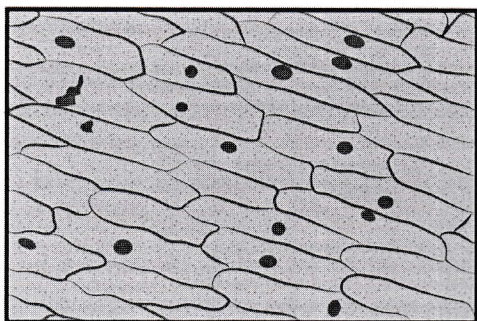


2) The image shows cells of an onion peel. What are these cells classified into?



- (a) Multicellular cells, because they all look identical.
- (b) Multicellular cells, because they form a part of the plant.
- (c) Unicellular cells, because they have simple cell structure.
- (d) Unicellular cells, because they perform all the necessary functions of an animal.

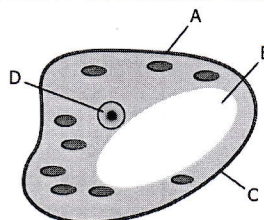
3) The table lists two parts of a plant cell with their function. Which parts of the plant cell are A and B?

- (a) A is nucleus and B is cell wall.
- (b) A is chromosome and B is gene.
- (c) A is cell wall and B is nucleus.
- (d) A is chromosome and B is protoplasm.

A	B
It provides structural strength to the plant cell.	It controls the activity of the cell.

4) The image shows a rubber diaphragm kept near a vibrating tuning fork. Which labelled part of the cell plays a vital role in the transfer of cellular characteristics to its offspring?

- (a) A
- (b) B
- (c) C
- (d) D



5) The cells of plants have a rigid shape unlike those of animals. The absence or presence of which part of the cell causes this difference?

- (a) cell wall
- (b) vacuoles
- (c) chloroplast
- (d) nuclear membrane

6) A student lights a candle and keeps a glass over it. He notices that the candle puts off after some time. What is the reason for his observation?

- (a) formation of heat in the glass
- (b) the absence of oxygen in the glass
- (c) the absence of carbon dioxide in the glass
- (d) glass puts off the fire when kept over anything

7) A group of students is learning about combustion. They researched that fuel and gas are needed to start a fire. Which option shows the things that the students need?

- (a) fuel - grass, gas - oxygen
- (b) fuel - wood, gas - oxygen
- (c) fuel - wood, gas - carbon dioxide
- (d) fuel - matchstick, gas - carbon dioxide

8) Fuels like kerosene are required to burn a piece of wood. Why a wood cannot start burning with a matchstick in normal conditions?

- (a) matchstick is a bad conductor of heat
- (b) kerosene is a liquid and liquids easily start a fire

- (c) kerosene heats the wood where it starts melting and catches fire
(d) matchstick cannot heat the wood to its ignition temperature

9) A student tries to burn a piece of wood with a matchstick. He notices that every time he brings the matchstick closer to coal, the coal turns red, but it does not catch fire. Why does this happen?

- (a) Because the matchstick cannot heat the coal to a very high temperature where it starts burning.
(b) Because the matchstick and coal are both made of wood and do not burn in normal conditions.
(c) Because matchsticks are made in a way to burn only smaller things like paper and plastic sheets.
(d) Because matchstick being smaller burns quickly and could not provide enough heat for coal to start burning.

10) The table lists some substances.

Which substance has a very low ignition temperature and can easily catch fire with a flame?

- (a) glass because it is luminous
(b) alcohol because it is inflammable
(c) wood because it is explosive
(d) granite because it is non-combustible

Wood
Glass
Alcohol
Granite

11) Which action is used in riding a bicycle?

- (a) Lifting (b) Picking (c) Pushing (d) Throwing

12) In which activity one object applies force on another object?

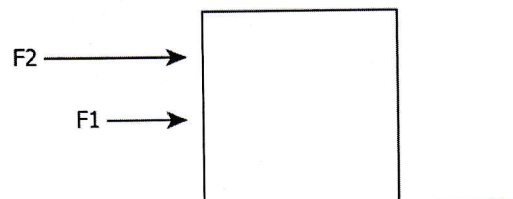
- (a) a chapatti being cooked (b) a hand of a clock moving
(c) a glass of water turning into ice (d) a batsman hitting a cricket ball

13) A person wants to skate using a skateboard. Which two objects should interact in order to move the skate?

- (a) ground and the foot of the person
(b) ground and the skateboard
(c) skateboard and wheels of the skateboard
(d) wheels of the skateboard and foot of the person

14) The image shows a block in which force F_1 and F_2 are acting. What would be the net force on the block?

