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الرابع
الابتدائي
٢٠٢٤

بنك اسئلة

التميز

أ/ محمود سعيد



ELMotamyez Questions Bank

Science

Final revision

By

MRS. Amira Ahmed

cartoon science

الصف
الرابع

نسخة
مجانية

ملق الإجابات
بالداخل

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First term Questions Bank



Question 01

choose the corret answer

unit 1

- 1 Adaptation helps the living organism in all the following characters, except.....
 - a surviving
 - b reproduction
 - c hiding
 - d death
- 2 Penguin's feet have blood vessels that bring up from its feet towards its body
 - a warm blood
 - b cold blood
 - c warm water
 - d cold water
- 3 One of the adaptations that helps the animal to protect itself from enemies
 - a camouflage
 - b extinction
 - c digestion
 - d reproduction
- 4is considered as a behavioral adaptation in living organisms
 - a long ears
 - b living in burrows
 - c big eyes
 - d countershading
- 5is considered as a structural adaptation in living organisms
 - a birds migration
 - b panting
 - c brown fur
 - d Puff its body with air
- 6 The following animals are structurally adapted to live in polar regions, except
 - a penguin
 - b fennec fox
 - c arctic fox
 - d polar bear
- 7 When a panther chameleon stands on leaves of trees, the color of its scales changes into.....
 - a white
 - b green
 - c blue
 - d black
- 8 The fur of fennec fox protect it from.....
 - a wind
 - b rains
 - c hot weather
 - d cold weather
- 9 The body of arctic fox covered with
 - a skin
 - b thick fur
 - c feathers
 - d scales
- 10 All of the following properties help arctic fox to stay warm, except....
 - a thick fur coat
 - b short ears
 - c tan-colored coat
 - d short legs



- 11 Bull sharks can live in
- a fresh water only b salt water only c seas, rivers and mud d rivers, seas and oceans.
- 12 fennec fox has a tan- colored coat that provides in its environment
- a camouflage b respiration c panting d communication
- 13 One of the structural adaptations of water lily plant is that it has
- a long roots b sharp spines c tiny leaves d wide leaves
- 14 passes the food from pharynx to stomach.
- a Esophagus b Stomach c Trachea d Alveoli
- 15 Digestion process begins in the
- a stomach b esophagus c mouth d small intestine
- 16 The food moves into the stomach through the
- a esophagus b trachea c small intestine d tongue
- 17 Crushing the food in your mouth is the function of
- a stomach b tongue c saliva d teeth
- 18 The undigested food pass from the small intestine into the
- a liver b pancreas c brain d large intestine.
- 19 Fish extracts oxygen out of the water by
- a skin b gills c lungs d fins
- 20 When exposing to danger, thesystem helps to recognize it and avoid it
- a Circulatory b digestive c respiratory d nervous
- 21 Which of the following can turn its head in all directions?
- a lizards b owls c cats d cow
- 22 Bats use their to get information about their surroundings in the dark.
- a nose b tongue c eyes d ears
- 23 All of the following are components of nervous system, except
- a spinal cord b heart c nerves d brain













- 24 Sense organ collect information and send signals to..... for processing and understanding
 (a) hands (b) legs (c) brain (d) stomach
- 25 use echolocation by bouncing high-pitched sounds in the air.
 (a) Bats (b) Dolphins (c) Whales (d) Snakes
- 26 The organ that is responsible for the sense of sight is
 (a) ear (b) tongue (c) nose (d) Eye
- 27 From transparent objects.....
 (a) metals (b) lens (c) mirror (d) Wood
- 28 Reading and writing are common types of communication in..... world
 (a) humans (b) animals (c) birds (d) Plants
- 29 Rock and wood are materials.
 (a) opaque (b) transparent (c) liquids (d) gaseous
- 30 Animals can communicate with each other through.....
 (a) sound and light (b) eating (c) writing (d) Reading

Question 02

put (true) or (false)

- 1 Thick white fur is an adaptation in bears that live in polar regions ()
- 2 The feet of the penguin do not freeze because they have layer of fat. ()
- 3 Black bears have dark fur to hide among trees. ()
- 4 The ears of arctic fox are longer than those of fennec fox ()
- 5 All type of sharks live in fresh water ()
- 6 Living organisms can adapt their environmental conditions through structural adaptation and behavioral adaptation ()
- 7 The behavioral adaptation is a change in the body structure of a living organism to survive. ()
- 8 Mangrove trees adapt to resist the water waves through their long, strong roots. ()
- 9 Plants have structural adaptation only to help them survive and grow in different environments. ()



