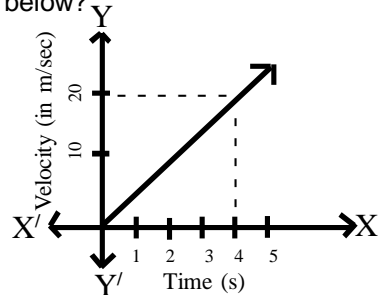


- (1) -

- Which of the following substances is pure?
(A) Brass (B) Bronze
(C) Antimony (D) Steel
- Milk is a _____ mixture.
(A) Homogeneous (B) Heterogenous
(C) Both(a) and (b) (D) none of these
- What is the valency of phosphate ion?
(A) 1 (B) 2
(C) 3 (D) 4
- What is the chemical name of the compound " $(\text{NH}_4)_2\text{SO}_4$ "
(A) Ammonium sulphate
(B) Diammonium sulphate
(C) Tetrammonium sulphate
(D) Ammonium tetrasulphate
- What is the ratio of the number of atoms present in a mole of oxygen molecule to that a mole of oxygen atom?
(A) 1 (B) 2
(C) 6.022×10^{23} (D) $2 \times 6.022 \times 10^{23}$
- What is the change in temperature when 3.34×10^5 J of heat is supplied to 1kg of ice at 0°C ?
(A) 0°C (B) 1°C
(C) 50°C (D) 100°C
- What is the other name of canal ray?
(A) Cathod ray (B) Anode ray
(C) Alpha ray (D) Gamma ray
- 12g of magnesium combines with 8g of oxygen to produce 20g of magnesium oxide. If 24g of magnesium is allowed to react with 100g of oxygen, what mass of magnesium oxide will be produced?
(A) 124g (B) 100g
(C) 40g (D) 20g
- Isobars are the atoms having the same number of _____.
(A) protons (B) Neutrons
(C) Nucleons (D) None of the above
- Which state of matter is/are considered as fluid :
(A) only liquid (B) only gas
(C) Both liquid and gas
(D) Solid liquid as well as gas
- What is the chemical formula of neon? :
(A) N (B) N_2
(C) Ne (D) Ne_2
- The approximate ratio of the diameter of atom to that of its radius is _____.
(A) 10^5 (B) 10^5mm
(C) 10^5cm (D) 10^5m
- Evaporation takes place _____.
(A) Only at melting point
(B) only at boiling oint
(C) above melting point
(D) at all temperature
- Which of the following is not a general property of metal?
(A) Conductivity (B) Lustre
(C) Ductility (D) Brittleness
- What is the percentage of composition alumnum in alumnum sulphate?
(A) 36% (B) 21.95%
(C) 8.57% (D) 15.79%
- An atom of an element has three electrons present in the M-shell. What is the atomic number of the element?
(A) 3 (B) 5
(C) 13 (D) 21
- The boiling points of water and ethanol are 100°C and 78.5°C respectively. Which of the following methods is the best suited for seperating them from their mixture
(A) Seperation by seperating
(B) Decantation funnel
(C) Simple distillation
(D) Fractional distillation
- A man travels from Imphal to Moreh by his car with an average speed of 40km/hr and returns the same path with an average speed of 60km/hr. What is the average speed of the whole journey?

- (2) -

- (A) 50km/hr (B) 48km/hr
(C) 45km/hr (D) none of these
- The effects of force may be started as -
(A) Change of state of a body
(B) Change of shape of a body
(C) Change in direction of motion of a body
(D) All of the above.
- What is the change in the K.E. of a body of mass 'm' moving with a uniform velocity 'v'?
(A) mv (B) mv^2
(C) $\frac{1}{2}mv^2$ (D) 0(zero)
- The time period of normal audible range of hearing for human ear lies in the range of _____
(A) 20Hz - 20KHz
(B) 20sec - 20 min
(C) 0.00005sec - 0.05sec
(D) 0.0005sec - 0.05sec
- What will be the acceleration of a body whose motion is represented by the given graph as below?


(A) 20m/sec^2 (B) 5m/sec^2
(C) 80m/sec^2 (D) 2.5m/sec^2
- What will be the unit of the ratio of the S.I. unit of weight of an object to that of its mass?
(A) Kg (B) N
(C) N.Kg (D) m/sec^2
- Identify the factors on which the buoyant force does not depend:
(A) mass of the immersed body
(B) Volume of the fluid displaced
(C) Acceleration due to gravity
(D) Density of the fluid
- Where is the speed of sound at 25°C maximum of the following media??
(A) Hydrogen (B) Helium
(C) Methanol (D) Ethanol
- Find the speed of the satellite which is revolving uniformly at a height of 6400km above the ground and takes a day to complete the revolution. [Given: Radius of the earth = 6400km, neglecting the motion of the earth]
(A) $2\pi \times 266.67 \text{ km/hr}$
(B) $2\pi \times 266.67 \text{ m/sec}$
(C) $2\pi \times 533.33 \text{ km/hr}$
(D) $2\pi \times 533.33 \text{ m/sec}$
- A particle is taken to a height 2R Above the surface where 'R' is the radius of the earth. The acceleration due to gravity of the earth at that point is
(A) 9.8m/s^2 (B) 4.9m/s^2
(C) 2.45m/s^2 (D) 1.08m/s^2
- Which of the following can be a unit of the thrust?
(A) Kg (B) Kg m/s
(C) Kg.m/s^2 (D) $\text{Kg}^2\text{m/s}^2$
- Ear drum is a part of _____.
(A) Outer ear (B) middle ear
(C) Inner ear (D) All of the above
- The ratio of the unit of force in MKS to that of its CGS is
(A) 10 (B) 10^2
(C) 10^5 (D) 10^7
- A body of mass 5Kg moves uniformly in a circular path of radius 6m. What is the amount of work done by the body when it covers a complete cycle
(A) 30J (B) 294J
(C) 1131.3J (D) 0
- What is the relative density of water? :
(A) 0 (B) 1

