# GREEN PARK MATRIC HR.SEC.SCHOOL , SIRUVACHUR.

## FIRST MIDTERM TEST- JULY – 2019

## STD: X

### TIME: 1.30HRS

## **SUB: SCIENCE**

## MARKS: 50 MARKS

CHOOSE THE BEST ANSWER25X1=25The unit of moment a couple is		
Nmb) N/mc) Newtond) None		
2. The unit is impulsive force is		
Ns b) kgm/s c)both a&b d)None		
3. The formula of calculate Mass of Earth		
$M=gR^2/G$ b) $M=GR^2/g$ c)both a&b d)None		
4. The value of acceleration due to gravity on the surface of the moon is		
1.625 ms <sup>-2</sup> b) 1.925 ms <sup>-2</sup> c) 1.725 ms <sup>-2</sup> d)all the above		
calculate the velocity of a moving body of mass 5Kg whose linear momentum is $2.5$ Kgms <sup>-1</sup> . 2 ms <sup>-1</sup> b) 0.5 ms <sup>-1</sup> c) 5 ms <sup>-1</sup> d) $2.5$ ms <sup>-1</sup>		
6 lenses are used in wide angle spy hole in doors.		
concave b)convex c)both a&b d)biconcave		
7. Compound microscope has times more magnification power than simple microscope.		
50—100 b) 50—200 c)50—250 d) 100—150		
8. Which microscope used in jewelers?		
compound b) simple c) cylindrical d) both a& b		
The mass of proton is approximately amu . a) 2 amu b) 1 amu c) 3 amu d) 4 amu	1	
10. The first scientific theory of the atom was proposed by		
Rutherford b) J.J. Thomson c) Neils Bohr d)None		
11. The Diameter of eye ball is approximately		
2.5cm b) 2.3 cm c)2.1cm d) 2.0cm		
12. The value of cubical expansion of mercury is		
a) $18.2 \times 10^{-5} k^{-1}$ b) $20.7 \times 10^{-5} k^{-1}$ c) $6 \times 10^{-5} k^{-1}$ d) None		
13. The unit of ionization energy is		
a) $kJ/mol$ b) $kJmol^{-1}$ c) both a&b d) $kJ$		

- 14. The melting point of aluminium ------
- a) $600^{0}$ C b) $620^{0}$ C c) $640^{0}$ C d) $660^{0}$ C
- 15. which of the following low density metal?
- a) copper b)Iron c) aluminium d) all the above
- 16. The blister copper contains ------ % pure copper and -----% of impurities.
- a)95.5&4.5 b) 98&2 c)99 & 1 d)99.5&0.5
- 17. The diameter of chloroplast is -----.
- a) 2-10micrometer b) 2-8 micrometer c)5-10 micrometer d)None
- 18. The mitochondria shape is ------.
- a)0.2-0.5micrometer b)0.2-2 micrometer c)0.5-2.0micrometer d)all the above
- 19. Mitocondrial membarane size of ------.
- a)50-70Å b)60-70Å c)50-60Å d) 40-50Å
- 20. ----- is the largest portion of alimentary canel.
- a) buccal cavity b) crop c) anus d) rectum
- 21. Leeches prevent blood clotting by secreting a protein called------.
- a) crop b) hirudin c) papillae d) none
- 22. The floor of the buccal cavity is occupied by a ------tongue
- a) muscular b) caecum c) tear d) None
- 23. ----- teeth are absent in rabbit.
- a) premolar b) incisors c) molar d)canines
- 24. who is the father of modern physiology?
- a) W.Harvi b) His c) N.grew d) None
- 25. The body nervous system can transmit signals at speeds of ------.
- a) 350km/h b) 220 c) 220mph d) both a& c