- 10 One of the structural adaptations of acacia tree is that it has large, wide roots called buttress roots ()
- 11 Hand-shaped leaves of kapok tree is considered as a behavioral adaptation. ()
- 12  The stomach is an important organ in the digestive system ()
- 13 Digestion process begins in the stomach with the help of saliva. ()
- 14 The food passes through the large intestine before it goes into the small intestine ()
- 15 We eat food to obtain energy. ()
- 16  Esophagus is an important organ in the respiratory system ()
- 17  The lungs are important organ in the respiratory system ()
- 18  The diaphragm is an important organ in the digestive system ()
- 19 Amphibians include frogs and salamanders ()
- 20  The sense of hearing of dolphin is stronger than human ()
- 21  Your sense of hearing allows you to see the light of flashlight ()
- 22  The heart is an important organ in the nervous system ()
- 23 The brain responsible for processing information ()
- 24 Bats use their sense of smell to avoid dangers. ()
- 25 Whales can communicate with each other by using songs. ()
- 26 Light travels in straight lines. ()
- 27 Both human and animal need light to see. ()
- 28  Nocturnal animals have eyes larger than human. ()
- 29 Wood is a transparent object that allows light to pass through it ()
- 30 Speaking, writing are ways to communicate with people. ()

Question 03

complete

- 1 penguin's body can keep warm through a thick layer of and dense.....
- 2 Type of adaptation that some animals use to hide from their predators or preys is known as



- 3 Forest bears have or colored fur, while polar bears have colored fur.
- 4 The long ears of the fennec fox are example of adaptation.
- 5 Eyes of chameleon move independently of each other; this is considered as adaptation.
- 6 Short ears of arctic fox are considered adaptation, while its staying in burrows to be warm is considered adaptation.
- 7 tree has taproot to search for water.
- 8 tree has long and strong roots to resist water waves.
- 9 The hand-shaped leaves of kapok tree allow to flow through them gently.
- 10 The leaves of water lilies are wide in order to on the water surface and to absorb a large amount of
- 11 Air enters and exits the human body through system.
- 12 During inhalation, air travels down from your throat to your lungs through
- 13 Humans use to breathe, while fish use to breathe.
- 14 Fish breath gas which dissolved in water.
- 15 Fish have to breathe.
- 16 Starred agama lizard is a, while frog is an
- 17 The dolphin has sharp sense of
- 18 and are from sharp senses in owls.
- 19 is the main control center in the body
- 20 Blind people can locate his friend by sense.
- 21 Humpback whales communicate with each other with their senses
- 22 ants are responsible for sending smelly message when amount of food decreases
- 23 The form energy that can be seen is energy.
- 24 Light travels in lines.
- 25 is the organ that we can use to receive light.
- 26 Fireflies use the sense of to communicate with each other.



- 27 Fireflies communicate with each other by producing a
- 28 is an opaque object.
- 29 is considered an example for transparent materials.
- 30 water is materials and you can see things through them


Question 04

write scientific term for each of the following

- 1 It covers the body of some types of bears to blend in with snow and keeps their bodies warm. ()
- 2 A type of adaptation that helps the living organism to blend in with the surrounding environment ()
- 3 A reptile that its body is covered by colored scales and has V-shaped feet. ()
- 4 A type of foxes has a tan-colored fur. ()
- 5 It covers the body of some bears to keep warm and blend in snow. ()
- 6 The fox that has extra-large ears to lose its heat ()
- 7 A structural adaptation that fixes the kapok tree in soggy soil and support its trunk ()
- 8 It is a tree that is found in snow and has a triangle shape. ()
- 9 An organ through which solid wastes of digestion leave the body. ()
- 10 A process of breaking down food into smaller parts that the body cells absorb and use to get energy and grow. ()
- 11 A large muscle that contracts during breathing in and relaxes during breathing out ()
- 12 It allows the air to pass from the nose to the trachea. ()
- 13 A gas presents in air and water, and is very important for breathing process ()
- 14 A system that controls all the body functions, and nerves are one of its parts. ()
- 15 An animal that can turn its head backwards, and has a bowl-shaped face and large eyes ()
- 16 The time taken by an organism's body to respond to different reactions ()





- 17 A group of ants which is responsible for sending smelly messages when there is a shortage of food. ()
- 18 Ants send a smelly message to alert the ants where to find the food. ()
- 19 A tool used by the man works as the eyes of fishing cats at night. ()
- 20 Objects that emit their own light. ()
- 21 A body that appears lighted in the sky, but it is not considered as a source of light. ()
- 22  The object which allows light to pass through it ()
- 23 It is a pattern that has meaning ()
- 24 It is a code that use symbols in a pattern to give a specific meaning according to the arrangement of letter in a word ()
- 25 It is a code in form of sounds used to transfer information ()

Question 05

Give Reason for each of the following

- 1 Fennec fox has sandy-colored fur
.....
- 2 The polar bear has thick white fur.
.....
- 3 The body of chameleon is covered with colored scales.
.....
- 4 Fennec fox has extra-large ears, while arctic fox has short ears.
.....
- 5 Panther chameleon has V-shaped feet and a long tail.
.....
- 6 Mangrove tree has long and strong roots.
.....
- 7 Kapok tree has hand-shaped leaves
.....




