### LEAD Talent Search Exam - LTSE 2015

#### SCHOLARSHIP-CUM-ADMISSION TEST - For Students passing 10th std in 2015

Date : Sunday, 19th April 2015. Exam Time : 10.00am – 12.30pm Reporting Time : 9.30am Entrance Test for Admission to 2 Year Residential Program offered by

Sl.	College	City	Gender	Coaching For	No. of FREE Seats
1	Alpine PU College	Bangalore	Only Boys	IIT-JEE / NIT + KCET Engineering	10
2	M S Academy	Hyderabad	Only Boys	IIT-JEE / NIT	30
3	Shaheen PU College	Bidar	Boys & Girls	Karnataka & Kerala CET Med & Engg	50
4	Shaheen PU College	Bangalore	Only Boys	Karnataka & Kerala CET Med & Engg	10
5	Shaheen PU College	Gulbarga	Boys & Girls	Karnataka & Kerala CET Med & Engg	30
6	Shaheen Challenger Junior College	Hyderabad	Only Girls	Karnataka & Kerala CET Med & Engg	10
7	Shaheen Crescent PU College	Bangalore	Only Girls	Karnataka & Kerala CET Med & Engg	07

NAME OF THE STUDENT	·
NAME OF THE SCHOOL	<u>:</u>
CENTRE CODE	·
10 <sup>th</sup> STD HALL TICKET NUMBER	:
TELEPHONE NUMBER	·
EMAIL ID(as mentioned in the application form	):

#### **INSTRUCTIONS TO THE CANDIDATE:**

- 1. This question booklet contains **120** questions. Please verify that this booklet contain all **120** questions in correct serial order.
- 2. This question paper consists of 4 parts:

Part I Logical Reasoning, Part II Mathematics, Part III Physics, Part IV Chemistry, Part V Biology. It contains questions of the objective type only. Indicate your answers **ONLY** on the OMR sheet. Follow the instructions strictly.

3. Students opting for IIT-JEE 2017 should answer Part I, Part II, Part III & Part IV only.

Time: 150 mins. Marks: 95

Students opting for Medical 2017 should answer Part I, Part III, Part IV & Part V only.

Time: 150 mins Marks: 95

- 4. **NEGATIVE MARKING:** Each correct answer will be awarded one mark, <sup>1</sup>/<sub>4</sub> marks will be deducted for each incorrect answer. More than one answer marked against a question will be deemed as an incorrect response and will be negatively marked.
- 5. Use of Calculators/logarithmic tables is **NOT ALLOWED.**

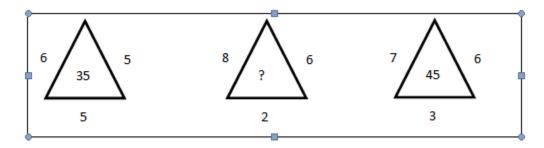
DO NOT OPEN THE BOOKLET UNTIL ASKED TO DO SO

Wish You all the best!

# **Part 1: Logical Reasoning**

l.	rina in	e next number n	n the seq	uence /:48	:: 8 : ?			
	a.	78						
	b.	65						
	c.	59						
	d.	63						
2.	Choose	a number that i	s similar	to the numbers	in the se	et 579, 489, 363		
	a.	471						
	b.	284						
	c.	296						
	d.	167						
3.	Find th	e odd pair						
	a.	54-62						
	b.	70-80						
	c.	28-32						
	d.	21-24						
4.	A watc point?	h reads 7:30. If t	the minu	te hand points a	t West, i	n which direction	n will the	e hour hand
	a.	South-West						
	b.	North-West						
	c.	South-East						
	d.	North-East						
5.		rly morning imn of the house fe				rectly facing my was I facing?	house. I	noticed that the
	a.	South	b.	North	c.	East	d.	West

- 6. Complete the series: 11, 23, 48, 99, 202, ...
  - a. 401
  - b. 408
  - c. 409
  - d. 405
- 7. Complete the series: A, CD, GHI, ..., UVWXY
  - a. LMNO
  - b. MNO
  - c. NOPQ
  - d. MNOP
- 8. Find the missing number



