling from a rarer medium to a denser medium. While entering the denser medium at the point of incidence, it								
A. Goes straight into the second medium  B. Bends towards the normal								
C. Bends away	C. Bends away from the normal  D. Does not enter at all							

- 47. The Main component of bio gas is \_\_\_\_\_
  - A. Propane
- B. Butane
- C. Ethane

- D. Methane
- 48. In Fleming's left hand rule middle finger indicates the direction of the
  - A. Magnetic field

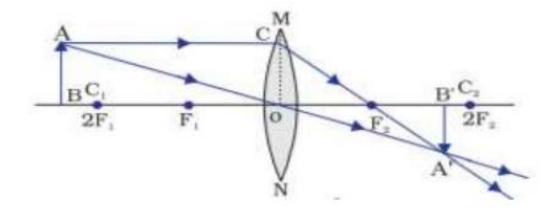
B. Electric current induced in conductor

C. Electric current

- D. Movement of the conductor
- 49. An electric bulb is connected to a 220 V generator. The current flowing in the bulb is 0.50A Then the power of the bulb is \_\_\_\_\_\_
  - A. 1100W

B. 44W

- C. 110W
- D. 100W
- 50. From the ray diagram given below identify the position and nature of the image



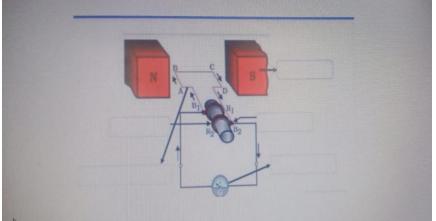
A.

Between F<sub>2</sub> and 2F<sub>2</sub>, virtual and inverted

- B. Between F<sub>2</sub>and 2F<sub>2</sub>, real and inverted.
- C. Beyond 2F<sub>2</sub>, real and inverted.
- D. Beyond 2F<sub>2</sub>, virtual and erect
- 51. Formula of ohm's law
  - A. V=IT
- B. H=IRT

- C. V=RI
- D.  $H=I^2RT$

# 52. In this diagram R1, R2 and B1,B2 respectively are

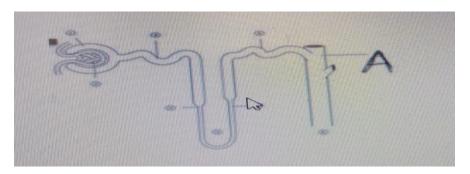


A .Rings and brushes	B. Ring	gs &magnetic	e poles
C. Brushes and magnetic pole	s D Brush	es and rings	
53. In an electric circuit amn	neter is connected	in	
A. Parallel	B. Series		
C. Both parallel and series	D. Oppos	site direction	
54. If the radius of curvature of	of a lens is 30cm, t	hen its focal	length will be
A.60 cm B.3	0cm	C.15cm	D.120cm
55. The acid present in the stir	nging hair of nettle	e leaves that	causes burning pain
A. Citric acid	B. Methanoic acid	d	
C. Tartaric acid	D. Acetic acid		
56. Carbon has the unique abirise to molecules. This proper	•	with other a	toms of carbon, giving
A .Isomerism B. Allotropy	y C.Catenation	D. Hydroge	enation
57. Mendeleevs Periodic tabl	e is based on		
A. Atomic mass	B. Atomic Num	ıber	
C. Number of Neutrons	D. None of thes	e	