- 8 Water lilies have wide floating leaves.
.....
- 9 Barbary fig has sharp spines.
.....
- 10 The inhaled air differs from the exhaled air.
.....
- 11 Gills are unique structural adaptation in fish
.....
- 12 Owls can hunt during the night
.....
- 13 Dolphine cah hear all kinds of sound
.....
- 14 Bats can't see in the dark, but they can hunt their prey at night
.....
- 15 Fishing cat eyes glow in the dark
.....
- 16 Sun is considered a source of light
.....
- 17 Moon is not considered as a source of light
.....
- 18 We can see objects when light fall on it
.....
- 19 A mirror can reflect light better than a painted surface.
.....
- 20 A shadow is formed when light falls on an opaque object.
.....



Question 06

What happens if ?

- 1 Animals can't adapt in their environment.
.....
- 2 The polar bear has thin fur instead of its thick fur
.....
- 3 Diaphragm moves up in respiration process (during exhalation)
.....
- 4 The diaphragm muscle contracts and moves down.
.....
- 5 When the light falls on a smooth and shiny surface as mirror
.....
- 6 The light falls on a rough surface. (Related to reflection of light rays).
.....
- 7 Light fall on transparent object as glass window
.....
- 8  When firefly wants to attract a mate to reproduce?
.....
- 9 The traffic light becomes red while you are going to cross road
.....

Question 07

cross the odd word

- 1 Penguin - Fennec fox - Polar bear - Arctic fox ()
- 2  Penguin - Polar bear - Snake - Arctic Fox. ()
- 3 Nose - Throat - Trachea - Anus. ()
- 4 Nose - Trachea - Stomach - Lungs. ()
- 5 Fire - The moon - The Sun - The light bulb. ()
- 6 Wood. Glass cup-Book-Wall ()



Question 01

choose the corret answer

unit 2

- 1 When an object is in motion, this means that itschanges
 (a) color (b) shape (c) size (d) position
- 2 When you move something towards you, this represents.....
 (a) pushing force (b) light energy (c) pulling force (d) sound energy
- 3 Push or pull actions are considered as types of
 (a) force (b) device (c) energy (d) adaptation
- 4 Which of the following will cause an object to move?
 (a) balanced forces (b) unbalanced forces (c) sound energy (d) light energy
- 5 All of the following are examples of motion, except
 (a) running person (b) ball travelling through air (c) flying bird (d) sleeping dog
- 6 When you throw a ball in the air, the gravity will make it move
 (a) upward (b) forward (c) downward (d) backward
- 7 The force that occurs when an object rubs against another object is called.....
 (a) friction (b) gravity (c) push (d) pull
- 8 When the force acting on a moving body increases, its speed will
 (a) increase (b) decrease (c) remain constant (d) stop
- 9 The force that slows down (decreases) the speed is called
 (a) push (b) gravity (c) friction (d) pull
- 10 There is a force between the car tires and the road that acts to decrease car's speed gradually.
 (a) gravity (b) pulling (c) pushing (d) friction
- 11 is the ability to do work or make a change.
 (a) Speed (b) Work (c) Energy (d) Displacement
- 12 The form of energy that can be seen is energy.
 (a) thermal (b) electrical (c) sound (d) light





- 13 In the electric lamp, electrical energy is changed into energy
 (a) sound (b) chemical (c) light (d) potential
- 14 The energy that is stored in an object due to its position, is known as energy.
 (a) kinetic (b) potential (c) electrical (d) chemical
- 15 The energy gained by a ball when it falls from above is energy
 (a) Potential (b) kinetic (c) light (d) chemical
- 16 Electric heater produces energy.
 (a) kinetic (b) thermal (c) electric (d) chemical
- 17 Chemical energy stored in batteries is considered a form of energy
 (a) potential (b) kinetic (c) heat (d) light
- 18 Chemical energy can be stored in
 (a) food only (b) battery only (c) television and food (d) food and battery
- 19 The force that causes an object to move a distance is called
 (a) work (b) potential (c) gravity (d) pull
- 20 A ball at the top of the hill stores energy
 (a) potential (b) sound (c) kinetic (d) heat
- 21 How can we calculate the speed of an object?
 (a) distance ÷ time (b) distance + time (c) distance x time (d) distance - time
- 22 Which of the following is a measuring unit of speed?
 (a) hr/km (b) sec/m (c) kg/sec (d) m/sec
- 23 The airbag is made of.....
 (a) carton (b) nylon (c) rubber (d) cotton
- 24 Kinetic energy isn't affected by the
 (a) mass (b) speed (c) color (d) weight
- 25 Speed is a measurement of how something is moving.
 (a) long (b) fast (c) tall (d) much
- 26 Collisions usually produceenergy
 (a) solar (b) sound (c) gravitational (d) chemical



- 27 When a car that moves forward stops suddenly, the passengers move ...
 a backward b forward c upward d downward

Question 02

put (true) or (false)