- (C) 100 (D) 1000
33. The product of the frequency and time period of a wave is always _____
(A) less than unity (B) unity
(C) greater than unity (D) depend on the wave
34. How many kilowatts do a megawatt constitute?
(A) 1 (B) 1000
(C) 1000000 (D) 746
35. Oxsomes are present in
(A) Lysosomes
(B) Endoplasmic reticulum
(C) Mitochondria (D) Chromoplast
36. Which of the following of the right sequential stages of karyokinesis?
(A) prophase - anaphase - metaphase - telophase
(B) prophase - metaphase - anaphase - telophase
(C) prophase - anaphase - telophase - metaphase
(D) metaphase - prophase - anaphase - telophase
37. Vessels are a type of cell present in ____:
(A) Collenchyma
(B) Sclerenchyma xylem
(C) xylem
(D) Phloem
38. Who introduced the term 'species' as a reproducing unit?
(A) Aristotle (B) John Ray
(C) Carolus Linnaeus (D) R.H. Whittaker
39. What is the family name of Human being?
(A) Mammalia (B) Primates
(C) Homonidae (D) Homo
40. The member of which phylum is known as Moss Animal
(A) Nematoda (B) Bryozoa
(C) Annelida (D) Arthropoda
41. What causes hepatitis B?

- (A) Hepadnavirus (B) Picornavirus
(C) Flavivirus (D) Lessavirus
42. What is the relative Vitamin C content of orange (in mg/100g) ?
(A) 70 (B) 60
(C) 50 (D) 40
43. Which of the following disease is a Zoonotic disease?
(A) Hepatitis (B) Tuberculosis
(C) Malaria (D) Rabies
44. Which of the following substances is moved during the process of osmosis :
(A) urea (B) carbon dioxide
(C) water (D) sodium chloride
45. Which of the following is the non-polar solvent?
(A) Water (B) Liquid ammonia
(C) Benzene (D) Hydrochloric acid
46. What does biopesticides constitute?
(A) naturally occurring substance that control pest
(B) microorganisms that control pest
(C) Pesticidal substances produced by the plants containing added genetic material.
(D) All of the above
47. Which of the following does not belong *Bos taurus*?
(A) Jersey (B) Nelore
(C) Swiss (D) Angus
48. Which of the following bee is known as western honey bee?
(A) *Apis indica* (B) *Apis dorsata*
(C) *Apis mellifera* (D) *Apis florea*
49. What is the major component of the atmosphere of Mars?
(A) Nitrogen (B) Oxygen
(C) Carbon dioxide (D) Sulphur dioxide
50. Which of the following organisms is responsible for denitrification?
(A) Rhizobium (B) Azotobacter
(C) Nitrosomonas (D) Pseudomonas

25thMIX (SCIENCE)

Time Allowed 1 hour

Maximum Marks : 100

Read the following instructions carefully before you begin to answer the questions.

- This booklet contains 50 questions in all.
- All questions are compulsory and each question carries 2 marks.
- Before you start to answer the questions you must check up this booklet and ensure that it contains all the pages 3 (Three) and see that no page is missing or repeated. If you find any defect in this Booklet, you must replace it immediately.
- There will **NOT** be any negative marking for wrong answers.
- You are required to fill the information on the answer sheet which you will get in the examination hall by **H.B. pencil or BALL point pen**.
- Answer Sheet** and **Question Paper** will be supplied in examination hall. After the test is over, you should hand over the answer sheet to the invigilator before leaving the room.
- You should write your **Name, Roll No.**, carefully on the space provided in the answer sheet. Otherwise you will be awarded **ZERO** mark.
- If you wish to change your answer, **ERASE** completely the darkened circle by using an **ERASER** and then blacken the new circle. If not erased completely, smudges will be left on the erased circle and the question will be read as having two answer and will be ignored for giving any credit.
- Answer the questions as quickly and as carefully as you can. Some questions may be difficult and others easy. Do not spend too much time on any question.
- You are not allowed to leave the examination hall until you are advised to do so by the invigilator.