- (a) F_1
(b) $F_1 + F_2$
(c) F_2
(d) $F_2 - F_1$



15) A person X pushes a cart with a force. Another person Y starts pushing the cart in the opposite direction with the same force. How does it affect the cart?

- (a) it changes the direction of cart (b) it increases the speed of the cart
(c) it brings the cart to rest (d) it will change the shape of the cart

16) Which option describes a situation where resistance accompanies the applied force?

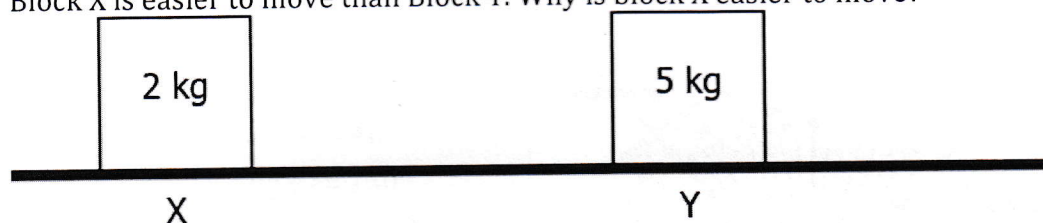
- (a) while kicking a football
- (b) while opening the door
- (c) while lifting the bucket
- (d) while burning a matchstick

17) A student designed a model of a car ramp. The student wants to cover the ramp so that the car could stop after travelling a small distance. Which material would be best to cover the ramp?

- (a) Sandpaper
- (b) Newspaper
- (c) Glossy paper
- (d) Butter paper

18) The image shows two blocks resting on ground.

Block X is easier to move than Block Y. Why is block X easier to move?



- (a) the surface is pressed harder by block X because of lesser mass, so greater is the friction
- (b) the surface is pressed harder by block Y because of greater mass, so greater is the friction
- (c) the surface is pressed harder by block X because of lesser mass, so lower is the friction
- (d) the surface is pressed harder by block Y because of lesser mass, so lower is the friction

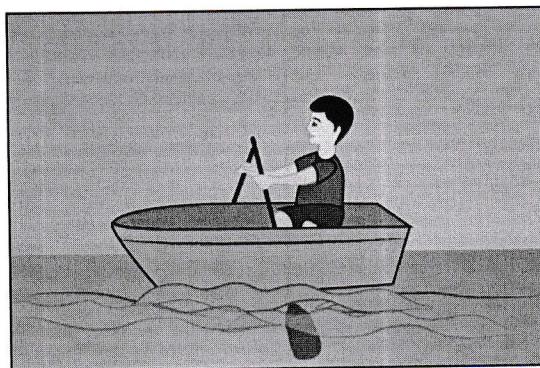
19) A student is pushing a block on an inclined plane against gravity. Which bodies are interacting when frictional force is felt?

- (a) block and gravity
- (b) student and gravity
- (c) block and inclined plane
- (d) student and inclined plane

20) The image shows a person rowing a boat over a river.

Identify the number of bodies experiencing friction.

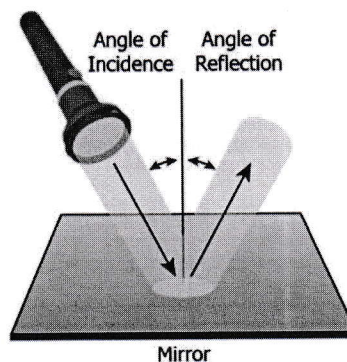
- (a) 1, boat because of the river
- (b) 1, boat because of the person
- (c) 2, boat because of the river and the person because of air
- (d) 2, boat because of air and river and the person because of air



21) Rakhi switched on a torch light and pointed it towards a mirror. She calculated the angle of

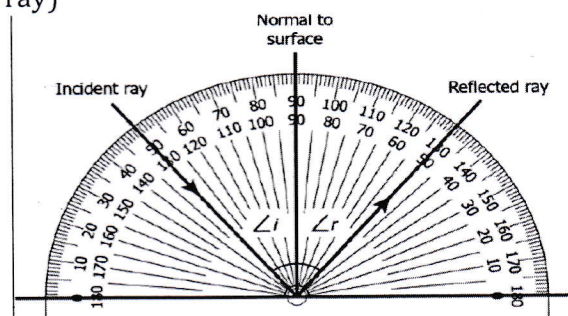
incident and found it to be 50° .
What is the angle of reflection?