- 1 Air resists the motion of a car. ()
- 2 Pushing force of gravity makes the ball falls down after throwing it in air ()
- 3 The balanced forces cause the object to move. ()
- 4 Hitting a tennis ball needs a pulling force ()
- 5 When a pen falls down from your hand, the acting force is the gravity. ()
- 6 Unbalanced forces cause a change in the object position ()
- 7 Objects fall down to the Earth due to friction force. ()
- 8 When a car crashes into a wall, it will not stop. ()
- 9 When a car runs out of fuel on a flat road, its speed increases gradually until it stops. ()
- 10 Any moving object has a form of energy known as kinetic energy ()
- 11 When the roller coaster slides down fast, its kinetic energy increases ()
- 12 The moving objects only have energy, while the objects that don't move have no energy ()
- 13 When you kick a ball, kinetic energy is produced ()
- 14 As the height of an object from the Earth's surface increases, its potential energy decreases ()
- 15 In the electric fan, the kinetic energy is converted into electric energy. ()
- 16 We can see the movement of electricity through a wire. ()
- 17 From the examples of kinetic energy, the bird which stays in its nest. ()
- 18 Energy can be changed from one form to another. ()
- 19 Potential energy is the energy of moving body. ()
- 20 Thermal energy is an example of kinetic energy. ()
- 21 Energy is the ability to do work. ()
- 22 Seatbelt is one of safety equipment in cars. ()





- 23 After collision, the air bag deflates the same speed as it inflates. ()
- 24 Drivers should drive as fast as possible to avoid accidents. ()
- 25 The high-speed moving objects face less dangers than the slower objects. ()
- 26 The mass of a moving body affects its speed. ()
- 27 As the speed increases, the amount of fuel used decreases. ()
- 28 We can measure the covered distance in kilometer unit. ()
- 29 Kilogram is the measuring unit of speed ()
- 30 Speed and mass are factor that affect the kinetic energy of a moving object ()

Question 03

complete

- 1 is the ability to do work.
- 2 If the mass of an object decreases this mean its kinetic energy
- 3 In gas oven, energy changes into energy.
- 4 In electric heater, energy changes into energy.
- 5 In electric bell, electrical energy changes into energy.
- 6 The energy that is stored in an object is called energy.
- 7 Airbags absorbs the of the car during collision.
- 8 When objects collide with each other, is transferred between them.
- 9 is a safety equipment that is used to prevent car passengers from moving forward when the car stops suddenly.
- 10 When the speed of an object increases, its kinetic energy
- 11 During a car crash, is inflated with a gas to provide a soft cushion.

Question 04

write scientific term for each of the following

- 1 A force that you make to move an object away from you ()
- 2 One of the fastest and most powerful trucks in the world ()
- 3 It is a push or pull that is applied to an object cause it to change its position ()
- 4 The force that pulls objects toward the center of the earth ()





- 5 A change in the position of an object relative to a fixed starting point ()
- 6 The energy that the object gains due to its motion ()
- 7 It is the ability to do work ()
- 8 It is a force that causes an object to move a distance ()
- 9 The form of energy that increases when the speed of an object increases ()
- 10 The stored energy in an object due to its position ()
- 11 The process in which two objects or more crash into each other and includes an energy. ()
- 12 Safety equipment used to prevent car passengers from moving forward when the car stops suddenly. ()
- 13 Safety equipment provide a soft cushion, when it inflates automatically with a gas during collision. ()
- 14 A heavy steel ball that swings on a cable and it is used in destruction of buildings parts. ()

Question 05

Give Reason for each of the following

- 1 The shockwave truck is faster than the normal truck
.....
- 2 Engineers use parachutes in shockwave truck
.....
- 3 If you let a pen out of your hand, it falls to the ground
.....
- 4 When you stop pedalling during movement of your bicycle, it slows down until it stops
.....
- 5 Electric lamp produces different forms of energy
.....
- 6 You switch on an electric lamp
.....
- 7 Airbag deflates after seconds of collision.
.....



Question 06

What happens if ?

- 1 The shockwave driver opens the parachutes
- 2 You let your toy out of your hand
- 3 A car runs of fuel on a flat road
- 4 A roller coaster moves from up to down
- 5 You operate a washing machine
- 6 You switch on an electric lamp
- 7 The speed of a car increases. (according to its kinetic energy).
- 8 When the mass of a moving body increases, as it moves down wards along a ramp. (According to the kinetic energy)

Question 07

cross the odd word

- 1 Sound energy - light energy - thermal energy - chemical energy

Question 08

Answer the following questions

1. Mention some of the safety equipment in the car?
2. Find speed of a runner, if you know that he covers 400 meters in 8 seconds.
3. A train travels from Cairo to Alexandria in a distance of 200 kilometers in 2 hours, Find its speed.