#### **GREEN PARK MATRIC HR.SEC.SCHOOL, SIRUVACHUR**

### FIRSTMIDTERM TEST – JULY 2019

### STD: X SUB: SCIENCE

### TIME: 30 MINUTES MARKS: 75 MARKS

#### I. CHOOSE THE BEST ANSWER

15X1=15

- 1. The unit of 'g' is ms<sup>-2</sup>. It can be also expressed as -----?
  - a) cms<sup>-1</sup> b) Nkg<sup>-1</sup> c) Nm<sup>2</sup>kg<sup>-1</sup> d) cm<sup>2</sup>s<sup>-2</sup>
- 2. In which of the following sport turning of effect of force used-----?
  - a) Swimming b)Tennis c) Cycling d) Hockey
- 3. Magnification of a convex lens is -----?
  - a) Positive b) Negative c) both a&b d) Zero
- 4. The eye defect 'Presbyopia' can be corrected by------ lens?
  - a) Concave b) Convex c) Bifocal d) None
- 5. Which of the following is a triatomic molecule?
  - a) Glucose b) Helium c) Carbon di oxide d) Hydrogen
- 6. The volume occupied by 1 mole of a diatomic gas at STP is ----?
- a) 11.2 litre b) 22.4 litre c) 5.6 litre d)44.8 litre
- 7. ----- group contains the number of Halogen family? a) 17 b) 15 c) 16 d) 18
- 8. The chemical formula of rust is -----?

a) Feo.x H<sub>2</sub>O b) FeO<sub>4</sub>.x H<sub>2</sub>O c) Feo d) Fe<sub>2</sub>O<sub>3</sub>.x H<sub>2</sub>O

- 9. ----- is an important metal to form amalgam. a) Ag b) Hg c) Mg d) Al
- 10. The endarch condition is the characteristic feature of ----?
- a) Root b) Stem c) Leaves d) Flower
- 11. Glycolysis takes place in -----? a) Chloroplast b) Cytoplasm c) Mitochondria d) None
- 12. ----- pairs spinal nerves are present in rabbit. a) 35 b) 37 c) 32 d) 36
- 13. Mammals are ------ blooded animals. a) Warm b) Cold c) Poikilothermic d) None
- 14. 'Heart to heart' is called -----?
- a) AV node b) SA node c) Purkinji fibers d) None

- 15. Vomiting centre is located in -----?
- a) Stomach b) Cerebrum c) Hypothalamus d) Medulla oblongata

### **II.ANSWER THE ANY 20 QUESTION**

- 16. State Newton's second law?
- 17. Define moment of a couple?
- 18. Difference between mass and weight?
- 19. How does an astronaut float in a space shuttle?
- 20. State Snell's law?
- 21. State Rayleigh's law of scattering?
- 22. Why are used traffic signals red in colour
- 23.What is power of accommodation of eye?
- 24. Define Relative Atomic Mass.
- 25. Find the percentage of nitrogen in Ammonia?
- 26. Define Atomicity.
- 27. Calculate the number of moles in 27g of Aluminium ?
- 28. Explain smelting process?
- 29. What are the uses of Aluminium?
- 30. A is a silvery white metal. A combines with  $O_2$  to form B at  $800^{\circ}$ C, the alloy of A is used in making

the aircraft. Find A and B?

- 31. Write the uses of Iron?
- 32. What is respiratory quiotient?
- 33. Write a short note on Mesophyll?
- 34. Name the three basic tissues system in following plants?
- 35. Write the dental formula of rabbit?
- 36. How is diastema formed in rabbit?
- 37. Draw and label the structure of oxysomes?
- 38. Give the common name of the Hirudinaria granulosa and Oractologus cuniculus?
- 39. Why is the teeth of rabbit called heterodent?
- 40. What is cohesion?
- 41. Name two layered protective covering of human heart?
- 42. What are heart sounds? How are they produced?

#### 20X2=40

- 43. Difference between systemic circulation and pulmonary circulation?
- 44. Name the parts of the hind brain?
- 45 What is the function of thalamus and cerebellum?
- 46. Define corpora quadrigemina?
- 47. Write a short notes on pons?

#### **III. ANSWER THE ALL QUESTION**

48. With a neat labelled diagram explain the structure of a neuron? (OR)

Enumurate the function of blood?

49. List out the parasitic adaptations in leech? (OR)

Difference between (i) Monocot root and Dicot root (ii) Aerobic and anaerobic respiration?

50. List out the properties of light? (OR)

State and prove the law of conservation of linear momentum?

51. (i) Give the salient features of modern atomic theory? (ii) Calculate the number of water molecule present in one drop of water which weights 0.18 g (**OR**)

A is a reddish brown metal which combines with O<sub>2</sub> at <1370 K gives B, a black coloured compound.

At a tempareature > 1370K, A gives C which is red colour. Find A,B,C with reaction?

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4X5=20