- a. 55
- b. 50
- c. 36
- d. 40

9. Find the missing number

81	9
18	

84	12
14	

88	11
3	

- a. 18
- b. 16
- c. 25
- d. 8
- 10. Other than noon and midnight, how many times do the hour and the minute hands cross each other?
  - a. 11
  - b. 10
  - c. 9
  - d. 12
- 11. Five marbles of different colors are arranged in a line. You decide to arrange these marbles in different unique combinations, but move only one marble per minute. How much time will it take for you to arrange them in all possible combinations?
  - a. One hour
  - b. One and half hours
  - c. Two hours
  - d. Two hours and 20 minutes
- 12. I told my daughter: "I was your present age when you were born". I am 40 years old now. How old will be my daughter 10 years from now?
  - a. 10
  - b. 20
  - c. 30
  - d. 25

13. If 9 \* 3 = 144 and 6 \* 3 = 81, what is 10 \* 2? 100 a. 144 b. 104 c. d. 169 14. Five timers are set to ring at durations of 12 seconds, 15 seconds, 20 seconds, 25 seconds and 45 seconds. If they all ring together at 12:00 noon, when will they all ring together again next? 1:00 PM a. b. 1:05 PM c. 12:30 PM d. 12:15 PM 15. Imagine that Dec 1st of some year is a Tuesday. When will the last Sunday of that year fall on? Dec 29th a. Dec 27th b. c. Dec 26th d. Dec 30th 16. All students in a class are arranged in a line. You are 10th in the line from the beginning and I am 8th from the end. When we switch places, you are 25th from the beginning. How many students are in the class? 32 a.

b.

c.

d.

29

30

34

17.	A caterpillar climbs up a wall five meters every minute, but slips back two meters in the next minute. If it starts climbing a 90 meters tall wall at 5:00 AM, at what time will it touch the top of the wall?							
	a.	6:00 AM						
	b.	5:30 AM						
	c.	5:59 AM						
	d.	6:01 AM						
18. father's		g out to a photograph, a man tells his friend, "She is the daughter of the only son of my fe". How is the girl in the photograph related to the man?						
	a.	Niece						
	b.	Daughter						
	c.	Sister						
	d.	Cousin						
19.	How many numbers are there from 1 to 50, each of which is exactly divisible by 4 and also contain 4 as a digit in it?							
	a.	4						
	b.	6						
	c.	3						
	d.	5						
20.	How m	any times are the hour and minute hands at 1800 from each other in 24 hours?						
	a.	24						
	b.	23						
	c.	22						
	d.	21						

### **Part 2: Mathematics**

- 21. If  $\frac{\sqrt{3}-1}{\sqrt{3}+1} = a b\sqrt{3}$ , then find values of 'a' and 'b'
  - a. a = -2, b = 1
  - b. a = 2, b = 1
  - c. a = -2, b = -1
  - d. a = 2, b = -1
- 22. If  $\sqrt{5} = 2.236$  and  $\sqrt{3} = 1.732$ , find the value of  $\frac{2}{\sqrt{5} + \sqrt{3}} + \frac{2}{\sqrt{5} \sqrt{3}}$ 
  - a. 16.36
  - b. 19.268
  - c. 15.296
  - d. 4.47
- 23. When the price of onions reduced by 30%, I could buy 3 more kilograms of it at the same previous price of Rs 280. What was the original price of onions?
  - a. 80
  - b. 40
  - c. 36
  - d. 24
- 24. What percentage of a full day is one hour and forty five minutes?
  - a. 7.228%
  - b. 7.291%
  - c. 7.193%
  - d. None of these
- 25. Abdullah drank 77 glasses of milk in a week, each day drinking 3 more than the previous day. How many glasses of milk did he drink on the first day?
  - a. 3
- b.
- c. 2
- d. 1

