N.SRIRAMSSPGHSS	TEST NO:1
SSLC-SCIENCE (E/M)	MARKS=10x1=10
QUARTERLY PORTIONS CHOOSE	TIME:10 minute

- 1. Inertia of a body depends on
- a) weight of the object b) acceleration due to gravity of the planet
- c) mass of the object
- d) Both a & b
- 2. Where should an object be placed so that a real and inverted image of same size is obtained by a convex lens
- a) f b) 2f c) infinity d) between f and 2f
- 3. If a substance is heated or cooled, the linear expansion occurs along (a) X or –X the axis of (b) Y or -Y
- (c) both (a) and (b)

- (d) (a) or (b)
- 4. Mass of 1 mole of Nitrogen atom is
- a. 28 amu
- b.14 amu
- c. 28 g
- d.14 g
- 5. Chemical formula of rust is
- a) FeO.xH2O
- b) FeO<sub>4</sub>.xH<sub>2</sub>O
  - c) Fe<sub>2</sub>O<sub>3</sub>.xH<sub>2</sub>O d) FeO
- 6. When pressure is increased at constant temperature the solubility of gases in liquid
- a. No change b. increases c. decreases d. no reaction
- 6. Oxygen is produced at what point during photosynthesis?
- a) when ATP is converted to ADP b) when CO<sub>2</sub> is fixed
- c) when H<sub>2</sub>O is splitted
- d) All of these
- 7. The animals which give birth to young ones are
- a) Oviparous
- b) Viviparous
- c) Ovoviviparous
- d) All the above
- 8. Which one of the following regarding blood composition is correct
- a) Plasma Blood + Lymphocyte
- b) Serum Blood + Fibrinogen
- c) Lymph Plasma + RBC + WBC
- d) Blood Plasma + RBC+ WBC +Platelets
- 9. There are pairs of cranial nerves and pairs of spinal nerves.
- (a) 12, 31
- (b) 31, 12 (c) 12, 13 (d) 12, 21
- 10. Which one of the following hormones is naturally not found in plants:
- a) 2, 4-D
- b) GA3 c) Gibberellin
- d) IAA

N.SRIRAMSSPGHSS	TEST NO:2
SSLC-SCIENCE (E/M)	MARKS=10x1=10
QUARTERLY PORTIONS CHOOSE	TIME:10 minute

QUINTERET TORTION	INIE:10 Inniete
11. Male gametes in angios	perms are formed by the division of
a) Generative cell	b) Vegetative cell
c) Microspore mother cell	d) Microspore
12. Okasaki fragments are jo	oined together by
a) Helicase	b) DNA polymerase
	d) DNA ligase
13. The loss of one or more	chromosome in a ploidy
is called	
a) Tetraploidy b) Aneuploid	dy c) Euploidy d) polyploidy
14. Which one of the following	
a) Copper – T b) Oral pills	c) Diaphragm d) Tubectomy
15. Which one is referred as	"Master Gland"?
a) Pineal gland	b) Pituitary gland
c) Thyroid gland	d) Adrenal gland
16. A person who met with	an accident lost control of body temperature,
water balance, and hunger.	Which of the following part of brain is
supposed to be damaged?	
(a) Medulla oblongata	(b) cerebrum
(c) pons	(d) hypothalamus
17. 'Heart of heart' is called	
a) SA node b) AV node c) l	Purkinje fibres d) Bundle of His
18. Mammals are anim	
a) Cold blooded b) Warm bl	looded c) Poikilothermic
d) All the above	,
19. Kreb's cycle takes place	e in
a) chloroplast	b) mitochondrial matrix
c) stomata	d) inner mitochondrial membrane
20. Which of the following:	•
a. ferric chloride	b. copper sulphate pentahydrate
c. silica gel	d. none of the above
<b>-</b>	

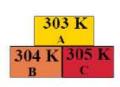
N.SRIRAMSSPGHSS	TEST NO:3
SSLC-SCIENCE (E/M)	MARKS=10x1=10
QUARTERLY PORTIONS CHOOSE	TIME:10 minute

