THE VILLAGE INTERNATIONAL SCHOOL
"We Nurture Dreams"

GRADE: IX Date: 11/09/23	TERM I EXAMINATION (2023-24) SCIENCE	Marks: 80 Time: 3 Hours

Q.No	Questions	Mark
	Section A	
	Choose the correct answer	
1	_____is **not** found in phloem tissues. a)Sieve tubes b)Phloem parenchyma c)Tracheids d)Companion cells	1
2	The process in which liquids is converted to vapours state is called ————. a) vapourisation b) solidification c) condensation d) sublimation	1
3	An opposite experience is encountered when we are standing in a bus and the bus begins to move suddenly. Now we tend to fall backwards, which law of motion explains it? a) First b) Second c) Third d) None of the above	1
4	Which plastids are colourless? a)Chromoplasts b) Chloroplast c) Leucoplasts d)Amyloplast	1
5	Which of the following properties does not describe a compound? a) It is composed of two or more elements b) It is a pure substance. c) It cannot be separated into constituents by physical means d) It is mixed in any proportion by mass	1

6	Inertia of an object is measured by its a) Temperature b) Mass c) Shape d) None of the above	1
7	Where are the essential proteins and lipids required for cell membrane, manufactured? a)Lysosome b)Chromosomes c)Endoplasmic reticulum d)Mitochondria	1
8	Tincture of iodine is: a) Iodine in potassium iodide b) Iodine in Vaseline c) Iodine in alcohol d) Iodine in water	1
9	What is the SI unit of momentum? a) m b) m s-2 c) kg m s-1 d) None of the above	1
10	The connective tissue that connects muscle to bone is called a)Ligament b)Tendon c)Nervous tissue d)Adipose tissue	1
11	Which of the following phenomenon always results in the cooling effect? a)Condensation b)Sublimation c)Evaporation d)Diffusion	1
12	When an object is thrown up the force of gravity is a) opposite to the direction of motion b) in the same direction as the direction of motion c)constant d)increases as it rises up	1
13	Living cells were discovered by a)Robert Hooke b) Robert Brown c) Leeuwenhoek d) Purkinje	1
14	In sugar solution, a) Sugar is solute, water is solvent b) Sugar is solvent, water is solute c) Both are solutes Both are solvents.	1

15	Slope of distance time graph gives a) distance b) displacement c) acceleration d) speed	1
16	The size of the stem increases in the width due to (a)Apical meristem (b)Intercalary meristem (c)Primary meristem (d)Lateral meristem	1
17	A particle is moving in a circular path of radius r, the displacement after half circle would be: a) 0 b) πr c)2r d)2πr	1
18	What is the unit of force? (a) PascaI . (b) Joule (c) Newton (d) None of the above	1
19	A tissue whose cells are capable of dividing and re-dividing is called a)Complex tissue b)Connective tissue c)Permanent tissue d)Meristematic tissue	1
20	The mass of a body is measured to be 12 kg on the earth. If it is taken to the moon, its mass will be (a) 12 kg (b) 6 kg (c) 2 kg (d) 72 kg	1
	SECTION B	
	VERY SHORT ANSWER QUESTION	
21	Write the full form of DNA and ATP.	2
22	Name the factors that affect evaporation.	2
23	Distinguish between speed and velocity	2
24	Why do aquatic plants float on water?	2
25	Write any two properties of suspension.	2
26	Give reasons for the following i) Recoil of the gun ii) Purpose of seat belt while driving a car	2

	Section C **SHORT ANSWER QUESTION**	
27	Write a short note on phloem.	3
28	A solution of urea in water contains 16 grams of it in 120 grams of solution. Find out the mass percentage of the solution.	3
29	From a rifle of mass 5 kg, a bullet of mass 50 g is fired with an initial velocity of 40 m/s. Calculate the recoil velocity of the gun?	3
30	State second law of motion. Derive the mathematical expression for second law of motion.	3
31	What are the characteristics of particles of matter?	3
32	Explain the structure and function of nervous tissue.	3
33	Define solution. Explain the types of solution.	3
	SECTION-D **LONG ANSWER QUESTIONS**	
34	Explain the features and types of muscular tissues.	5
35	Differentiate solution, suspension and sol	5
36	A man jumps out from a boat, the boat moves backward why? State law of conservation of momentum and prove mathematically momentum before and after collision of two objects moving along straight line are equal.	5
	SECTION - E **CASE-BASED/DATA -BASED QUESTIONS**	
37	In brief state what happens when a) Dry apricots are left for some time in pure water b) The plasma membrane of a cell breaks down? c) Golgi apparatus is removed from the cell? d) If chloroplast were not present in plants.	4
38	Three students A, B and C prepared mixtures using chalk powder, common salt and milk respectively in water. Whose mixture: a) Would not leave residue on filter paper after filtration? b) Would show Tyndall effect? c) Would give transparent/clear solution? d) Would settle down at the bottom when left undisturbed? e) Could be filtered by filter paper?	4

39	There is no atmosphere on the moon. This is because gas molecules need a certain amount of force of attraction to be retained on a heavenly body. The force of attraction of the moon is less than the required force, hence no atmosphere can exist. (i) The value of g on moon is..... times that of earth (a) 1/3 (b) ¼ (c) 1/5 (d) 1/6 (ii) Mass of the moon is ..... that of earth (a) more than (b) less than (c) equal to (d) can't say (iii) If the weight of an object is 60 kg f on earth, then, its weight on moon is (a) 10 kg (b) 20 kg (c) 30 kg (d) 40 kg (IV) The moon revolves around the earth in a circular orbit, with uniform speed, is this motion is a) uniform b) non uniform c) accelerated d) deaccelerated	4
	THE END	