A. Carbon dioxide C. Oxygen D. Nitrogen dioxide  59. A compound having high melting point is  A. Ionic compound B. Covalent compound C. Carbon compound D. All the above  60. General formula of alkynes  A. C <sub>n</sub> H2 <sub>n+2</sub> B. C <sub>n</sub> H2 <sub>n</sub> C. C <sub>n</sub> H2 <sub>n-2</sub> D. C <sub>n</sub> H2 <sub>n-1</sub> 61. From 1 gram gold it is possible to make wire up to 2km length ,here property of metal exhibit is  A. Good conductor of electricity B. Malleability C. Ductility D. Sonorous  62. An element X having 2 shells ,reacts with Magnesium and forms a compound MgX. The element X is  A. Chlorine B. Boron C. Sulphur D. Oxygen  63. The pH of four acids namely P, Q, R, S is 2, 5, 3, 6 respectively. The strongest acid among these acids is  A. P B. Q C. R D. S  64. Name of the organic compound having molecular formula CH <sub>3</sub> CH <sub>2</sub> Br is  A. Bromoethane B. Chloroethane C. Ethanone D. Ethanal  65. Butanone is a four - carbon compound with the functional group  A. Carboxylic acid B. Aldehyde C. Ketone D. Alcohol  66. An alloy having constituents of lead and Tin is  A. Bronze B. Brass C. Solder D. Stainless steel	58. Sita observe a blackish layer on a newly brought silver anklets after 2 month .A gas responsible for this reaction is								
A. Ionic compound B. Covalent compound C. Carbon compound D. All the above 60. General formula of alkynes A. C <sub>n</sub> H2 <sub>n+2</sub> B. C <sub>n</sub> H2 <sub>n</sub> C. C <sub>n</sub> H2 <sub>n-2</sub> D. C <sub>n</sub> H2 <sub>n-1</sub> 61. From 1 gram gold it is possible to make wire up to 2km length ,here property of metal exhibit is A. Good conductor of electricity B. Malleability C. Ductility D. Sonorous 62. An element X having 2 shells ,reacts with Magnesium and forms a compound MgX. The element X is A. Chlorine B. Boron C. Sulphur D. Oxygen 63. The pH of four acids namely P, Q, R, S is 2, 5, 3, 6 respectively. The strongest acid among these acids is A. P B. Q C. R D. S 64. Name of the organic compound having molecular formula CH <sub>3</sub> CH <sub>2</sub> Br is A. Bromoethane B. Chloroethane C .Ethanone D. Ethanal 65. Butanone is a four - carbon compound with the functional group A. Carboxylic acid B. Aldehyde C. Ketone D. Alcohol 66. An alloy having constituents of lead and Tin is	A. Carbon dioxide	A. Carbon dioxide B. Sulphur							
A. Ionic compound D. All the above  60. General formula of alkynes  A. C <sub>n</sub> H2 <sub>n+2</sub> B. C <sub>n</sub> H2 <sub>n</sub> C. C <sub>n</sub> H2 <sub>n-2</sub> D. C <sub>n</sub> H2 <sub>n-1</sub> 61. From 1 gram gold it is possible to make wire up to 2km length ,here property of metal exhibit is  A. Good conductor of electricity B. Malleability  C. Ductility D. Sonorous  62. An element X having 2 shells ,reacts with Magnesium and forms a compound MgX. The element X is  A. Chlorine B. Boron C. Sulphur D. Oxygen  63. The pH of four acids namely P, Q, R, S is 2, 5, 3, 6 respectively. The strongest acid among these acids is  A. P B. Q C. R D. S  64. Name of the organic compound having molecular formula CH <sub>3</sub> CH <sub>2</sub> Br is  A. Bromoethane B. Chloroethane C. Ethanone D. Ethanal  65. Butanone is a four - carbon compound with the functional group  A. Carboxylic acid B. Aldehyde C. Ketone D. Alcohol	C. Oxygen	D. Nitrogen	dioxide						
