



SHRI GULABRAO ESHWARA KHANDVE EDUCATIONAL FOUNDATION,
JAGADGURU INTERNATIONAL SCHOOL, LOHEGAON PUNE
TERM-1 EXAM (2024-25)

Class: VIII

Date: 30 /09/2024

Roll No. :

Subject: Science(80)

M.M.: 80

Time: 3 HRS

General Instructions:

- This question paper consists of 41 questions in 5 sections.
- All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
- Section A consists of 20 objective type questions carrying 1 mark each.
- Section B consists of 6 Very Short questions carrying 02 marks each. Answers to these questions should be in the range of 30 to 50 words.
- Section C consists of 7 Short Answer type questions carrying 03 marks each. Answers to these questions should be in the range of 50 to 80 words.
- Section D consists of 3 Long Answer type questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.
- Section E consists of 3 source-based/case-based units of assessment of 04 marks each with sub parts.

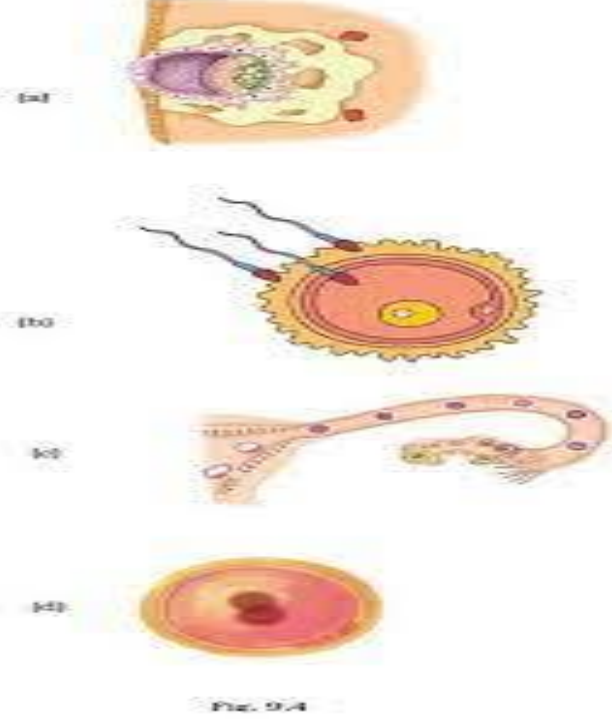
Section-A

Select and write the most appropriate option out of the four options given for each of the questions 1-20

Q.NO	QUESTIONS	MARKS
1.	A person can be identified by the quality of sound produced by him. The characteristics of a sound can be determined by- a) amplitude b) frequency c) Loudness d) All of these	1
2.	Which of these is an antibiotic? a) Streptomycin b) Sodium benzoate c) metabisulphite d) none of these	1
3.	Scientist who discovered the vaccine for small pox in 1798. a) Alexander Fleming b) Edward Jenner c) Louis Pasteur d) None of these	1
4.	Which of the following statements are correct- i) Each sperm is a single cell. ii) External fertilisation takes place in frog. iii) A new human individual develops from a cell called gamete. iv) A zygote is formed as a result of fertilisation. a) i, ii, and iv b) i, ii, iii and iv c) i and iii d) i, ii and iii	1
5.	Friction opposes the _____ between two surfaces in contact. It acts on both the surfaces. a) relative motion b) force c) smoothness d) direction	
6.	Given below are statements about the harmful effects of weeds on crop plants: i) They interfere with harvesting. ii) They help crop plants to grow healthy. iii) They compete with crop plants for water, nutrients, space and light. iv) They affect plant growth.	1

	Choose the correct combination of statements: a)i , iii, iv b)iii only c) iii, iv d)i , ii, iii, iv	
7.	Whenever the surfaces in contact tend to move or move with respect to each other, the force of friction comes into play- a)only if the object is solid b)only if one of the two objects is liquid c)only if one of the two objects is gaseous d) irrespective of whether the objects are solid, liquid or gaseous	1
8.	The two microorganisms which live in symbiotic association in lichens are : a)Fungus and Protozoa b) Alga and Bacteria c)Bacteria and Protozoa c) Alga and Fungus	1
9.	A toy car released with the same initial speed will travel farthest on- a)muddy surface b)polished marble surface c)cemented surface d)brick surface	1
10.	Which of the following is not a combustible substance. i)camphor ii) glass iii)alcohol iv)straw Choose the correct combination of statements: a)i , iii, iv b)iii only c) ii and iv d)i , ii, iii, iv	1
11.	Aquatic animals in which fertilisation occurs in water are said to be- a)Viviparous without fertilisation. b)Oviparous with external fertilisation. c)Viviparous with internal fertilisation. d) Oviparous with internal fertilisation.	1
12.	Which is the major component of CNG? a)ethane b)propane c)methane d)butane	1
13.	A disease in human beings caused by virus is- a)Typhoid b)Influenza c)cholera d) none of these	1
14.	In the decreasing order of magnitude, which of the following is correct? a. Rolling < static < sliding friction b. Static > sliding > rolling friction c. Static > rolling > sliding friction d. Sliding < static < rolling friction	1
15.	Which of the statements are incorrect- i)For human ears, the audible range is 20 Hz to 20,000Hz ii)The lower the frequency of vibration, the higher the pitch. iii)Unwanted or unpleasant sound is termed as music iv)Noise pollution may cause partial hearing impairment. a)i and ii b)iii and iv c) i, ii and iv d)iii only	1
16.	Which one of the following has the highest calorific value? a)Kerosene b) LPG c) Biogas d)Petrol	
	Question number 17-20 consists of two statements-Assertion and Reason. Answer these questions selecting the appropriate option given below: a)Both A and R are true and R is the correct explanation of A b)Both A and R are true and R is not the correct explanation of A c)A is true but R is False	