- 26. You are given two fractions. Fraction A is twice Fraction B. The product of the two fractions is . What is the value of fraction B?
  - a. 1/25
  - b. 2/5
  - c. 1/5
  - d. None of these
- 27. What is the value of the expression

$$\frac{(x-y)^3 + (y-z)^3 + (z-x)^3}{(x-y)(y-z)(z-x)}$$

- a. 30
- b. 3
- c. x + y + z
- d. x y z
- 28. If x + y + z = 0, then  $\frac{x^2}{yz} + \frac{y^2}{zx} + \frac{z^2}{xy}$  is equal to
  - a. 3
  - b. 1
  - c. -3
  - d. 27
- 29. If  $\left(\frac{a}{b}\right)^{(x-1)} = \left(\frac{b}{a}\right)^{(x-3)}$ , find the value of x
  - a. 4
  - b. :
  - c. 2
  - d. 1

- 30. For the equation  $3x^2 + px + 3 = 0$ , p > 0, if both the roots are the same, then p is equal to
  - a.  $\frac{1}{3}$
  - b. 6
  - c. 2
  - d. -
- 31. If  $\tan \theta = \frac{4}{3}$ , what is the value of  $\sqrt{\frac{1-\sin \theta}{1+\sin \theta}}$ 
  - a. 3
  - b. 1/3
  - c. 1/4
  - d. 4
- 32. If 5 tan  $\theta = 4$ , find the value of  $\frac{5 \sin \theta 3 \cos \theta}{5 \sin \theta + 2 \cos \theta}$ 
  - a.  $\tan \theta$
  - b.  $3 \tan \theta$
  - c. 1/3
  - d. 1/6
- 33. Two cars are driving on the road towards a building from opposite sides. The angles of elevation of the top of the building as observed from the two cars are 30° and 45°. If the building is 100 units high, the distance between the two cars is?
  - a. 273 units
  - b. 500 units
  - c. 440 units
  - d. 370 units

34.	The cost of carpeting a hall 20 feet long is Rs 40. Had the breadth been 3 feet less, the cost would have been Rs 25. Find the area of the hall.							
	a.	360 ft2						
	a.	260 ft2						
	b.	160 ft2						
	c.	200 ft2						
35.	A drum manufacturer has decided to make the radius of the drum be twice as large. However, he still wants the drum to contain the same amount of liquid. What should be the new height of the drum?							
	a.	40% smaller						
	b.	75% smaller						
	c.	50% smaller						
	d.	20% smaller						
36.	The diagonals of a rhombus are 48 cm and 64 cm. The height of the rhombus is							
	a.	38.4 cm						
	b.	43.5 cm						
	c.	30.5 cm						
	d.	29 cm						
37.	The poi	int on the x-axis which is the same distance from (5, 4) and (-2, 3) is						
	a.	(0, 0)						
	b.	(2,2)						
	c.	(2,0)						
	d.	(1.5, 3.5)						

- 38. If two dice are thrown, what is the probability of getting two numbers whose product is even?
  - a. 1/2
  - b. 1/3
  - c. 5/16
  - d. 3/4
- 39. If  $\frac{a^2-1}{a} = 2$ , then the value of is  $\frac{a^6-1}{a^3}$ 
  - a. 11
  - b. 12
  - c. 13
  - d. 14
- 40. If two triangles are on the same base and between the same parallels, then the ratio of their areas is
  - a. 1:1
  - b. 1:2
  - c. 2:1
  - d. 1:3
- 41. A circle has a radius of 5 cm. You have a chord in it of length 8 cm. The distance of the chord from the center is
  - a. 2 cm
  - b. 5 cm
  - c. 3 cm
  - d. 6 cm

42.		ecord of a weath asts were correct ct?			•		•	
	a.	0.8	b.	0.33	c.	0.75	d.	0.7
43.	If mea	an = 110 and mo	de = 80,	then the median	is			
	a.	90	b.	95	c.	105	d.	100
44.	•	erical ball of rad o of the balls are				•		balls. If the radii
	a.	2.5 cm	b.	1.75 cm	c.	1 cm	d.	1.25 cm
45.	-	's grandmother w from now. Eight			•	-		imes of his age 8 grandmother?
	a.	2:7	b.	11:53	c.	5:17	d.	3:8

