

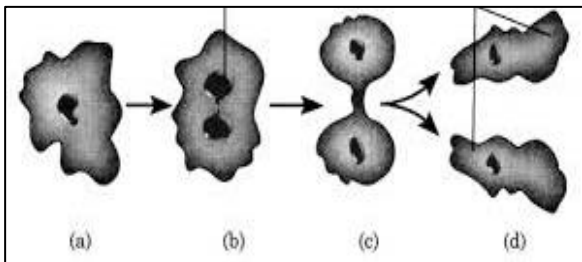
KOTHARI INTERNATIONAL SCHOOL, NOIDA
TERM END ASSESSMENT, 2023-2024
GRADE 8: SUBJECT: SCIENCE
SET: B SECTION B

DATE: 19/02/2024
 NAME: _____

TIME ALLOWED: 2.5 hours.
 MAXIMUM MARKS: 60

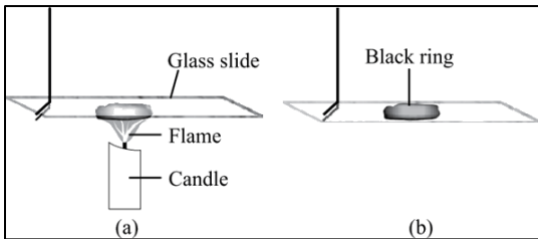
GENERAL INSTRUCTIONS:

1. This question paper consists of 3 pages and 4 questions.
2. It is compulsory to attempt all the questions.
3. Read the question paper carefully and then attempt it.



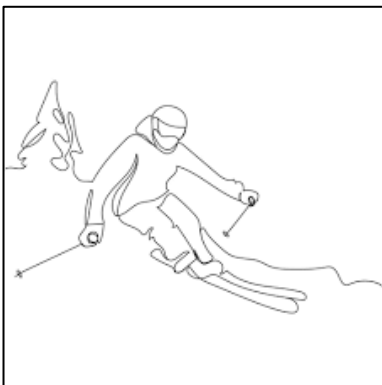
Q-1) Observe the given experimental set-ups and answer the related questions.

- I. a) Explain the biological process shown in the picture. (2)
- b) Identify the step in which Cytokinesis & Karyokinesis occurs. (1)
- c) Label A & B. (1)



II. Sohan introduced the glass plate into the luminous zone of the candle flame for a few seconds and observed the given changes as shown in the diagram.

- a) What do you observe and conclude from this experiment? (2)
- b) Will he observe the same result with the outermost zone too? why or why not? (1)



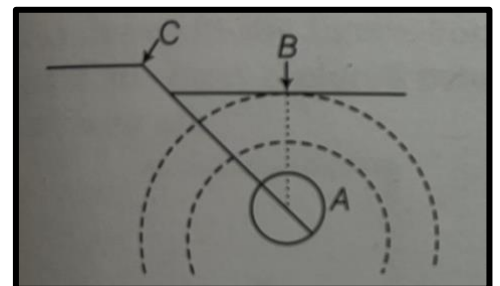
III. a) Snehil is going for skiing, explain if he needs low or high friction between snow and ski. (1)

b) In downhill skiing, as the skier is _____ down the hill by the force of _____, their gravitational potential energy is converted to kinetic energy. (2)

Q-2) Case Based Questions.

Read the following passage and answer the questions that follow:

- i) Earthquakes are the result of slow-moving processes that occurs within the earth. A sudden slippage or crack along a fault line result in an unexpected release of elastic energy stored in rocks that are subjected to an immense strain. Earthquakes waves do not originate at epicentre. The focus of an earthquake is also known as hypocentre. The seismic waves generated can be detected using a seismograph.



- A. The point of origination of earthquake is _____.** (1)
 a. A, epicentre b. B, focus c. A, focus d. B, dip
- B. The point C refers to _____.** (1)
 a. dip b. epicentre c. focus d. fault scrap
- C. The point where greatest damage occurs is _____.** (1)
 a. A, epicentre b. B, focus c. A, focus d. B, epicentre

ii) Rohan took a matchstick and observes it carefully. He kept it in air for about half an hour but observes no change. But, when he rubbed it at the side of the box, it catches fire. He got confused and asked to his teacher whether I place it in the category of combustible substances or incombustible substances. Teacher suggests him to keep it in the category of combustible substances.

- a) Why did teacher suggested Rohan to keep the matchstick in the category of combustible substances? (1)
 b) What is the composition of a matchstick? (1)

iii) Sita and her mother reached a jewellery shop to purchase some ornaments. She liked a necklace very much but her mother told her not to purchase it because it is not real gold. When she checked the information tag, it was written that 1gm gold. The necklace was quite big and heavy. She was surprised to see it and asked about it. The salesman explained that it is a gold-plated necklace. Then Sita checked that the process of depositing a layer of any desired metal on another material by means of electricity is called electroplating. It is one of the most common applications of the chemical effects of electric current. In electroplating factories, the disposal of the used conducting solution is a major concern. It is a polluting waste and specific disposal guidelines should be followed to protect the environment.