- 21. \_\_\_\_\_ is an important metal to form amalgam.
- a) Ag b) Hg
- c) Mg
- d) Al
- 22. 1 mole of any substance contains \_\_\_\_ molecules.
- a.  $6.023 \times 10^{23}$

b. 6.023 x 10<sup>-23</sup>

c.  $3.0115 \times 10^{23}$ 

- d.  $12.046 \times 10^{23}$
- 23. In the Given diagram, the possible direction of heat energy transformation is



- a)A  $\leftarrow$  B, A  $\leftarrow$  C,B  $\leftarrow$  C b)A  $\longrightarrow$  B, A  $\longrightarrow$  C,B  $\longrightarrow$  C
- c)A  $\longrightarrow$  B, A  $\longleftarrow$  C,B  $\longrightarrow$  C d)A  $\longleftarrow$  B, A  $\longrightarrow$  C,B  $\longleftarrow$  C
- 24. If V<sub>B</sub>, V<sub>G</sub>, V<sub>R</sub> be the velocity of blue, green and red light respectively in a glass prism, then which of the following statement gives the correct relation?
- a)  $V_B = V_G = V_R$
- b)  $V_B > V_G > V_R$
- c)  $V_B < V_G < V_R$
- d)  $V_B < V_G > V_R$
- 25. To project the rockets which of the following principle(s) is /(are) required?
- a) Newton's third law of motion b) Newton's law of gravitation
- c) law of conservation of linear momentum d) both a and c
- 26. Impulse is equals to
- a) rate of change of momentum b) rate of force and time
- c) change of momentum d) rate of change of mass
- 27. The refractive index of four substances A, B,C and D are 1.31, 1.43,
- 1.33, 2.4 respectively. The speed of light is maximum in
- a) A b) B c) C d) D
- 28. Estrogen is secreted by
- a) Anterior pituitary b) Primary follicle
- c) Graafian follicle d) Corpus luteum.
- 29. The value of universal gas constant
- a)  $3.81 \text{ J} \text{ mol}^{-1} \text{ K}^{-1} \text{ b}) 8.03 \text{ J} \text{ mol}^{-1} \text{ K}^{-1} \text{ c}) 1.38 \text{ J} \text{ mol}^{-1} \text{ K}^{-1}$
- d) 8.31 J mol<sup>-1</sup> K<sup>-1</sup>
- 30. Which of the following has the smallest mass?
- a.  $6.023 \times 10^{23}$  atoms of He
- b.1 atom of He

c. 2 g of He

d.1 mole atoms of He

N.SRIRAMSSPGHSS	TEST NO:4
SSLC-SCIENCE (E/M)	MARKS=10x1=10
OUARTERLY PORTIONS CHOOSE	TIME:10 minute

31. The number of periods and groups in the periodic table are		
a) 6,16 b) 7,17 c) 8,18 d) 7,18		
32.A solution is a mixture.		
a. homogeneous b. heterogeneous		
c. homogeneous and heterogeneous d. non homogeneous		
33. Casparian strips are present in the of the root.		
a) cortex b) pith c) pericycle d) endodermis		
34.In leech locomotion is performed by		
a) Anterior sucker b) Posterior sucker c) Setae		
d) Contraction and relaxation of muscles		
35.Active transport involves		
a) movement of molecules from lower to higher concentration		
b) expenditure of energy c) it is an uphill task		
d) all of the above		
36.Bipolar neurons are found in		
(a) retina of eye (b) cerebral cortex		
(c) embryo (d) respiratory epithelium		
37. Gibberellins cause:		
a) Shortening of genetically tall plants		
b) Elongation of dwarf plants		
c) Promotion of rooting d) Yellowing of young leaves		
38. The plant which propagates with the help of its leaves is		
a) Onion b) Neem c) Ginger d) Bryophyllum		
39. According to Mendel alleles have the following character		
a) Pair of genes b) Responsible for character		
c) Production of gametes d) Recessive factors		
40. The number of chromosomes found in human beings are		
a) 22 pairs of autosomes and 1 pair of allosomes.		
b) 22 autosomes and 1 allosome c) 46 autosomes		
d) 46 pairs autosomes and 1 pair of allosomes.		