	d) A is false but R is true	
17.	Assertion (A) Humans cannot hear the sound of ultrasonic frequency. Reason (R) Human ear can only hear sound of frequency range 20 Hz to 20000Hz	1
18.	Assertion(A): Farmers have to add manure to the fields to replenish the soil with nutrients. Reason(R): Continuous cultivation of crops makes the soil rich in nutrients.	1
19.	Assertion(A) A person pressing his ear on the railway tracks can hear an approaching sound. Reason(R) Speed of sound is more in solid medium.	1
20.	Assertion (A): Friction increases with an increase in mass. Reason (R): A rough surface has more irregularities than a smooth surface.	1
SECTION B		
	Question number 21-30 are very short answer questions. Each question carries 2 marks.	
21.	Define- i)Fermentation ii)Ignition temperature	2
22.	In an experiment 5.5Kg of a fuel was completely burnt. The heat produced was measured to be 180,000KJ. Calculate the calorific value of the fuel.	2
23.	Beera wants to practice crop rotation on his field. Suggest a Rabi crop and kharif crop which will replenish his field with nitrogen. Which crop replenishes nitrogen why?	2
24.	A simple pendulum makes 20 oscillations in 40seconds. What is the time period and frequency of its oscillation?	2
25.	Two astronauts are floating close to each other in space. Can they talk to each other without using any special device? Give reason.	2
26.	What is the function of hair and wax in ear canal?	2
SECTION-C		
	Question 27 to 33 are short answer questions. Each question carries 3 marks.	
27.	Give two examples of each of the following types of microorganisms: (a) Algae (b) Fungi (c) Protozoa	3
28.	Give three examples each where friction is a disadvantage and where it is useful.	3
29.	Explain in detail the products of coal.	3
30.	Name the different constituents of petroleum and write their uses.	3
31.	Define asexual reproduction. Describe two methods of asexual reproduction in animals.	3
32.	Give reasons - a) The jar of a mixer becomes hot if it is run for a few minutes. b)A pencil will write on paper but not on the glass. [friction is more on paper than a glass. c) Sometimes when you wash utensils, they slip from your hand.	3

33.	 <p>Observe the following figure and answer the following-</p> <p>a) Identify the stages a to d in above figure during development of human baby.</p> <p>b) Arrange the stages in correct sequence of development.</p> <p>c) Explain the development that takes place in any one stage.</p>	3
	<p align="center">SECTION-D</p> <p>Question number 34 to 38 are long answer questions. Each question carries 5 marks(Any three)</p>	
34.	What do you mean by fluid friction? How can fluid friction be reduced? Give some examples of fluid friction.	
35.	Explain how sound is produced and how it is transmitted and heard by us.	
36.	Explain nitrogen cycle with the help of a flowchart.	
37.	<p>i) If microorganisms were not there, the earth would have been full of garbage and unwanted materials. Why?</p> <p>ii) Write any two ways in which microorganisms are beneficial to us.</p> <p>iii) How bacteria help to increase soil fertility?</p>	
38.	Explain with a diagram the development of an embryo.	
	<p align="center">SECTION-E</p> <p>Question number 39 to 41 consists of 3 source-based/case-based question. Each question carries 04 marks</p>	
39.	<p>Sound plays an important role in our life. It is through sound we know that a period in school is over or if someone is approaching you by just listening to the footsteps. Vibrating objects produce sound. Vibration is the to-and-fro or back-and-forth movement of an object. Sound needs a medium to travel. Hence, it cannot travel in a vacuum.</p> <p>i) The buzzing sound produced by a mosquito is produced by-</p> <p>a) Its mouth b) vibration of surrounding air c) vibration of wings</p> <p>ii) Why sound cannot travel in a vacuum?</p> <p>iii) Name two musical instruments which produce sound by vibrating.</p> <p>iv) Name the sound producing organ in human.</p>	4

40.	<p>Petroleum is a dark oily liquid. It has an unpleasant odour. It is a mixture of various constituents Such as petroleum gas, petrol, diesel, lubricating oil, paraffin wax, etc. We know that coal and petroleum are fossil fuels, will last only a few hundred years. Moreover, burning of these fuels is a major cause of air pollution. Their use is also linked to global warming. It is therefore necessary that we use these fuels only when absolutely necessary. This will result in better environment.</p> <p>i) Why petrol is exhaustible natural resource? (1)</p> <p>ii) Write some important uses of the various constituents of petroleum. (2)</p> <p>iii)How does burning of petrol causes global warming? (1)</p>	4
41.	<p>Friction is a force between two surfaces that are sliding, or trying to slide, across each other. Friction always works in the direction opposite to the direction in which the object is moving, or trying to move. It always slows a moving object down. Friction also produces heat. If you rub your hands together quickly, you will feel them get warmer. Friction can be a useful force because it prevents our shoes from slipping on the pavement when we walk and stops car tyres from skidding on the road. When you walk, friction is caused between the tread of shoes and the ground. This friction acts to grip the ground and prevent sliding. Sometimes we want to reduce friction. For example, we use oil to reduce the friction between the moving parts inside a car engine. In many machines, friction is reduced by using ball bearings. The reduced friction means there is less wear on the moving parts and less heat produced.</p> <p>i) When does friction arise?</p> <p>ii) Why should we apply oil on the hinges of the door?</p> <p>iii) Gymnasts apply some coarse substance on their hands. Why?</p> <p>iv) Explain why sportsmen use shoes with spikes.</p>	4