تم بحمد الله

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم



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First term Questions Bank



Question 01




choose the corret answer

unit 1

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 - c hiding
 - d **death**
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- 5is considered as a structural adaptation in living organisms
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 - b panting
 - c **brown fur**
 - d Puff its body with air
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 - b **fennec fox**
 - c arctic fox
 - d polar bear
- 7 When a panther chameleon stands on leaves of trees, the color of its scales changes into.....
 - a white
 - b **green**
 - c blue
 - d black
- 8 The fur of fennec fox protect it from.....
 - a wind
 - b rains
 - c **hot weather**
 - d cold weather
- 9 The body of arctic fox covered with
 - a skin
 - b **thick fur**
 - c feathers
 - d scales
- 10 All of the following properties help arctic fox to stay warm, except....
 - a thick fur coat
 - b short ears
 - c **tan-colored coat**
 - d short legs





- 11 Bull sharks can live in
- a fresh water only b salt water only c seas, rivers and mud d rivers, seas and oceans.
- 12 Fennec fox has a tan- colored coat that provides in its environment
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- 13  One of the structural adaptations of water lily plant is that it has
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- 17 Crushing the food in your mouth is the function of
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- 24 Sense organ collect information and send signals to..... for processing and understanding.
 (a) hands (b) legs (c) **brain** (d) stomach
- 25 use echolocation by bouncing high-pitched sounds in the air.
 (a) **Bats** (b) Dolphins (c) Whales (d) Snakes
- 26 The organ that is responsible for the sense of sight is
 (a) ear (b) tongue (c) nose (d) **eye**
- 27 From transparent objects.....
 (a) metals (b) **lens** (c) mirror (d) Wood
- 28 Reading and writing are common types of communication in world
 (a) **humans** (b) animals (c) birds (d) Plants
- 29 Rock and wood are materials.
 (a) **opaque** (b) transparent (c) liquids (d) gaseous
- 30 Animals can communicate with each other through.....
 (a) **sound and light** (b) eating (c) writing (d) Reading

Question 02

put (true) or (false)

- 1 Thick white fur is an adaptation in bears that live in polar regions
- 2 The feet of the penguin do not freeze because they have a layer of fat.
- 3 Black bears have dark fur to hide among trees.
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- 5 All type of sharks live in fresh water
- 6 Living organisms can adapt their environmental conditions through structural adaptation and behavioral adaptation
- 7 The behavioral adaptation is a change in the body structure of a living organism to survive.
- 8 Mangrove trees adapt to resist the water waves through their long, strong roots.
- 9 Plants have structural adaptation only to help them survive and grow in different environments.





- 10 One of the structural adaptations of acacia tree is that it has large, wide roots called buttress roots ✗
- 11 Hand-shaped leaves of kapok tree is considered as a behavioral adaptation. ✗
- 12  The stomach is an important organ in the digestive system ✓
- 13 Digestion process begins in the stomach with the help of saliva. ✗
- 14 The food passes through the large intestine before it goes into the small intestine ✗
- 15 We eat food to obtain energy. ✓
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- 20  The sense of hearing of dolphin is stronger than human ✓
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- 27 Both human and animal need light to see. ✓
- 28  Nocturnal animals have eyes larger than human. ✓
- 29 Wood is a transparent object that allows light to pass through it ✗
- 30 Speaking, writing are ways to communicate with people. ✓

Question 03

complete

- 1 The penguin's body can keep warm through a thick layer of **fat** and dense **feathers**
- 2 Type of adaptation that some animals use to hide from their predators or preys is known as **camouflage**



- 3 Forest bears have **black** or **brown** colored fur, while polar bears have **white** colored fur.
- 4 The long ears of the fennec fox are example of **structural** adaptation.
- 5 Eyes of chameleon move independently of each other; this is considered as **structural** adaptation.
- 6 Short ears of arctic fox is considered **structural** adaptation, while its staying in burrows to be warm is considered **behavioral** adaptation.
- 7 **Acacia** tree has taproot to search for water.
- 8 **Mangrove** tree has long and strong roots to resist water waves.
- 9 The hand-shaped leaves of kapok tree allow **wind** to flow through them gently.
- 10 The leaves of water lilies are wide in order to **float** on the water surface and to absorb a large amount of **sunlight**
- 11 Air enters and exits the human body through **respiratory** system.
- 12 During inhalation, air travels down from your throat to your lungs through **trachea**
- 13 Humans use **lungs** to breathe, while fish use **gills** to breathe.
- 14 Fish breath **oxygen** gas which dissolved in water.
- 15 Fish have **gills** to breathe.
- 16 Starred agama lizard is a **reptile**, while frog is an **amphibian**
- 17  The dolphin has sharp sense of **hearing**
- 18 **Sight** and **hearing** are from sharp senses in owls.
- 19 **brain** is the main control center in the body
- 20 Blind people can locate his friend by **hearing** sense.
- 21 Humpback whales communicate with each other with their **hearing** senses.
- 22 **Nurse** ants are responsible for sending smelly message when amount of food decreases
- 23  The form energy that can be seen is **light** energy.
- 24 Light travels in **straight** lines.
- 25 **eye** is the organ that we can use to receive light.
- 26 Fireflies use the sense of **sight** to communicate with each other.