## Part 3: Physics

- 46. A person moves a certain distance in a certain time. If 1/3 of the distance is covered in 2/3 of the time with speed V1, and the rest of the 2/3 distance in 1/3 of the time speed V2, then V1 / V2 is
  - a. 1/2
  - b. 1/4
  - c. 4/9
  - d. 2/9
- 47. If one puts ones ears to the steel rail, the sound of a coming train can be heard even when the Train cannot be seen. One can conclude from this observation that
  - a. Sound travels faster in steel than in air.
  - b. Amplitude of sound in the rail is much larger than in air.
  - c. Sound can travel larger distances in solids than in air.
  - d. Quality of sound in rail is better than in air.

The reasonable conclusions are

- a. a and c
- b. a and b
- c. b and c
- d. b and d
- 48. Examine the following statements:
  - a. When two bodies are rubbed against each other, the charges are created.
  - b. When two bodies are rubbed against each other, charges in these bodies are redistributed.
  - c. When two bodies are rubbed against each other, similar charges appear on each.
  - d. When two bodies are rubbed against each other, dissimilar charges appear on both.

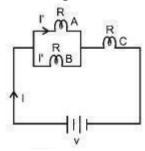
The correct statements are:

- a. All four
- b. None
- c. Only A and C
- d. Only B and D
- 49. Bottom of the bucket containing water appears to be raised; physical phenomenon behind it is:
  - a. Reflection of light

- b. Refraction of light
- c. Diffraction of light
- d. Dispersion of light
- 50. The type of motion with reference to friction in decreasing order is:
  - a. rolling, static, sliding
  - b. rolling, sliding, static
  - c. static, sliding, rolling
  - d. sliding, static, rolling
- 51. Mohan moves 30 mts in a straight line towards East and then moves 40 mts to the South. Find his displacement:
  - a. 70 mts
  - b. 20 mts
  - c. 50 mts
  - d. 60 mts
- 52. A vibrator generates the waves of the speed 330 m/s and wavelength 1.1 m. Then the frequency and timeperiod is
  - a. 264 Hz, 0.0037 sec
  - b. 412.5 Hz, 0.0024 sec
  - c. 300 Hz, 0.0033 sec
  - d. 264 Hz, 0.0033 sec
- 53. When a stone is dropped into the lake, the produced waves are
  - a. Transverse waves
  - b. Sound waves
  - c. Longitudinal waves
  - d. Electromagnetic waves
- 54. The power of the concave lens is 0.05 per cm. At what distance should the object from the lens be placed so that it forms an image at 10 cm from the lens?
  - a. 20 cm
  - b. 1/20 cm
  - c. 10 cm
  - d. 1/10 cm
- 55. The acceleration due to gravity of the earth is 9.8 m/s<sup>2</sup> and the radius of the earth is 6400 km. What is the approximate mass of the earth? Take Universal Gravitational constant  $G = 6.67 \times 10^{-11} \text{ Nm}^2/\text{Kg}^2$ :
  - a.  $6 \times 10^{24} \text{ kg}$
  - b.  $6 \times 10^{20} \, \text{kg}$
  - c.  $9 \times 10^{24} \text{ kg}$
  - d.  $9 \times 10^{20} \text{ kg}$

- 56. Which of the following correctly describes the magnetic field near a long straight wire?
  - a. The field consists of straight lines perpendicular to the wire.
  - b. The field consists of straight lines parallel to the wire.
  - c. The field consists of radial lines originating from the wire.
  - d. The field consists of concentric circles centred on the wire.
- 57. Boiling point of water in Fahrenheit scale is
  - a. 180 deg F
  - b. 158 deg F
  - c. 100 deg F
  - d. 212 deg F
- 58. Heat supplied to a substance at its melting point is used for
  - a. Rise in temperature
  - b. Change of state
  - c. Both (1) and (2)
  - d. Doing work
- 59. A car is moving with a constant speed of 70 km/h. Which of the following statements is correct?
  - a. The acceleration of the car is definitely zero.
  - b. The car has an acceleration only if it is moving along a curved path
  - c. The car may have an acceleration even if it is moving along a straight path
  - d. The car may not have an acceleration even if it is moving along a curved path
- 60. A box of mass 20 kg is pushed along a rough floor with a velocity 2 m/s and then let go. The box moves 5 m on the floor before coming to rest. What must be the frictional force acting on the box
  - a. 4 N
  - b. 2 N
  - c. 20 N
  - d. 8 N