- (a) 40°
- (b) 45°
- (c) 50°
- (d) 100°



22) The given image marks the incident ray and the reflected ray. (angle i = angle of incident ray, angle r = angle of reflected ray)

- (a) angle $i = 50^\circ$, angle $r = 50^\circ$
- (b) angle $i = 40^\circ$, angle $r = 40^\circ$
- (c) angle $i = 50^\circ$, angle $r = 130^\circ$
- (d) angle $i = 40^\circ$, angle $r = 130^\circ$



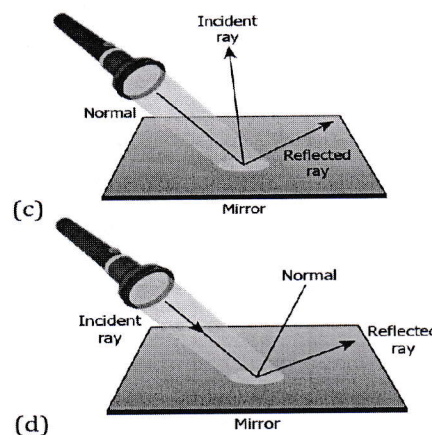
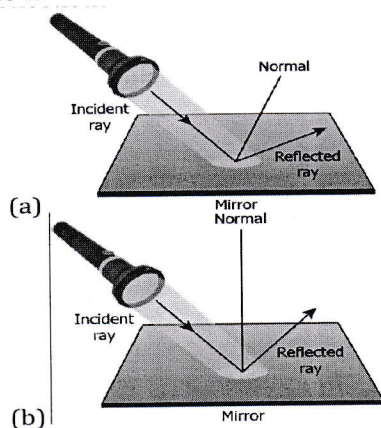
23. Which of the following materials can be classified as malleable?

- (a) sand, because it has the ability to flow
- (b) air, because it can move from one place to another
- (c) metals, because they can be beaten into thin sheets
- (d) water, because it can change its shape when put in different containers

24) Which option explains how sound is produced by the voice box in a human throat?

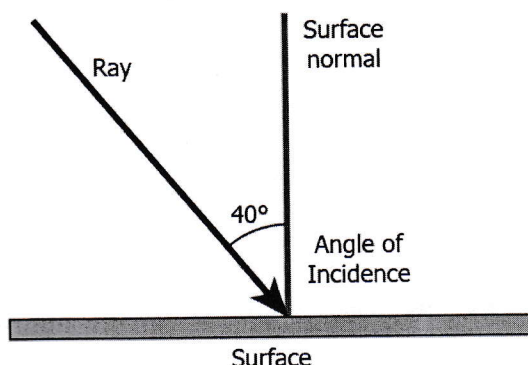
- (a) the voice box vibrates by the air coming out from lungs
- (b) the vocal cords vibrate by the air coming in through the voice box
- (c) the vocal cords stretched across the voice box vibrates by air coming from lungs
- (d) the stretched vocal cords across the voice box produce the air to vibrate the voice box

25) Which of the image traces the incident ray, reflected ray and normal that support the law of reflection?

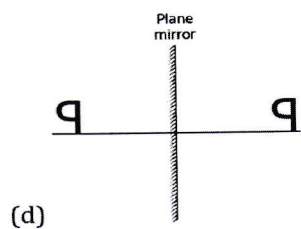
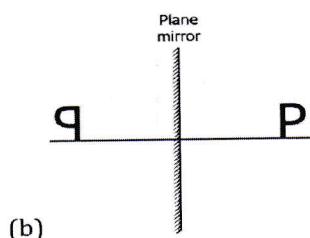
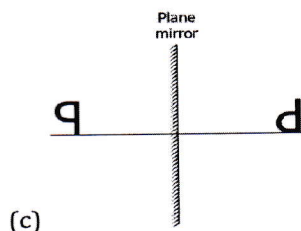
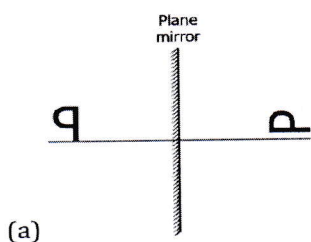


26) Rahul traced a ray of incident on a plane mirror. He also plotted the normal to the surface and calculated the angle of incidence to be 40 degree as shown in the image. Where should he draw the reflected ray?

- (a) 50° with normal
- (b) 40° with normal
- (c) 50° with incident ray
- (d) 40° with the surface of mirror



27) A student studies that a plane mirror results in an inverted image after reflecting. Which of these represents the image likely to be formed by a plane mirror?