- 27 Fireflies communicate with each other by producing a **light**
- 28 **wood** is an opaque object.
- 29 **Air** is considered an example for transparent materials.
- 30 water is **transparent** materials and you can see things through them


Question 04

write scientific term for each of the following

- 1 It covers the body of some types of bears to blend in with snow and keeps their bodies warm. **Thick white fur**
- 2 A type of adaptation that helps the living organism to blend in with the surrounding environment **camouflage**
- 3 A reptile that its body is covered by colored scales and has V-shaped feet. **Panther chameleon**
- 4 A type of foxes has a tan-colored fur. **Fennec fox**
- 5 It covers the body of some bears to keep warm and blend in snow. **Thick white fur**
- 6 The fox that has extra-large ears to lose its heat **fennec fox**
- 7 A structural adaptation that fixes the kapok tree in soggy soil and support its trunk **Buttress root**
- 8 It is a tree that is found in snow and has a triangle shape. **Pine tree**
- 9 An organ through which solid wastes of digestion leave the body. **Anus**
- 10 A process of breaking down food into smaller parts that the body cells absorb and use to get energy and grow. **Digestion process**
- 11 A large muscle that contracts during breathing in and relaxes during breathing out **Diaphragm**
- 12 It allows the air to pass from the nose to the trachea. **Throat (pharynx)**
- 13 A gas presents in air and water, and is very important for breathing process **Oxygen gas**
- 14 A system that controls all the body functions, and nerves are one of its parts. **Nervous system**
- 15 An animal that can turn its head backwards, and has a bowl-shaped face and large eyes **Owl**





- | | | |
|----|--|----------------------|
| 16 | The time taken by an organism's body to respond to different reactions | reaction time |
| 17 | A group of ants which is responsible for sending smelly messages when there is a shortage of food. | nurse ants |
| 18 | Ants send a smelly message to alert the ants where to find the food. | Scout ants |
| 19 | A tool used by the man works as the eyes of fishing cats at night. | night vision goggles |
| 20 | Objects that emit their own light. | Sources of light |
| 21 | A body that appears lighted in the sky, but it is not considered as a source of light. | The moon |
| 22 |  The object which allows light to pass through it | transparent object |
| 23 | It is a pattern that has meaning | Code |
| 24 | It is a code that use symbols in a pattern to give a specific meaning according to the arrangement of letter in a word | writing |
| 25 | It is a code in form of sounds used to transfer information | language |

Question 05

Give Reason for each of the following

- 1 Fennec fox has sandy-colored fur
Fennec fox has a sandy- colored fur to blend in with the desert
- 2 The polar bear has thick white fur.
Thick fur to stay warm
white fur to blend in with snow
- 3 The body of chameleon is covered with colored scales.
To make camouflage
- 4 Fennec fox has extra-large ears, while arctic fox has short ears.
Extra-large ears help fennec fox to lose heat and cool its body,
arctic fox has short ears to stay warm
- 5 Panther chameleon has V-shaped feet and a long tail.
To hold the branches of trees



- 6 Mangrove tree has long and strong roots.
To resist the water waves
- 7 Kapok tree has hand-shaped leaves
To allow wind to move gently through them without tearing leaves
- 8 Water lilies have wide floating leaves.
To absorb a large amount of sunlight – to float on water
- 9 Barbary fig has sharp spines.
To prevent animals from eating its fruits and leaves
- 10 The inhaled air differs from the exhaled air.
Inhaled air rich in oxygen gas, exhaled air rich in carbon dioxide gas
- 11 Gills are unique structural adaptation in fish.
Fish use gills to respire oxygen under water
- 12 Owls can hunt during the night
Because owl is nocturnal animals with sharp hearing sense it use echolocation to find prey
- 13 Dolphine can hear all kinds of sound
Because dolphine have super sense of hearing and depend on hearing to locate objects
- 14 Bats can't see in the dark, but they can hunt their prey at night
Because they depend on echolocation to locate (find) their prey at night
- 15 Fishing cat eyes glow in the dark
because it has a mirror-like membrane at the back of its eyes which reflect light
- 16 Sun is considered a source of light
Because it emits light
- 17 Moon is not considered as a source of light
Because it reflects sun light.
- 18 We can see objects when light fall on it
Because of light reflection



- 19 A mirror can reflect light better than a painted surface.
Because the mirror is more smooth than the painted surface
- 20 A shadow is formed when light falls on an opaque object.
Because opaque object doesn't allow light to pass through

Question 06

What happens if ?