- 61. A spring balance measures the weight of an object in air to be 0.1 N. It shows a reading of 0.08 N when the object is completely immersed in water. If the value of acceleration due to gravity is 10m/s<sup>2</sup>. The volume of the object is
  - a. 20 cm<sup>3</sup>
  - b. 80 cm<sup>3</sup>
  - c.  $200 \text{ cm}^3$
  - $d. 2 cm^3$
- 62. Consider a simple circuit as shown containing a battery and three identical incandescent bulbs A, B and C. Bulb A is wired in parallel with bulb B and this combination is wired in series with bulb C. What would happen to the brightness ofthe other two bulbs if bulb A were to burn out?
  - a. Only bulb B would get brighter.
  - b. Both B and C would get brighter.
  - c. Bulb B would get brighter and Bulb C would get dimmer.
  - d. There would be no change in the brightness of either bulb B or bulb C.



- 63. A ball of mass 0.20 kg falls freely from a certain height and rebounds elastically with a speed of 40 m/s. The change in momentum of the ball is
  - a. 4 kg-m/s
- b. 8 kg-m/s
- c.16 kg-m/s
- d.40 kg-m/s
- 64. The amount of energy consumed by a 10HP water pump in 10 minutes to lift the water to overhead tank is:
  - a. 26.856 MJ
  - b. 4.476 MJ
  - c. 53.712 MJ
  - d. 13.428 MJ
- 65. A ray of light passes from denser medium to rarer medium. If the thickness of the denser medium is doubled, then the emerging angle is
  - a. also doubled.
  - b. Reduced by its half.
  - c. Not affected.
  - d. Critical angle.

- 66. Inside the magnet, the field lines run
  - a. From south to north
  - b. Away from north pole
  - c. From north to south
  - d. Away from south pole
- 67. When light passes through a prism, the colour which deviates the least is
  - a. Red
- b. Violet
- c. Green
- d.Blue

- 68. An electric fuse is based on
  - a. the chemical effect of the current
  - b. the heating effect of the current
  - c. the magnetic effect of the current
  - d. None of these
- 69. Two charged bodies having equal potential are connected through a conducting wire. In this case
  - a. current will flow.
  - b. current will not flow.
  - c. cannot say.
  - d. current will flow if a resistor is also connected.
- 70. A body of weight W is suspended from the ceiling of a room through a rope of weight R. The ceiling pulls the rope by a force of
  - a. W
  - b. R
  - c. W + R
  - d. (W + R)/2

# Part 4: CHEMISTRY

71. How many 6	electrons are presen	nt in second sh	ell of Oxygen?	•			
a) 2	b)6 c)	8	d)4				
72. Most soluble	e in water is —						
a) Camphor	b) Sugar						
c) Sulphur	d) Commo	on Salt					
73. The number	of moles of solute	present in 1 kg	g of a solvent is	s called its			
a) molality	b) molarit	у					
c) normality	d) formali	ty					
74. The most ele	ectronegative atom	among the fol	lowing is				
a) Oxygen	b) Fluorin	e					
c) Nitrogen	d) Helium	d) Helium					
75. The metallu	rgical process in w	hich a metal is	obtained in a f	used state is called			
a) smelting	b) Roastir	ng					
c) calcinations	d) froth fl	oatation					
76. Which solut	ion is most acidic						
a) pH = 6	b) pH = 7		c) $pH = 3$	d) pH = 2			