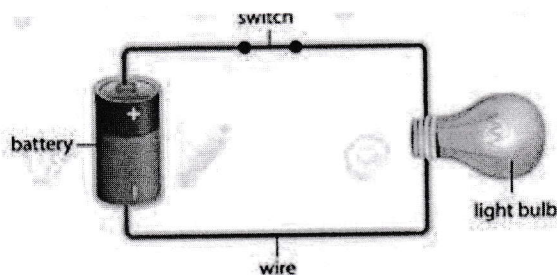
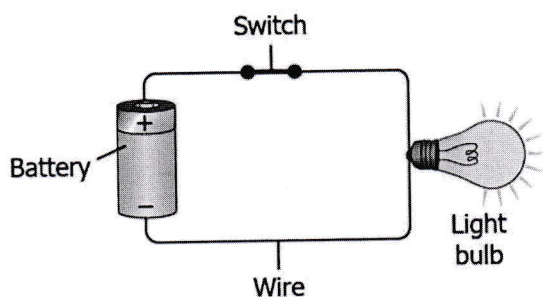
28. A student wants to make a model. She needs a hard material than can bend and can be made into a thin sheet. Which material should she pick?

- (a) chalk
- (b) Aluminium
- (c) paper
- (d) rubber

29. Which material is used to make wires to conduct electricity?

- (a) Cotton
- (b) Copper
- (c) Rubber
- (d) Glass

30. A student is making an electric circuit to light a bulb. He needs a battery, connecting wires, switch, and a bulb, as shown.



He used different materials to connect the battery, switch, and the bulb. He noted when

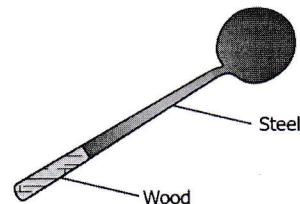
the bulb goes on. Which material is a good conductor of electricity?

- (a) Wool
- (b) Copper
- (c) Rubber
- (d) plastic

Material	Does the Bulb Light Up?
Wool	No
Copper	Yes
Rubber	No
Plastic	No

31. Mehak notices that the ladle she is using to make soup is made of two materials. She observes that the handle of the ladle is cool, but the other end is hot. How can the two materials be classified based on conduction of heat?

- (a) wood and steel are good conductors of heat
- (b) steel is a good conductor of heat, but wood is not
- (c) steel and wood are bad conductors of heat
- (d) wood is a good conductor of heat, but steel is not



32) Microorganisms are classified into:

- (a) four groups- bacteria, algae, virus, fungi
- (b) four groups-bacteria, algae, fungi, protozoa
- (c) three groups- algae, protozoa, virus
- (d) three groups- algae, virus, bacteria

33) Padma saw some coloured cottony growth on the bread she kept open in her kitchen. She uses magnifying glass to observe the microorganisms. Which group of microorganisms will she likely observe?

- (a) Fungi
- (b) Algae
- (c) Bacteria
- (d) Protozoa

34) What makes viruses different from the bacteria?

- (a) dependency on living cells
- (b) microscopic size
- (c) requirement of moist conditions
- (d) requirement of food

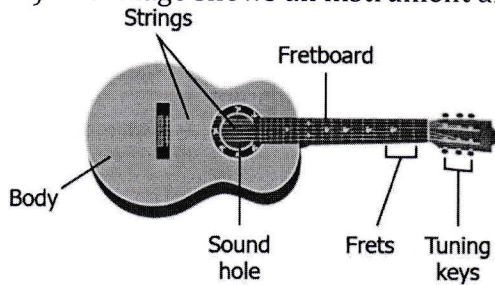
35) Rahul mixes some maida flour with water and sugar. He also adds small amount of yeast powder in the mixture. After two hours, he see saw that the dough rises. What made the dough to rise?

- (a) The division of yeast cells and production of gas.
- (b) The reaction of maida flour with sugar.
- (c) The release of energy by yeast cell after consumption of Maida flour.
- (d) The release of heat due to enlargement of yeast cells.

36) What is an example of an object that works on vibrations?

- (a) guitar string being plucked
- (b) a spinning top
- (c) a coin is tossed
- (d) marble rolling on a ramp

37) The image shows an instrument and its part.



Which part of this instrument vibrates and produces sound?

- (a) Strings (b) Body (c) Frets (d) Sound hole

38. 1 hertz is equal to :

- (a) 1 vibration per minute (b) 10 vibrations per minute
(c) 60 vibrations per minute (d) 600 vibrations per minute

39) Which part of the human throat is responsible for the voice produced by a human?

- (b) Trachea (c) Pharynx (c) Larynx (d) Oesophagus

40) Which option explains how sound is produced by the voice box in a human throat?

- (a) the voice box vibrates by the air coming out from lungs
(b) the vocal cords vibrate by the air coming in through the voice box
(c) the vocal cords stretched across the voice box vibrates by air coming from lungs
(d) the stretched vocal cords across the voice box produce the air to vibrate the voice box

Note:

Submit your answers (Single .pdf file) to naikmunew1@gmail.com

Answer papers without Roll number, Class, Section will not be considered for the assessment.