- 1 Animals can't adapt in their environment.
They cannot survive and reproduce
- 2 The polar bear has thin fur instead of its thick fur
It cannot adapt in its cold environment
- 3 Diaphragm moves up in respiration process (during exhalation)
air rich in carbon dioxide comes out of the lungs, size of chest decrease
- 4 The diaphragm muscle contracts and moves down.
the air rich in oxygen enter the lung, the size of chest increases
- 5 When the light falls on a smooth and shiny surface as mirror
Light rays will reflect in one direction.
- 6 The light falls on a rough surface. (Related to reflection of light rays).
Light rays will reflect in different directions.
- 7 Light fall on transparent object as glass window
Light will pass through it and I can see objects through it
- 8 When firefly wants to attract a mate to reproduce?
It produces a chemical reaction inside its body to light up
- 9 The traffic light becomes red while you are going to cross road
The eyes send a message to brain – brain process information
(stop walking)





Question 07

cross the odd word

- | | | |
|---|--|------------|
| 1 | Penguin - Fennec fox - Polar bear - Arctic fox | Fennec fox |
| 2 | Penguin - Polar bear - Snake - Arctic Fox. | Snake |
| 3 | Nose - Throat - Trachea - Anus. | Anus |
| 4 | Nose - Trachea - Stomach - Lungs. | stomach |
| 5 | Fire - The moon - The Sun - The light bulb. | moon |
| 6 | Wood. Glass cup-Book-Wall | Glass cup |

Question 01

choose the corret answer

unit 2

- 1 When an object is in motion, this means that itschanges
 (a) color (b) shape (c) size (d) position
- 2 When you move something towards you, this represents.....
 (a) pushing force (b) light energy (c) pulling force (d) sound energy
- 3 Push or pull actions are considered as types of
 (a) force (b) device (c) energy (d) adaptation
- 4 Which of the following will cause an object to move?
 (a) balanced forces (b) unbalanced forces (c) sound energy (d) light energy
- 5 All of the following are examples of motion, except
 (a) running person (b) ball travelling through air (c) flying bird (d) sleeping dog
- 6 When you throw a ball in the air, the gravity will make it move
 (a) upward (b) forward (c) downward (d) backward
- 7 The force that occurs when an object rubs against another object is called.....
 (a) friction (b) gravity (c) push (d) pull





- 8 When the force acting on a moving body increases, its speed will
- (a) increase (b) decrease (c) remain constant (d) stop
- 9 The force that slows down the speed is called
- (a) push (b) gravity (c) friction (d) pull
- 10 There is a force between the car tires and the road that acts to decrease car's speed gradually.
- (a) gravity (b) pulling (c) pushing (d) friction
- 11 is the ability to do work or make a change.
- (a) Speed (b) Work (c) Energy (d) Displacement
- 12 The form of energy that can be seen is energy.
- (a) thermal (b) electrical (c) sound (d) light
- 13 In the electric lamp, electrical energy is changed into energy
- (a) sound (b) chemical (c) light (d) potential
- 14 The energy that is stored in an object due to its position, is known as energy.
- (a) kinetic (b) potential (c) electrical (d) chemical
- 15 The energy gained by a ball when it falls from above is energy
- (a) Potential (b) kinetic (c) light (d) chemical
- 16 Electric heater produces energy.
- (a) kinetic (b) thermal (c) electric (d) chemical
- 17 Chemical energy stored in batteries is considered a form of energy
- (a) potential (b) kinetic (c) heat (d) light
- 18 Chemical energy can be stored in
- (a) food only (b) battery only (c) television and food (d) food and battery
- 19 The force that causes an object to move a distance is called
- (a) work (b) potential (c) gravity (d) pull
- 20 A ball at the top of the hill stores energy
- (a) potential (b) sound (c) kinetic (d) heat
- 21 How can we calculate the speed of an object?
- (a) $\frac{\text{distance}}{\text{time}}$ (b) distance + time (c) distance x time (d) distance - time





- 22 Which of the following is a measuring unit of speed?
 (a) hr/km (b) sec/m (c) kg/sec (d) **m/sec**
- 23 The airbag is made of.....
 (a) carton (b) **nylon** (c) rubber (d) cotton
- 24 Kinetic energy isn't affected by the
 (a) mass (b) speed (c) **color** (d) weight
- 25 Speed is a measurement of how something is moving.
 (a) long (b) **fast** (c) tall (d) much
- 26 Collisions usually produceenergy
 (a) solar (b) **sound** (c) gravitational (d) chemical
- 27 When a car that moves forward stops suddenly, the passengers move ...
 (a) backward (b) **forward** (c) upward (d) downward

Question 02

put (true) or (false)

- 1 Air resists the motion of a car. ✓
- 2 Pushing force of gravity makes the ball falls down after throwing it in air ✗
- 3 The balanced forces cause the object to move. ✗
- 4 Hitting a tennis ball needs a pulling force ✗
- 5 When a pen falls down from your hand, the acting force is gravity ✓
- 6 Unbalanced forces cause a change in the object position ✓
- 7 Objects fall down to the Earth due to friction force. ✗
- 8 When a car crashes into a wall, it will not stop. ✗
- 9 When a car runs out of fuel on a flat road, its speed increases gradually until it stops. ✗
- 10 Any moving object has kinetic energy ✓
- 11 When the roller coaster slides down fast, its kinetic energy increases ✓
- 12 The moving objects only have energy, while the objects that don't move have no energy ✗
- 13 When you kick a ball, kinetic energy is produced ✓