C. Carbon compound D. All the above  60. General formula of alkynes  A. C <sub>n</sub> H2 <sub>n+2</sub> B. C <sub>n</sub> H2 <sub>n</sub> C. C <sub>n</sub> H2 <sub>n-2</sub> D. C <sub>n</sub> H2 <sub>n-1</sub> 61. From 1 gram gold it is possible to make wire up to 2km length ,here property of metal exhibit is  A. Good conductor of electricity B. Malleability  C. Ductility D. Sonorous  62. An element X having 2 shells ,reacts with Magnesium and forms a compound MgX. The element X is  A. Chlorine B. Boron C. Sulphur D. Oxygen  63. The pH of four acids namely P, Q, R, S is 2, 5, 3, 6 respectively. The strongest acid among these acids is  A. P B. Q C. R D. S  64. Name of the organic compound having molecular formula CH <sub>3</sub> CH <sub>2</sub> Br is  A. Bromoethane B. Chloroethane C. Ethanone D. Ethanal  65. Butanone is a four - carbon compound with the functional group  A. Carboxylic acid B. Aldehyde C. Ketone D. Alcohol  66. An alloy having constituents of lead and Tin is	59. A compound having	59. A compound having high melting point is							
A. C <sub>n</sub> H2 <sub>n+2</sub> B. C <sub>n</sub> H2 <sub>n</sub> C. C <sub>n</sub> H2 <sub>n-2</sub> D. C <sub>n</sub> H2 <sub>n-1</sub> 61. From 1 gram gold it is possible to make wire up to 2km length ,here property of metal exhibit is  A. Good conductor of electricity B. Malleability  C. Ductility D. Sonorous  62. An element X having 2 shells ,reacts with Magnesium and forms a compound MgX. The element X is  A. Chlorine B. Boron C. Sulphur D. Oxygen  63. The pH of four acids namely P, Q, R, S is 2, 5, 3, 6 respectively. The strongest acid among these acids is  A. P B. Q C. R D. S  64. Name of the organic compound having molecular formula CH <sub>3</sub> CH <sub>2</sub> Br is  A. Bromoethane B. Chloroethane C. Ethanone D. Ethanal  65. Butanone is a four - carbon compound with the functional group  A. Carboxylic acid B. Aldehyde C. Ketone D. Alcohol  66. An alloy having constituents of lead and Tin is	A. Ionic compound	B. Covalent con	mpound						
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C. Ductility  D. Sonorous  62. An element X having 2 shells ,reacts with Magnesium and forms a compound MgX. The element X is  A. Chlorine  B. Boron  C. Sulphur  D. Oxygen  63. The pH of four acids namely P, Q, R, S is 2, 5, 3, 6 respectively. The strongest acid among these acids is  A. P  B. Q  C. R  D. S  64. Name of the organic compound having molecular formula CH <sub>3</sub> CH <sub>2</sub> Br is  A. Bromoethane  B. Chloroethane  C. Ethanone  D. Ethanal  65. Butanone is a four - carbon compound with the functional group  A. Carboxylic acid  B. Aldehyde  C. Ketone  D. Alcohol  66. An alloy having constituents of lead and Tin is		is possible to make	wire up to 2km lengt	h ,here property					
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A. Bromoethane B. Chloroethane C. Ethanone D. Ethanal 65. Butanone is a four - carbon compound with the functional group A. Carboxylic acid B. Aldehyde C. Ketone D. Alcohol 66. An alloy having constituents of lead and Tin is	A. P	B. Q	C. R	D. S					
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A. Carboxylic acid B. Aldehyde C. Ketone D. Alcohol 66. An alloy having constituents of lead and Tin is	A. Bromoethane	B. Chloroethane	C .Ethanone	D. Ethanal					
66. An alloy having constituents of lead and Tin is	65. Butanone is a four -	carbon compound w	vith the functional gro	oup					
	A. Carboxylic acid	A. Carboxylic acid B. Aldehyde C. Ketone D. Alcohol							
A. Bronze B. Brass C. Solder D. Stainless steel	66. An alloy having con	66. An alloy having constituents of lead and Tin is							
	A. Bronze	B. Brass	C. Solder	D. Stainless steel					