N.SRIRAMSSPGHSS	TEST NO:5
SSLC-SCIENCE (E/M)	MARKS=10x1=10
QUARTERLY PORTIONS CHOOSE	TIME:10 minute

- 41. The large elongated cells that provide nutrition to developing sperms are
- a) Primary germ cells b) Sertoli cells
- c) Leydig cells d) Spermatogonia
- 42. Which organ acts as both exocrine gland as well as endocrine gland
- a) Pancreas b) Kidney c) Liver d) Lungs
- 43. Nerve cells do not possess
- (a) neurilemma (b) sarcolemma (c) axon (d) dendrites
- 44. A patient with blood group O was injured in an accident and has blood loss. Which blood group the doctor should effectively use for transfusion in this condition?
- a) O group b) AB group c) A or B group
- d) all blood group
- 45. Plotting a graph for momentum on the X-axis and time on Y-axis. slope of momentum- time graph gives
- a) Impulsive force b) Acceleration c) Force d) Rate of force
- 46. The body of leech has
- a) 23 segments b) 33 segments c) 38 segments
- d) 30 segments
- 47. Which is formed during anaerobic respiration
- a) Carbohydrate b) Ethyl alcohol c) Acetyl CoA d) Pyruvate
- 48. Deliquescence is due to \_\_\_\_\_
- a. Strong affinity to water b. Less affinity to water
- c. Strong hatred to water d. Inertness to water
- 49. The number of components in a binary solution is \_\_\_\_\_.
- a. 2 b. 3 c. 4 d. 5
- 50. If the Earth shrinks to 50% of its real radius its mass remaining the same, the weight of a body on the Earth will
- a) decrease by 50%
- b) increase by 50%
- c) decrease by 25%
- d) increase by 300%

N.SRIRAMSSPGHSS	TEST NO:6
SSLC-SCIENCE (E/M)	MARKS=10x1=10
QUARTERLY PORTIONS CHOOSE	TIME:10 minute

51. Neon shows zero electron affinity due to a) stable arrangement of neutrons b) stable configuration of electrons c) reduced size d) increased density 52. \_\_\_\_ group contains the member of halogen family. d) 16th a) 17th c) 18th b) 15th 53. The gram molecular mass of oxygen molecule is b. 18 g c. 32 g d. 17 g a. 16 g 54. In which of the following sport the turning of effect of force used b) tennis c) cycling d) hockey a) swimming 55. A small bulb is placed at the principal focus of a convex lens. When the bulb is switched on, the lens will produce a) a convergent beam of light b) a divergent beam of light c) a parallel beam of light d) a coloured beam of light 56. Which of the following statement is incorrect? a. One gram of C - 12 contains Avogadro's number of atoms. b. One mole of oxygen gas contains Avogadro's number of molecules. c. One mole of hydrogen gas contains Avogadro's number of atoms. d. One mole of electrons stands for  $6.023 \times 10^{23}$  electrons. 57. Temperature is the average \_\_\_\_\_ of the molecules of a substance a) difference in K.E and P.E b) sum of P.E and K.E c) difference in T.E and P.E. d) difference in K.E and T.E 58. A 25% alcohol solution means a. 25 ml alcohol in 100 ml of water b. 25 ml alcohol in 25 ml of water c. 25 ml alcohol in 75 ml of water d. 75 ml alcohol in 25 ml of water 59. The xylem and phloem arranged side by side on same radius is called a) radial b) amphivasal c) conjoint d) None of these 60. Which of the following lens would you prefer to use while reading small letters found in a dictionary? a) A convex lens of focal length 5 cm b) A concave lens of focal length 5 cm c) A convex lens of focal length 10 cm

d) A concave lens of focal length 10 cm

N.SRIRAMSSPGHSS	TEST NO:7
SSLC-SCIENCE (E/M)	MARKS=10x1=10
OUARTERLY PORTIONS CHOOSE	TIME:10 minute

61.Newton's III l	aw is applicable
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- a) for a body is at rest
- b) for a body in motion
- c) both a & b

- d) only for bodies with equal masses
- 62.A convex lens forms a real, diminished point sized image at focus. Then the position of the object is at
- a) focus
- b) infinity
- c) at 2f
- d) between f and 2f
- 63. If a substance is heated or cooled, the change in mass of that substance is
- a) positive b) negative c) zero d) none of the above
- 64. The volume occupied by 1 mole of a diatomic gas at S.T.P is --.
- c. 22.4 litre d. 44.8 litre 65. The basis of modern periodic law is

b. 5.6 litre

- a) atomic number
- b) atomic mass
- c) isotopic mass
- d) number of neutrons
- 66. Which of the following is the universal solvent?
- a. Acetone

a. 11.2 litre

- b. Benzene c. Water d. Alcohol
- 67. The brain of leech lies above the
- a) Mouth
- b) Buccal Cavity c) Pharynx d) Crop
- 68. During transpiration there is loss of
- a) carbon dioxide
- b) oxygen

c) water

- d) none of the above
- 69. Site for processing of vision, hearing, memory, speech, intelligence and thought is
- (a) kidney
- (b) ear
- (c) brain (d) lungs
- 70. The hormone which has positive effect on apical dominance is:
- a) Cytokinin
- b) Auxin
- c) Gibberellin d) Ethylene

N.SRIRAMSSPGHSS	TEST NO:8
SSLC-SCIENCE (E/M)	MARKS=10x1=10
QUARTERLY PORTIONS CHOOSE	TIME:10 minute

- 71. The essential parts of a flower are
- a) Calyx and Corolla
- b) Calyx and Androecium
- c) Corolla and Gynoecium d) Androecium and Gynoecium
- 72. The region of the chromosome where the spindle fibres get attached during cell division
- a) Chromomere b) Centrosome c) Centromere d) Chromonema
- 73. A single highly coiled tube where sperms are stored, get concentrated and mature is known as
- a) Epididymis

b) Vasa efferentia

c) Vas deferens

- d) Seminiferous tubules
- 74. Which of the following have inert gases 2 electrons in the outermost shell.
- a) He
- b) Ne
- c) Ar
- d) Kr
- 75. In reflex action, the reflex arc is formed by
- (a) brain, spinal cord, muscle
- (b) receptor, muscle, spinal cord
- (c) muscle, receptor, brain
- (d) receptor, spinal cord, muscle
- 76. Identify the exocrine gland
- a) Pituitary gland b) Adrenal gland c) Salivary gland
- d) Thyroid gland
- 77. Which of the following represents 1 amu?
- a. Mass of a C 12 atom b.Mass of a hydrogen atom
- c. 1/12th of the mass of a C -12 atom
- d.Mass of O 16 atom
- 78. Vomiting centre is located in
- (a) medulla oblongata (b) stomach (c) cerebrum (d) hypothalamus
- 79. Identify the non aqueous solution.
- a. sodium chloride in water b. glucose in water
- c. copper sulphate in water
- d. sulphur in carbon-di-sulphide
- 80. Which is the sequence of correct blood flow
- a) ventricle atrium vein arteries
- b) atrium ventricle veins arteries
- c) atrium ventricle arteries vein
- d) ventricles vein atrium arteries