- 14 As the height of an object from the Earth's surface increases, its potential energy decreases
- 15 In the electric fan, the kinetic energy is converted into electric energy.
- 16 We can see the movement of electricity through a wire.
- 17 From the examples of kinetic energy, the bird which stays in its nest.
- 18 Energy can be changed from one form to another.
- 19 Potential energy is the energy of moving body.
- 20 Thermal energy is an example of kinetic energy.
- 21 Energy is the ability to do work.
- 22 Seatbelt is one of safety equipment in cars.
- 23 After collision, the air bag deflates the same speed as it inflates.
- 24 Drivers should drive as fast as possible to avoid accidents.
- 25 The high-speed moving objects face less dangers than the slower objects.
- 26 The mass of a moving body affects its speed.
- 27 As the speed increases, the amount of fuel used decreases.
- 28 We can measure the covered distance in kilometer unit.
- 29 Kilogram is the measuring unit of speed
- 30 Speed and mass are factor that affect the kinetic energy of a moving object

Question 03

complete

- 1 **Energy** is the ability to do work.
- 2 If the mass of an object decreases this mean that its kinetic energy **decrease**
- 3 In gas oven, **chemical** energy changes into **thermal** energy.
- 4 In electric heater, **electric** energy changes into **thermal** energy.
- 5 In electric bell, electrical energy changes into **sound** energy.
- 6 The energy that is stored in an object is called **potential** energy.
- 7 Airbags absorbs the **energy** of the car during collision.





- 8 When objects collide with each other, **energy** is transferred between them.
- 9 **Seatbelt** is a safety equipment that is used to prevent car passengers from moving forward when the car stops suddenly.
- 10 When the speed of an object increases, its kinetic energy **increases**
- 11 During a car crash, the **airbag** is inflated with a gas to provide a soft cushion.

Question 04

write scientific term for each of the following

- | | |
|---|------------------|
| 1 A force that you make to move an object away from you | push force |
| 2 One of the fastest and most powerful trucks in the world | shockwave |
| 3 It is a push or pull that is applied to an object cause it to change its position | trunk |
| 4 The force that pulls objects toward the center of the earth | force |
| 5 A change in the position of an object relative to a fixed starting point | gravity |
| 6 The energy that the object gains due to its motion | Motion |
| 7 It is the ability to do work | kinetic energy |
| 8 It is a force that causes an object to move a distance | energy |
| 9 The form of energy that increases when the speed of an object increases | work |
| 10 The stored energy in an object due to its position | kinetic energy |
| 11 The process in which two objects or more crash into each other and includes an energy. | potential energy |
| 12 Safety equipment used to prevent car passengers from moving forward when the car stops suddenly. | collision |
| 13 Safety equipment provide a soft cushion, when it inflates automatically with a gas during collision. | seatbelt |
| 14 A heavy steel ball that swings on a cable and it is used in destruction of buildings parts. | airbag |
| | A wrecking ball |



Question 05

Give Reason for each of the following

- 1 The shockwave truck is faster than the normal truck
Because shockwave truck has three jet engines
- 2 Engineers use parachutes in shockwave truck
To help slow down the shockwave truck quickly
- 3 If you let a pen out of your hand, it falls to the ground
Because gravity pull it down toward the ground
- 4 When you stop pedalling during movement of your bicycle, it slows down until it stop
Due to friction force between the bicycle tires and the road that act in the opposite direction of motion
- 5 Electric lamp produces different forms of energy
Because it produces light and thermal energy
- 6 You switch on an electric lamp
The electrical energy changes into light energy and thermal energy
- 7 Airbag deflates after seconds of collision.
Because it has holes to deflate to let driver get out of the car

Question 06

What happens if ?

- 1 The shockwave driver opens the parachutes
The shockwave truck speed slow down quickly
- 2 You let your toy out of your hand
It will fall down towards the ground because of gravity force
- 3 A car runs of fuel on a flat road
Its speed decreases gradually till it stops
- 4 A roller coaster moves from up to down
The stored potential energy changed into kinetic energy



- 5 You operate a washing machine
Electric energy changes into kinetic energy
- 6 You switch on an electric lamp
The electrical energy changes into light energy and thermal energy
- 7 The speed of a car increases. (according to its kinetic energy).
The kinetic energy of the car increases
- 8 When the mass of a moving body increases, as it moves down wards along a ramp. (According to the kinetic energy)
The kinetic energy will increase

Question 07

cross the odd word

- 1 Sound energy - light energy - thermal energy - **chemical energy**

Question 08

Answer the following questions

1. Mention some of the safety equipment in the car?

1 – seatbelt 2- airbag

2. Find the speed of a runner, if you know that he covers 400 meters in 8 seconds.

$$\text{Speed} = \frac{\text{distance}}{\text{time}}$$

$$\text{Speed} = \frac{400}{8} = 50 \text{ m/ sec.}$$

3. A train travels from Cairo to Alexandria in a distance of 200 kilometers in 2 hours, Find its speed

$$\text{Speed} = \frac{\text{distance}}{\text{time}}$$

$$\text{Speed} = \frac{200}{2} = 100 \text{ km/ hr.}$$

تم بحمد الله

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم

