

الصف  
الرابع  
الابتدائي  
٢٠٢٥

بنك أسئلة

# التميز

أ/ محمود سعيد

مذكرتي  
ElMotamyez.com

ELMotamyez Questions Bank

## Science

Final Revision

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نسخة  
مجانية

ملق الإجابات  
بالداخل



El.Motamyez.School

يمكنكم الحصول على المذكرات والاختبارات من خلال مسح رمز ال QR Code  
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Second term Questions Bank



Question 01

choose the corret answer

- 1 At the convergence of flowing river water that carries clay and sediments with the sea, landform which is called ..... is formed  
 (a) delta (b) sand dune (c) dam (d) canyon
- 2 Which of the following landforms is steep and formed due to power of flowing water erosion?  
 (a) Plains (b) Valleys (c) Canyons (d) Mountains
- 3 When a rock blocks the path of flying sand, a ..... may be formed.  
 (a) dune (b) river (c) valley (d) canyon
- 4 A triangular landform formed from very fine bits of sand and clay that formed due to flow of river into the sea is a.....  
 (a) canyon (b) delta (c) sand dunes (d) valley
- 5 If the rain falls over a canyon for several times per year, .....  
 (a) its depth increases (b) its depth decreases (c) it becomes flat (d) not be affected
- 6 The input energy when using the lamp is the ..... energy.  
 (a) electrical (b) potential (c) kinetic (d) thermal
- 7 Steep valley forms due to flowing water erosion are called .....  
 (a) canyon (b) sand dune (c) hill (d) delta
- 8 Which of the following landforms is steep and formed due to power of flowing water erosion?  
 (a) plains (b) valley (c) canyons (d) Mountains
- 9 The solar energy is converted into ..... energy in greenhouses.  
 (a) electrical (b) sound (c) thermal (d) Potential
- 10 When rocks break down into small pieces without change in its structure, this indicates the occurrence of..... process.  
 (a) mechanical weathering (b) chemical weathering (c) erosion by wind (d) erosion by water





- 11 The dropping of sediments in a new place, is known as .....
- (a) weathering (b) deposition (c) freezing (d) erosion
- 12 Dissolving metals forming rocks is an example for.....
- (a) mechanical weathering (b) weathering by wind (c) deposition in rivers (d) chemical weathering
- 13 Which of the following is from causes of mechanical weathering?
- (a) Heat (b) Acid (c) Lichens (d) Oxygen
- 14 All the following are processes that can change Earth's surface, except .....
- (a) digestion (b) erosion (c) weathering (d) deposition
- 15 ..... is the process in which sediments move to other place on the Earth's surface
- (a) Erosion (b) Weathering (c) Deposition (d) Melting
- 16 ..... causes mechanical weathering.
- (a) Oxygen (b) Acid rain (c) Lichens (d) Wind
- 17 ..... may cause chemical weathering or mechanical weathering.
- (a) Oxygen (b) Water (c) Rocks (d) Lichens
- 18 Rusting of iron forming rocks is an example of .....
- (a) mechanical weathering (b) weathering by wind (c) deposition in rivers (d) chemical weathering
- 19 From factors of mechanical weathering .....
- (a) oxygen (b) acid rains (c) temperature (d) acids of lichens
- 20 Lichens produce ..... on rocks that dissolve minerals found in these rocks.
- (a) oxygen (b) acids (c) water (d) rain
- 21 The unusable energy that produced from the electric lamp ..... energy
- (a) potential (b) chemical (c) thermal (d) light
- 22 Limestone caves are formed due to the combination of.....
- (a) dissolved minerals (b) red-colored rusts (c) living organisms (d) acid rains
- 23 The wasted energy in most devices in the form of ..... energy.
- (a) electric (b) thermal (c) sound (d) kinetic





- 24 Rusting of a statue is an example of the action of ..... process.
- (a) deposition (b) erosion (c) mechanical weathering (d) chemical weathering
- 25 Rocks can be broken down into small particles by the exposure to all of the following, except .....
- (a) rain water (b) wind (c) moon (d) water waves
- 26 The formation of canyons takes .....
- (a) few minutes (b) few hours (c) few days (d) many years
- 27 Which of the following does not cause mechanical weathering?
- (a) Plant root (b) Acid rains (c) Wind movement (d) Water movement
- 28 Sand is formed due to breaking down of .....
- (a) glass (b) wood (c) rocks (d) Plastic
- 29 Which of the following is evidence of erosion? forming of .....
- (a) Sand dunes (b) Rock crumbs (c) Nile river delta (d) Sedimentary rock
- 30 The formation of sand dunes in Eastern Desert in Egypt is due to the movement of .....
- (a) floods (b) winds (c) waves (d) torrents
- 31 The delta is formed when the river stream entering all of the following except .....
- (a) A lake (b) A sea (c) A mountain (d) an ocean
- 32 Both hair dryer and electric water kettle produce ..... energy.
- (a) thermal (b) light (c) electric (d) potential
- 33 When a river meets a sea or an ocean, a ..... is formed.
- (a) canyon (b) volcano (c) mountain (d) delta
- 34 The output energy when playing drums is the ..... energy.
- (a) chemical (b) light (c) sound (d) potential
- 35 The output energy when using the hair dryers is the ..... energy.
- (a) electrical (b) potential (c) light (d) thermal
- 36 The stored energy inside the battery of a mobile phone is..... energy
- (a) electrical (b) light (c) Chemical (d) sound
- 37 When you use the hand bell, the .... energy changed into sound energy.
- (a) Electrical (b) potential (c) thermal (d) kinetic





- 38 The energy source in a toy car is the .....
- (a) engine      (b) tires      (c) battery      (d) fuel
- 39 The idea of design and work of the robot that explores the surface of Mars depends on the idea of transforming .....
- (a) electric to kinetic      (b) potential to kinetic      (c) light to electric      (d) kinetic to electric
- 40 The Sun provide us with ....., .....
- (a) Sound - Heat      (b) Light - Electricity      (c) Sound - Light      (d) Heat - Light
- 41 Which of the following energy forms isn't produced from the Sun?
- (a) Thermal energy      (b) Light energy      (c) Kinetic energy      (d) Radiation energy
- 42 When the blades of wind turbines rotate, this causes their turbines to rotate that leads to generating ..... energy.
- (a) electrical      (b) solar      (c) chemical      (d) Potential
- 43 Water flows through turbines in hydroelectric dams to generate ..... energy
- (a) electrical      (b) potential      (c) solar      (d) light
- 44 Among forms of fuel that present in car fuel stations are .....
- (a) gasoline - wood      (b) natural gas - coal      (c) wood - coal      (d) natural gas - gasoline
- 45 All of the following are forms of fuel, except .....
- (a) natural gas      (b) gasoline      (c) coal      (d) glass
- 46 ..... is considered as the main resource of energy on the Eath's surface
- (a) Gasoline      (b) the sun      (c) natural gas      (d) the moon
- The output energy that is not from the job of hair dryer is .....
- 47 (a) chemical      (b) sound      (c) kinetic      (d) light
- 48 During riding a bike, some kinetic energy is converted into ..... energy due to friction of bike's tire with the road.
- (a) chemical      (b) potential      (c) thermal      (d) electrical
- 49 The produced energy from radio that reflects its main function is ..... energy
- (a) electric      (b) sound      (c) light      (d) chemical
- 50 Input energy when using the hair dryer is ..... energy.
- (a) electrical      (b) potential      (c) light      (d) kinetic





- 51 Wood is considered as .....
- (a) bio fuel      (b) fossil fuel      (c) liquid fuel      (d) gaseous fuel
- 52 ..... is a type of biofuel which is made of wood.
- (a) Coal      (b) Oil      (c) Charcoal      (d) Natural gas
- 53 All the following are forms of fossil fuel, except .....
- (a) water      (b) coal      (c) natural gas      (d) Oil
- 54 Extreme heat and pressure under the earth's surface has an important role in forming .....
- (a) wood      (b) wind      (c) fossil fuel      (d) biofuel
- 55 From examples of renewable resources of energy is .....
- (a) oil      (b) wind      (c) coal      (d) natural gas
- 56 The sun and wind are considered as ..... resources of energy.
- (a) renewable      (b) nonrenewable      (c) destroyed      (d) Harmful
- 57 The resource that we consume in a rate faster than its formation in nature.....
- (a) Wind      (b) Water      (c) Solar energy      (d) Fossil fuel
- 58 In a battery of a toy car ..... energy changes into electrical energy
- (a) chemical      (b) sound      (c) thermal      (d) kinetic
- 59 In water turbines, the ..... energy of water is changed into electrical energy
- (a) chemical      (b) kinetic      (c) thermal      (d) light
- 60 Energy produced from flowing water of waterfalls, dams and turbines is called .....
- (a) mechanical energy      (b) hydroelectric energy      (c) chemical energy      (d) kinetic energy
- 61 When a rock's surface is eroded due to weather factors such as air or water, this indicates the occurrence of..... process.
- (a) weathering      (b) deposition      (c) transfer      (d) Erosion
- 62 Water turbines can generate more electricity by increasing the ..... energy of water that is stored behind dams.
- (a) light      (b) sound      (c) thermal      (d) potential
- 63 Curiosity rover is designed to explore .....
- (a) Mars planet      (b) the Moon      (c) the sun      (d) Earth planet