N.SRIRAMSSPGHSS	TEST NO:9
SSLC-SCIENCE (E/M)	MARKS=10x1=10
OUARTERLY PORTIONS CHOOSE	TIME:10 minute

81. Pharyngeal ganglion in leech is a pai	at of
a) Excretory system	b) Nervous system
c) Reproductive system	d) Respiratory system
82. The endarch condition is the character	eristic feature of
a) root b) stem c) leaves d) flo	wer
83. Which nervous band connects the tw	o cerebral hemispheres of
brain? (a) thalamus	(b) hypothalamus
(c) corpus callosum	(d) pons
84. Solubility of NaCl in 100 ml water is	s 36 g. If 25 g of salt is
dissolved in 100 ml of water how much	more salt is required for
saturation	
a. 12g b. 11g c. 16g	d. 20g
85. In the nucleus of $_{20}\text{Ca}^{40}$ , there are	
a. 20 protons and 40 neutrons b. 20	protons and 20 neutrons
c. 20 protons and 40 electrons d. 40	protons and 20 electrons
86. The eye defect 'presbyopia' can be c	corrected by
a) convex lens b) conce c) convex mirror d) Bi fo	ave lens
c) convex mirror d) Bi fo	cal lenses
87. The process of coating the surface of	f metal with a thin layer of zinc
is called a) painting b) th	inning
c) galvanization d) electroplatin	g
88. The mass of a body is measured on p	planet Earth as M kg. When it
is taken to a planet of radius half that o	f the Earth then its value will
bekg a) 4 M b) 2M c) M/4	
a) 4 M b) 2M c) M/4	d) M
89. The units form the b	backbone of the DNA.
a) 5 carbon sugar b) Phosphate c) Nitrog	genous bases
d) Sugar phosphate	
90. What is true of gametes?	
a) They are diploid b) They give ris	•
c) They produce hormones d) They are	formed from gonads

N.SRIRAMSSPGHSS	TEST NO:10
SSLC-SCIENCE (E/M)	MARKS=10x1=10
QUARTERLY PORTIONS CHOOSE	TIME:10 minute

91. LH is secreted by		
a) Adrenal gland	b) Thyroid gland	
c) Anterior pituitary	d) Hypothalamus.	
92. Node of Ranvier is found	in	
(a) muscles (b) axons (c	) dendrites (d) cyton	
93. The wall of human heart i	s made of	
a) Endocardium	b) Epicardium	
c) Myocardium	d) All of the above	
94. The segments of leech are	known as	
a) Metameres (somites) b) Pro	oglottids c) Strobila d) All the above	
95. A solution in which no me	ore solute can be dissolved in a definite	
amount of solvent at a given t	emperature is called	
a. Saturated solution b. Un s	saturated solution	
c. Super saturated solution	d. Dilute solution	
96. In a myopic eye, the imag	e of the object is formed	
a) behind the retina	b) on the retina	
c) in front of the retina	d) on the blind spot	
97.One kilogram force equal	ls to	
a) 9.8 dyne b) $9.8 \times 10^4 \text{N}$ c)	$98 \times 10^4$ dyne d) 980 dyne	
98. The centromere is found a	at the centre of the	
chromosome.		
a) Telocentric b) Metacentric	c) Sub-metacentric d) Acrocentric	
99. Anemophilous flowers ha	ve	
a) Sessile stigma b) Small s	smooth stigma	
c) Colored flower d) Large	feathery stigma	
100. To increase the sugar pro	oduction in sugarcanes they are sprayed	
with		
a) Auxin b) Cytokinin c)	Gibberellins d) Ethylene	

N.SRIRAMSSPGHSS	TEST NO:11
SSLC-SCIENCE (E/M)	MARKS=10x1=10
QUARTERLY PORTIONS CHOOSE	TIME:10 minute

101. The neurons whi	ch carries impulse from	the central nervous
system to the muscle	fibre.	

- (a) afferent neurons
- (b) association neuron
- (c) efferent neuron

- (d) unipolar neuron
- 102. Which of the following process requires energy?
- a) active transport b) diffusion c) osmosis d) all of them
- 103. In the alumino thermic process the role of Al is \_\_\_\_\_
- a) oxidizing agent
- b) reducing agent
- c) hydrogenating agent d) sulphurising agent
- 104. The volume occupied by 4.4 g of CO<sub>2</sub> at S.T.P
- b.2.24 litre c. 0.24 litre d.0.1 litre a. 22.4 litre
- 105. Power of a lens is –4D, then its focal length is
- a) 4m
  - b) -40m c) -0.25 m d) -2.5 m
- 106. The unit of 'g' is m s<sup>-2</sup>. It can be also expressed as
- a) cm s<sup>-1</sup> b) N kg<sup>-1</sup> c) N m<sup>2</sup> kg<sup>-1</sup> d) cm<sup>2</sup> s<sup>-2</sup>
- 107. 9:3:3:1 ratio is due to
- a) Segregation