67. Functional uni	t of nervous syst	em is							
A. Axon	B. Nephron		C. Neuron	D. Synapse					
68. In human male production of sper		the scrotum	outside the body b	because the					
A. low temperature B. more nutrition									
C .more temperat	ure D. For n	nore blood sup	pply						
69. In human bein this way	gs, the paternal c	hromosome d	etermines the sex	of the child in					
A.X	B.Y	(	C.Z	D.O					
70. The substance	responsible for t	he depletion o	of ozone layer						
A. CFC	B. CCF	C. HI	OFC	D. KFC					
71. The biodiversi	ty hot spot is fou	nd in							
A. Rivers	B. Forests	S	C. Deserts	D. Oceans					
72. A blood vesse	l which carries th	ne blood from	the heart to the en	ntire body					
A. Artery	B. Capillar	cy C.	Vein	D. Hemoglobin					
73. Which structure blood?	re among the following	owing connec	ets the foetus to th	e mother's					
A. Fallopian t	ube B.	Uterus	C. Placenta	D. Ovary					
74. Analogous org	gans have,								
A. Same structure and same function different functions.  B. Same structure and									
C. Different str different functions	ructures and same	e function.	D. Differe	nt structures and					

75. In this diagram of nephron name the part which is marked as "A"



A. Bowman's capsule

B. Glomerulus

C.collecting duct

D.capillaries

76. Water harvesting is a method which

A. Increase ground water level

B. Not practiced in modern days

C. Has no relation with the groundwater

D. Decrease groundwater level.

77. The part that contains the male gametes in the flower is

A. Ovary

B. Anther

C. Stigma

D. Filament

78. One person is having slow recovery from wounds because of more sugar level in blood, the hormone responsible for this problem is secreted by

A. Thyroid

B. Adrenal

C. Pancreas

D. Pituitary

79. In Mendel's experiments monohybrid ratio in F2 progeny is

A. 3:1

B. 9:3:3:1

C. 2:1

D. 9:3:1

80. The hormone increases blood flow ,heart beat and makes ready to the situation is

A. Thyroxin

B. Adrenaline

C. Oestrogen

D. Insulin

## **Key Answers**

41	42	43	44	45	46	47	48	49	50
D	С	D	D	С	С	D	A	С	D
51	52	53	54	55	56	57	58	59	60
C	A	В	C	В	C	A	В	A	C
61	62	63	64	65	66	67	68	69	70
C	D	A	A	C	C	C	A	В	A
71	72	73	74	75	76	77	78	79	80
В	Α	C	C	С	A	В	C	Α	В

#### Department of Public Instruction, Chamarajanagar DistrictInstituteofEducationalTraining, Chamarajanagar

2020-21 SSLC Science Model Question paper - 04

**Marks** : 40

Four choices are given for each of the	e questions. Choose t	he right answer for
the -following:		

the -following:	<b>5</b> -	<b>3-1 3-1 3-13 4</b>	3 <b>2</b> 202	~ · · · · · · · · · · · · · · · · · · ·
41. The material us	sed to protec	et electric circu	uits and elect	rical devices
A. ammeter	B. fuse	C. commutat	tor	D. galvanometer
42. The position of <b>2F1</b> (F: principal for A. between F2 and C. beyond 2F2	ocus of the co	•	nvex lens wl B. at 2F2 D. at infinity	nen object is kept beyond
43. The correct sen	ntence related	d to good sour	ces of energ	y
a. easy to available	b. eas	sy to store		
c. more heat efficie	ency	d. pollution	free	
A. a and b	B. a only			
C. a,b and c	D. a,b,c and	l d		

44. In the given circuit the volume of a current transmitted through a  $10\Omega$ resistance with potential difference 6V

A. 1.2A

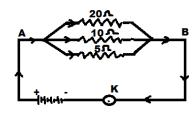
B. 0.2A

C. 2.0A

D.

0.6A

45. The function electric motor



A. returns of electric current						
B. electrical energy is converted into	o mechanical energy					
C. to find out the presence of electric	c current in the circuit					
D. mechanical energy is converted in	nto electrical energy					
46. In which medium the speed of the	he light decreases					
A. air B. water c. Ice	D. kerosene					
47. When electric current carrying of then mechanical force increases and is	<del>-</del>	_				
A. 300 B.450	C. 600	D.90				
48. Among the following energy so energy?	ources which energy source does	not use solar				
A. geothermal energy	B. wind energy					
C. nuclear energy	D. bio mass					
49. Which among the following is n	ot a character of concave lens.					
A. scattering of light rays	B. virtual and erect image is	formed				
C. Thicker at the middle and edges	are thin D. objects appear smal	1				
50. An electric washing machine rated 600W operates 6 hour/day. What is the cost of energy to operate it for 10 days at Rs. 4.00 per kWh?						
A. 100 Rs B. 120Rs	C. 134 Rs D. 144 Rs					
51. Among the following which is	used to regulate speed of the fan					
A. — M B. — M	·~—					
c. ————————————————————————————————————						

52. Among the four values of resistivity which value is possessed by good conductor?					
A. 1.60x10 <sup>-8</sup>	B.1.62x10 <sup>-8</sup>				
C. 2.63x10 <sup>-8</sup>	D. 5.20x10 <sup>-8</sup>				
53. Which of the following	g produce a Tyndall effect?				
A. salt dissolved in water	B. sugar dissolved in water				
C. milk is mixed in water	D. sodium hydroxide solution				
54. The device works und	er Direct current				
A. mixer B. tele	vision				
C. radio D. was	shing machine				
55. The constituents of the	e alloy Bronge				
A. copper and zinc	B. copper and tin				
C. lead and tin	D. copper and nickel				
56. The functional group	of alcohol and aldehyde				
AOH and -COOH	BOH and - CO				
COH and CHO	DOH and – Br				
57. In a, b and c elements respectively. Then atomic	atomic mass of a is 100 and atomic mass of b is 150 mass of c is				
A. 100 B. 175	C. 250 D. 200				
58. The acid present in st	inging hairs of nettle leaves that causes burning				
A. carboxylic acid	B. methanoic acid				
C. citric acid	D. oxalic acid				

59. The ionic end of	59. The ionic end of the soap reacts with						
A. dirt	B. water		C. oil	D. paint			
60. The atomic nur	mber of an element	is 16 v	which period	does it belongs to			
A. 2	B. 3	C. 4		D. 1			
61. The catalyst us	ed in addition reac	tion					
A. potassium perm	anganate		B. nickel				
C. manganese			D. potassiur	m dichromate			
62. Examples for n	netalloids						
A. sodium and pota	assium	B. sili	con and gerr	manium			
C. uranium and the	orium	D. arg	gon and neon				
63. The chemical	layer produced by	magne	sium when it	is exposed to air			
A. magnesium carb	oonate	B. ma	gnesium sulp	phate			
C. magnesium oxid	de	D. magnesium nitrate					
64. The gas liberate	ed during the rea	ction b	etween metal	l carbonate and acid			
A. hydrogen		B. nit	rogen				
C. oxygen		D. car	rbon dioxide				
65. Which product	s are formed when	acid re	eacts with bas	se			
A. salt			B. water				
C. salt and water		D. sal	t and hydrog	en			
66. Which stateme	66. Which statement is correct related to atomic size in the modern periodic table						
A. atomic size decreases from left side to right							
B. atomic size incr	B. atomic size increases from left side to right						
C. attraction between nucleus and electron decreases							

D. no change	
67. The process of water evaporation	from aerial parts of the plant body is called
A. transportation	B. transpiration
C. photosynthesis	D. translocation
68. The correct pathway of blood flow	ving in blood circulatory system
A. veins- atrium- ventricle- artery	
B. ventricle-artery-atrium-veins	
C. atrium-artery-ventricle-artery	
D. artery-veins-ventricle-atrium	
69. A person suffering from late wour the hormone responsible for this is re-	nd healing and his blood sugar level variation, eleased by
A. thyroid gland	B. adrenal gland
C. pancreas	D. pituitary gland
70. Which part of the brain responsible and balance the body?	e for voluntary action, equilibrium posture
A. pons	B. cerebrum
C. hypothalamus	D. cerebellum
71. Among the following the function	of ovary is
1. production of eggs	
2. releases estrogen hormone	
3.transport matured egg to uterus	
1 66	

4. development of foetus				
A. 1 and 2 only	B. 1 and 3 only			
C. 2 and 4 only	D. 3 and 4 only			
72. Among the following sexually transmitting disease is				
A. hepatitis	B. typhoid			
C. malaria	D. syphilis			
73. The transfer of pollen grain from flower	stamen of one flower to stigma of the another			
A. propagation	B. cross pollination			
C. fertilization	D. self pollination			
74. Round and yellow(RRYY) and w pollinated, then the F1 generation is	rinkled green(rryy) pea plants are cross			
A. round yellow(RrYy)	B. round green(Rryy)			
C. wrinkled green(rryy)	D. wrinkled yellow(rrYy)			
75. The plant containing two different character which is not expressed is.	t traits and express single character the other			
A. mixed trait	B. recessive trait			
C. dominant trait	D. none of the above			
76. Among the following example of	analogous organs is			
A. cow tail and dog fore arm	B. wings of bird and bat wings			
C. bird fore arm and whale fore arm	D. tooth of monkey and ear of fox			
77. Advantage of ozone layer is				

A. provides oxygen

B. pollution control

C. protects from UV rays

D. provides carbon dioxide

78. Old furniture are used by applying warmish. This is

A. recycling

B. reuse

C. repurpose

D. reduce

79. Adrenaline hormone is also known as emergency hormone because

A. our body will alert while sleeping

B. our will power increases

C. protects from accidents

D. our body faces fear and anger situations

80. This is not a ecofriendly habit

A. usage of bicycle

B. usage of cloth bags

C. use of dust bins

D. burning of wastes

## **Key answers**

41	В	51	В	61	В	71	A
42	A	52	A	62	D	72	D
43	D	53	С	63	С	73	В
44	D	54	С	64	D	74	A
45	В	55	В	65	A	75	С
46	D	56	С	66	A	76	В
47	D	57	D	67	В	77	С
48	С	58	В	68	A	78	В
49	С	59	В	69	С	79	D
50	D	60	В	70	D	80	D

# Department of Public Instruction, Chamarajanagara District Institute of Educational Training, Chamarajanagara

2020-21 SSLC Science Model Question paper 05 Marks-40

<ul> <li>(41) What is the principal of working of an electric iron box</li> <li>(a)heating effect (b) chemical effect</li> <li>(c) magnetic effect (d) electro magnetic effect</li> </ul>
(42) The magnetic field intensity inside solenoid is (a) Zero (b) uniform (c) irregular (d) continuous change
(43) Difference between ratio of the height of the image and height of the object (a) Power of lens (b) magnification (c) lateral displacement (d) focal length
<ul> <li>(44) The main component of biogas</li> <li>(a) nitrogen (b) hydrogen (c) methane (d) oxygen</li> <li>(45) ohm's law can be express such as</li> <li>(a) I=IR (b) R=VI (c) I=VR (d) V=PI</li> </ul>
(46) Place of coin at the bottom of a glass filled with water . the coin appears slightly raised above it`s actual position due to light (a)reflection (b) diffraction (c) color separation (d) refraction
(47) A device used for electric circuit for safety (a) rheostat (b) fuse (c) ammeter (d) switch
<ul> <li>(48) The type of energy conversion in solar cell</li> <li>(a) solar energy into electrical energy</li> <li>(b) thermal energy into electrical energy</li> <li>(c) light energy into het energy</li> <li>(d) electrical energy into light energy</li> </ul>
(49) An electric device consume 1kw of electric power when operated at 220 v. a fuse wire of what rating must be used (a) 4A (b) 2A (C) 3A (D) 5A

<ul><li>(50) The optical centre is</li><li>(a) optical centre (b) centre of curvature (c) principal axis (d) at infinity</li></ul>									
(51) Relation between power of lens and focal length (a) $p = 2f$ (b) $p = f/2$ (c) $p = 1/f$ (d) $p = 2+f$									
<ul><li>(52) In armature revolution the type flow of current I changed twice is</li><li>(a) direct current (b) alternative current (c) electric charge (d) magnetic field</li></ul>									
<ul><li>(53) Color of the ground earthening cable(wire)</li><li>(a) green (b) black (c) blue (d) red</li></ul>									
(54) A device used to convert mechanical energy to the electrical energy (a) electric motor (b) dynamo (c) electric motor (d) magnet									
<ul><li>(55) The acid produced naturally in our stomach</li><li>(a) acetic acid</li><li>(b) citric acid</li><li>(c) hydrochloric acid</li><li>(d) sulphuric acid</li></ul>									
(56) The pH value of acid rain is (a) less than 5.6 (b)greater than 10 (c) 7 (d) 5									
(57) A solution turns red litmus to blue color. the pH value of the solution is (a) 1 (b) 9 (c) 7 (d) 5									
<ul> <li>(58) A compound formed by the transfer of electron from metal to nonmetal</li> <li>(a) Hydrogen chloride</li> <li>(b) Magnesium chloride</li> <li>(c) Hydrogen sulphide</li> <li>(d) Carbon tetra chloride</li> </ul>									
(59) Total number of bonds present in propyne (a) 7 (b) 8 (c) 9 (d) 10									
(60) The first member of cycloalkane is (a) methane (b) ethane (c) propane (d) cyclopropane  DIET Chamarajanagar									

(61) Correct decreasing order of activity of metal  (a) Fe> Zn> Al> Mg  (b) Mg> Al> Zn> Fe  (c) Zn>Fe>Al>Mg  (d) Al>Mg>Fe>Zn										
(62) The atom contains three shells and four valence electrons is (a carbon (b) silicon (c) sulphur (d) phosphorous										
(63)Liquid non metal is (a) iodine (b) oxygen (c) bromine (d) hydrogen										
(64) This element is most easily lose it's electron (a) Ca (b) Na (c) K (d) Mg										
<ul><li>(65) The simple hydrocarbon</li><li>(a) methane</li><li>(b) ethane</li><li>(c) propane</li><li>(d) cyclopropane</li></ul>										
(66) Valency of carbon atom is (a) 6 (b) 4 (c) 2 (d) 3										
<ul><li>(67) The phloem tissue is responsible for the transport of</li><li>(a) water (b) water and minerals (c) glucose (d) all of above</li></ul>										
<ul><li>(68) The unit helps to clotting of blood</li><li>(a) platelets</li><li>(b) white blood cells</li><li>(c) red blood cells</li><li>plasma</li></ul>										
<ul><li>(69) The hormone which inhibit the growth of plant body</li><li>(a) auxin</li><li>(b) gibberellins</li><li>(c) ethylene</li><li>(d) cytokinin</li></ul>										
(70) The process of removing of waste product by living organism is known as (a) excretion (b) digestion (c) circulation (d) respiration										
(71) The major part of brain is										

(a) thalamus	(b) cerebrum	(c) pons	(d) cerebellum							
(72) The hormone is responsible for the control blood sugar level (a) adrenaline (b) thyroxin (c) insulin (d) testosterone										
<ul><li>(73) Diseases not</li><li>(a) gonnorrhoea</li></ul>	transmitted by sexual c (b) malaria (c)		syphilis							
(74) The main aim of conservation of forest is (a) trekking (b) conserving biodiversity (c) collecting forest resources (d) for beauty for ambience										
<ul><li>(75) Name the part developing embryo</li><li>(a) placenta</li></ul>	which transports  (b) heart (c)	wastes to mothe								
(76) In evolutionary terms human being have more similarities with (a) A Chinese school boy (b) a chimpanzee (c) a spider (d) a bacteria										
<del>-</del>	fusion of sperm and over fertilization (c)	rum (egg) is combination	(d) embryo							
(78) The phenotypic ratio of $F_2$ generation in mono hybrid cross experiments (a) 1:2:1 (b 3:1 (c) 2:1:1 (d) 1:3										
(79) The element re (a) Hydrogen	esponsible for the deplet (b) Chlorine	<u> </u>	er (d) Nitrogen							
(80) Phenotypic rat (a) 6:3:3:1 (b) 3	tio of Dihybrid cross in 3:1 (c) 9:3:3:1 (	F <sub>2</sub> generation (d) 1:2:1								

# Key Answers

41.	42.	43.	44.	45.	46.	47	48.	49.	50.
A	В	В	C	A	D	.B	A	D	A
51.	52	53.	54.	55.	56.	57.	58.	59.	60.
C	.B	A	В	C	A	В	В	В	D.
61	62.	63	64.	65	66	67.	68.	69.	70.
.A	В	.C	C	.A	.B	C	A	D	A
71	72	73.	74.	75.	76.	77.	78.	79.	80.
.B	.C	В	В	A	A	В	В	В	C