- A. Where and how the electroplating waste should be disposed of? (1)
 B. What are the effects produced by the chemical reactions brought about by an electric current? (1)

iv) The changes which occur during adolescence in the human body are controlled by hormones. Hormones are secreted by glands called ductless glands or endocrine glands. The hormones are poured by the endocrine gland directly into the bloodstream. Endocrine glands include pituitary glands, thyroid glands, pancreas, and adrenal. In insects, metamorphosis is controlled by insect hormones. In the case of frogs, it is controlled by thyroxine hormones.

- a) Which gland is also called the master gland and why? (2)
 b) The term metamorphosis is not used while describing the human development. Why? (1)

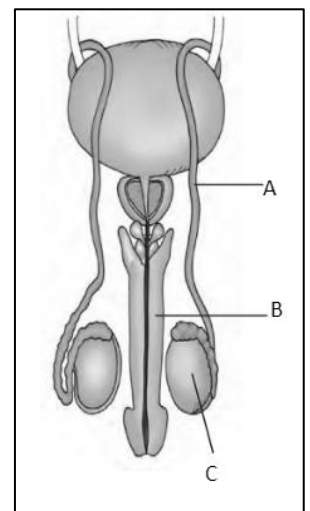
Q3) Short Answer Questions. (3x5=15)

a) Given alongside is a diagram of the male reproductive system in humans. Label Vas deferens & testis and state their functions. (1+2)

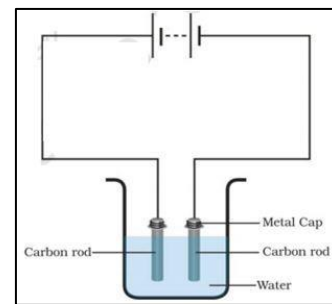
b) A gland P is located just below the stomach in the human body. The gland P secretes a hormone X. The deficiency of hormone X in the body causes a disease Y in which the blood sugar level of a person rises too much. The person having high blood sugar is called Q.

- i) What is P, X, Y and Q? (2)
 (ii) Why gland P acts as an endocrine as well as exocrine gland? (1)

c) In walking the pressure on the ground is more as compared to that while standing on the ground. Explain this statement. (3)



d) Rehan made the circuit as shown in the figure. He wanted to observe what happens when an electric current is passed through water. But he forgot to add a few drops of lemon juice to water. Will it make any difference to his observation? Explain. (3)

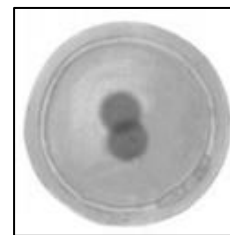
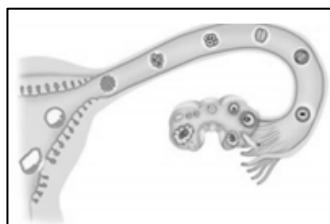
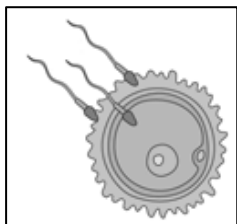
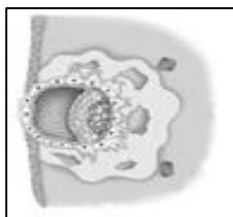


e) Suppose your writing table is tilted a little, a book kept on the table starts sliding down. Draw a diagram to show the direction of force of friction acting on the book. (3)

Q4) Long Answer Questions.

(5x5=25)

A. Observe the figures given below and answer the following questions.



- a) (i) Identify all the stages given above in the figure, during development of human baby. (2)
- (ii) Arrange the stages in correct sequence of development. (1)
- b) Explain the future development of the embryo that would take place after it gets embedded in the uterus. (2)

B. a) A book of length 20 cm and width 15 cm is placed on a table. If the force exerted by the book on the table is 3 N, find the pressure exerted by it. (3)

b) Why bubble wrap is effective in protecting fragile items during shipping or storage? (2)

C. a) The sex of a new born child is a matter of chance and none of the parents may be considered responsible for it. "Justify the statement with the help of flow chart showing determination of sex of a new born. (3)

b) A boy is 12 years old and has retained 80 % of his full height. He is 120 cm tall. Calculate his full height at the end of his growth period. (2)

D. a) Explain why objects moving in fluids should have streamlined shape. (2)

b) Imagine you are at a water park, about to go down a water slide. As you slide down, you notice that sometimes you go faster, and other times you slow down. Explain how different factors, such as the surface of the slide and the amount of water on it, contribute to the fluid friction you experience while sliding. How do these factors affect your speed on the water slide?

E. a) The arrangement shown in the following figure describes the process of electroplating of Copper (Cu) . Copy the diagram and label the materials used as anode, cathode and electrolyte solution. (3)

b) Mention two applications of electroplating with examples. (2)