b) Crossing over

c) Independent assortment

- d) Recessiveness
- 108. Syngamy results in the formation of \_\_\_\_\_\_.
- a) Zoospores b) Conidia c) Zygote d) Chlamydospores 109. Avena coleoptile test was conducted by
- a) Darwin
- b) N. Smit
- c) Paal
- d) F.W. Went
- 110. The outer most of the three cranial meninges is
- (a) arachnoid membrane

(b) piamater

(c) duramater

(d) myelin sheath

N.SRIRAMSSPGHSS	TEST NO:12
SSLC-SCIENCE (E/M)	MARKS=10x1=10
OUARTERLY PORTIONS CHOOSE	TIME:10 minute

111. Root hairs are		
a) cortical cell b	) projection of epidermal cell	
c) unicellular d	) both b and c	
112 is a relative periodic	property	
a) atomic radii b)	ionic radii	
c) electron affinity d)	electronegativity	
113. Asexual reproduction take	s place through budding in	
a) Amoeba b) Yeast c) Pl	asmodium d) Bacteria	
114. Dendrites transmit impulse	e cell body and axon transmit	
impulse cell body.		
(a) away from, away from	(b) towards, away from	
(c) towards, towards (d) away from, towards		
115. Water which is absorbed by roots is transported to aerial parts		
of the plant through a) cortex b) epidermis c) phloem d) xylem		
116. Which of the following is a triatomic molecule?		
a. Glucose b.Helium c. C	Carbon dioxide d. Hydrogen	
117. Magnification of a convex	lens is	
a) Positive b) negative c) either	er positive or negative d) zero	
118. The wall of human heart is	s made of	
a) Endocardium	b) Epicardium	
c) Myocardium	d) All of the above	
119. Which is formed during an	naerobic respiration	
a) Carbohydrate b) Ethyl alcoho	ol c) Acetyl CoA d) Pyruvate	
120. Kreb's cycle takes place in	1	
a) chloroplast b) mitochon	drial matrix c) stomata	
d) inner mitochondrial membra	ne	

c) electrical energy

N.SRIRAMSSPGHSS	TEST NO:13
SSLC-SCIENCE (E/M)	MARKS=10x1=10
QUARTERLY PORTIONS CHOOSE	TIME:10 minute

121. The outer most of the three cranial meninges is (b) piamater (a) arachnoid membrane (d) myelin sheath (c) duramater 122. Chemical formula of rust is \_----. b)  $FeO_4.xH_2O$  c)  $Fe_2O_3.xH_2O$ a) FeO.xH2O d) FeO 123. Which of the following is correct? a) Rate of change of charge is electrical power. b) Rate of change of charge is current. c) Rate of change of energy is current. d) Rate of change of current is charge. 124. One kilogram force equals to c)  $98 \times 10^4$  dyne b)  $9.8 \times 10^4 \,\text{N}$ d) 980 dyne a) 9.8 dyne 125. SI unit of resistance is b) joule d) ohm meter a) mho c) ohm 126. The neurons which carries impulse from the central nervous system to the muscle fibre. (a) afferent neurons (b) association neuron (c) efferent neuron (d) unipolar neuron 127. In a simple circuit, why does the bulb glow when you close the switch? a) The switch produces electricity. b) Closing the switch completes the circuit. c) Closing the switch breaks the circuit. d) The bulb is getting charged 128. Which is the sequence of correct blood flow a) ventricle - atrium - vein – arteries b) atrium - ventricle - veins – arteries c) atrium - ventricle - arteries – vein d) ventricles - vein - atrium - arteries 129. Temperature is the average \_\_\_\_\_\_ of the molecules of a substance b) sum of P.E and K.E a) difference in K.E and P.E d) difference in K.E and T.E c) difference in T.E and P.E 130. Kilowatt hour is the unit of a) resistivity b) conductivity

d) electrical power