77. The main buffer system of the human blood is							
a) H <sub>2</sub> CO <sub>3</sub> - HCO <sub>3</sub>			b) $H_2CO_3 - CO_3^{2-}$				
c) CH <sub>3</sub> COOH -	CH <sub>3</sub> COO <sup>-</sup>		d) NH <sub>2</sub> CONH <sub>2</sub> - NH <sub>2</sub> CONH <sup>+</sup>				
78. The gas pres	sent in the strato	sphere whic	h filters out some of	the sun's ultraviolet light and			
provides an effective shield against radiation damage to living things is							
a) helium	b) ozor	ne c	) oxygen	d) methane			
79. The formula	a C <sub>6</sub> H <sub>5</sub> -CO-CH <sub>3</sub>	represents					
a) Acetone	b) Acet	tic acid c	e) Acetophenone	d) Phenyl acetate			
80. The names of	of the scientists-	Newlands, l	Mendeleev, and Mey	er are associated with the			
development of	•						
a) atomic struct	ure	b) metallur	gy				
c) periodic table	e of elements	d) discover	y of elements				
81. The half life	e period of an iso	otope is 2 ho	urs. After 6 hours wl	nat fraction of the initial quantity of			
the isotope will	be left behind?						
a) 1/6	b) 1/3	c) 1/16	d) 1/8				
82. The number of electrons presents in H <sup>+</sup> is							
a) zero	b) one	c) two	d) three				
83. The hardest	form of carbon	is					
a) coke	b) Graphite	c) charcoal	d) Diamond				

84. The action of water on quick lime is an example of which type of reaction?						
a) Combination	b) Displacement	c) Decomposition	d) Redox			
85. Following is the rea	activity series in decreasi	ng order of their reactivi	ty -			
Magnesium > Zinc > In	ron > Lead > Copper > S	ilver > Gold				
Which one of the follow	wing metals can displace	copper from copper sulp	phate solution?			
a) Zn b) Ag	c) Au	d) None				
86. The method that ca	nnot be used for removir	ng permanent hardness of	f water is			
a) adding sodium carbo	onate b) disti	illation				
c) adding caustic soda	d) Boil	ling				
87. The hydronium ion	is					
a) H <sup>+</sup>	b) HO	c) H <sup>2+</sup>	d) H <sub>3</sub> O <sup>+</sup>			
88. Formalin is :						
a) 60 % formic acid	b) 40 % formal	ldehyde				
c) 60 % Acetic acid	d) 40% Acetic	acid				
89. Which of the follow	ving pairs are bivalent m	etals?				
a) Zn, Al	b) Fe, Al	c) Ca, K	d) Mg, Zn			
90. Which of the following show variable valency?						
a) Mg	b) Zn	c)Fe	d) K			
91. The total number of	f covalent bonds in prop	ane is				
a) 6	b) 8	c) 10	d) None of these			

92. Which of the following compounds contain least number of oxygen in its molecules ?						
a) Nitric acid	b) Sodium Carbonate					
c) Sulphuric acid	d) Zinc oxide					
93. The oxygen atom has 8 protons and 8 electrons. The oxide ion O <sup>2-</sup> will have						
a) 8 protons and 6 electrons						
b) 6 protons and 8 electrons						
c) 8 protons and 10 electrons						
d) 8 protons and 16 electrons						
94. The total number of atoms present in 3 moles of water is						
a) 6.02 x 10 <sup>23</sup>	b) 3 x 10 <sup>23</sup>	c) $1.806 \times 10^{24}$	d) 12.04 x 10 <sup>24</sup>			
95. Which of the following statements is wrong about alkynes?						
a) They have general formula $C_nH_{2n-2}$						
b) They have carbon – carbon triple bond						
c) They have general formula $C_nH_{2n}$						
d) The first member is ethyne						

### **Part 5: BIOLOGY**

- 96. A cross is made between true breeding tall and dwarf pea plants, in F<sub>1</sub> generation all plants appear tall. Up on selfing F<sub>1</sub> hybrids in F<sub>2</sub> generation, both tall and dwarf plants appear. Which principle of inheritance is explaining this genetic phenomenon is
  - a. Law of dominance
  - b. Law of segregation
  - c. Law of unit character
  - d. Law of independent assortment.
- 97. Cold treatment given to the seeds for the induction of early flowering is
  - a. Photoperiodism
  - b. Vernalization
  - c. Photorespiration
  - d. Cryopreservation
- 98. Light reaction of photosynthesis occurs in grana of chloroplast and it results in formation of following assimilatory powers is
  - a. ATP
  - b.  $NADPH + H^+$
  - c. O2
  - d. Both a and b
- 99. Which of the following acts as antitranspirant
  - a. Gibberalic acid
  - b. Auxin
  - c. Ethylene
  - d. Phenyl mercuric acetate
- 100. The RQ value becomes one when
  - a. Oxygen consumed more than CO<sub>2</sub> evolved.
  - b. Oxygen consumed less than CO<sub>2</sub> evolved.
  - c. Oxygen consumed equals to CO<sub>2</sub> evolved.
  - d. Respiration stops.
- 101. Causative agent for tuberculosis is
  - a. Mycobacterium leprae
  - b. Mycobacterium tuberculosis
  - c. Yersinia pestis
  - d. Vibrio cholera

102.		If DNA contains 15% Adenine find out the percentage of C+G
	a.	15%
	b.	70%
	c.	35%
	d.	20%
103.		What happens when RBCs are kept in distilled water
	a.	Swelling due to endosmosis and finally burst
	b.	Swelling due to endosmosis but do not burst
	c.	No change at all
	d.	RBC undergoes shrinking
104.		G.J. Mendel conducted experiments upon
	a.	Allium cepa
		Drosophilia melanogaster
		Pisum sativum
	d.	Cucurbita pepo
105.		If both sperm and ovum contain 7 chromosomes, the resulting embryo contains chromosomes.
	a.	7
	b.	3.5
	c.	14
	d.	7.5
106.		Which of the following are the symptoms of diabetes mellitus
	a.	Polyurea
	b.	Glycosurea
	c.	Ketonurea
	d.	All of these
107.		Which of the following are responsible for acid rain
	a.	$CO_2$
	b.	CO
	c.	$NO_2$
	d.	$\mathrm{CH_4}$
108.		Osteoporosis i.e. weakening of bones is caused by the hypersecretion of
ho	mor	
	a.	Insulin
	b.	Parathormone
	c.	Thyrosine
	d.	Thyroxine

109.		Saliva contains enzymes
	a.	Ptyalin
	b.	Pepsin
	c.	Rennin
	d.	Trypsin
110.		Milk teeth contain total teeth
110.	a.	10
		25
		20
		32
	u.	52
111.		During which stage of cell division crossing over occurs
	a.	Zygotene
	b.	Pachytene
	c.	Diplotene
	d.	Leptotene
112.		The valve present in human heart between Right Atrium and Right Ventricle is
	a.	
	b.	•
	c.	Tricusid
	d.	Eustachian
113.		Programmed cell death is called
113.	a.	Endocytosis
	b.	•
		Phagocytosis
		Pinocytosis
	u.	Tinocytosis
114.		The normal blood pressure is 120/80 mmHg. The normal pulse pressure is
	a.	40 mmHg
	b.	200 mmHg
	c.	1.5 mmHg
	d.	9600 mmHg
115.		During which stage of cell division centromere splits
	a.	Metaphase
	b.	Telophase
	c.	Prophase
	d.	Anaphase

116.		Root hairs are
	a.	Unicellular
	b.	Multicellular
	c.	Binucleated
	d.	Multinucleated
117.		Antimicrobial activity in tears is due to which enzyme
	a.	Pepsin
	b.	Lysozyme
	c.	None of these
	d.	Trypsin
118.		Maintenance of body posture is due to which part of the brain
	a.	Hypothalamus
	b.	Cerebrum
	c.	Cerebellum
	d.	Medulla
119.		The ability of a single plant cell to develop into a whole plant is called
	a.	Pluripotency
	b.	Totipotency
	c.	Unipotent
	d.	All of these
120.		Which blood group lacks blood antigens
	a.	A b. B c. AB d. O
		End of Question Paper