- 64 The ..... on the rover curiosity convert solar energy into ..... energy which is used to charge its batteries  
 (a) Solar panels electrical (b) Batteries electrical (c) Solar panels sound (d) Batteries sound
- 65 The output energy in the Mars exploration vehicle is ..... energy.  
 (a) electrical (b) light (c) kinetic (d) solar
- 66 By rubbing hands ..... energy is changed into thermal energy.  
 (a) chemical (b) kinetic (c) sound (d) potential
- 67 A plugged-in lamp can turn ..... energy to ..... energy.  
 (a) electrical, light (b) kinetic, light (c) chemical, light (d) chemical, heat
- 68 Fossil fuel is extracted from .....  
 (a) the Earth's surface (b) the underground (c) the food (d) the water
- 69 Fossil fuels need ..... to be formed under the Earth's surface.  
 (a) five years (b) ten years (c) hundreds of years (d) millions of years
- 70 All forms of fossil fuel are formed .....  
 (a) above earth's surface (b) under earth's surface (c) above water surface (d) in air around us
- 71 All the following are forms of fossil fuel, except .....  
 (a) water (b) coal (c) natural gas (d) oil
- 72 Among the following resources, we must conserve.....  
 (a) Solar energy - coal (b) Solar energy - wind (c) Solar energy and oil (d) Oil and coal
- 73 Energy produced from the electric bulb is ..... energy.  
 (a) chemical (b) sound (c) light (d) kinetic
- 74 All of the following are examples of renewable energy resources, except .....  
 (a) fossil fuel (b) waterfalls (c) wind (d) sunlight

Question 02

put ( true ) or ( false )

- 1 When iron in rocks rusts, the rock becomes stronger. ( )
- 2 When water freezes, its volume increases. ( )



- 3 Gravity pulls rocks down the mountainsides causing its erosion. ( )
- 4 Deposition process never change the shape of the land. ( )
- 5 Nile delta is a triangle-shaped mass of mud and other sediments. ( )
- 6 The volume of water decreases when it freezes. ( )
- 7 The Earth's surface never changes over time. ( )
- 8 Canyons can take millions of years to be formed ( )
- 9 Sea waves may cause erosion of beaches. ( )
- 10 Both sandcastles and canyons can be formed in few hours. ( )
- 11 Canyons are special types of valleys that have steep sides. ( )
- 12 Mechanical weathering causes changing in the structure of the rocks and new substance is formed. ( )
- 13 Erosion process is usually followed by weathering process. ( )
- 14 Deposition process never change the shape of the land. ( )
- 15 Plant roots growing in crack of rocks cause chemical weathering ( )
- 16 Wind can be considered as one of the factors that cause weathering. ( )
- 17 All physical factors of mechanical weathering lead to breaking down of rocks. ( )
- 18 Water causes both mechanical and chemical weathering. ( )
- 19 The process of deposition occurs when sediment down. ( )
- 20 Sandcastle wrecked during a long period of time. ( )
- 21 Hot and cold cause rocks to break. ( )
- 22 Wind can pick up sand grains in forming sand dunes. ( )
- 23 Weathering and deposition take place together ( )
- 24 Energy is created and destroyed. ( )
- 25 Hydropower is a clean energy resource. ( )
- 26 Deltas are formed by weathering process. ( )
- 27 Canyons are similar in their colors, texture and shapes. ( )
- 28 Strong wind and hurricanes carry sand grains for a short distance. ( )
- 29 Erosion is the process in which the small particles are moved to other places. ( )
- 30 Floods are one of the factors that causes water erosion. ( )



- 31 Gravity doesn't affect the small rocks that have been broken down from mountains. ( )
- 32 Both valleys and canyons often have river in their bottom. ( )
- 33 Small sand dunes are formed due to strong wind. ( )
- 34 Dunes are lowland areas which have gentle sloped sides. ( )
- 35 Small hills of sand found in a desert are known as canyons ( )
- 36 Mars is located a few meters away from Earth. ( )
- 37 Mars Curiosity can be operated from a distance ( )
- 38 A toy car can continue moving even after its battery runs out. ( )
- 39 Acid rains formed by combination of carbon dioxide with water vapor of air ( )
- 40 We have to conserve all forms of fuel. ( )
- 41 Coal was formed from the sea animals remains. ( )
- 42 Charcoal is formed from decomposition of remains of ancient plants ( )
- 43 Biofuels are from nonrenewable resources of energy. ( )
- 44 Fossil fuels that human made from corn can be replaced as it is used ( )
- 45 Generator in the electric power station changes potential energy into electrical energy ( )
- 46 Wind, oil and natural gas are natural resources used to generate clean energy ( )
- 47 Using solar energy is a way to conserve fossil fuels. ( )
- 48 Windmills always do their job all the time, because the wind never stop blowing ( )
- 49 The Sun is the main source of energy on Earth. ( )
- 50 The Sun provides the Earth with light and heat. ( )
- 51 Wind is a renewable energy resource. ( )
- 52 Energy cannot be transformed from one form to another ( )
- 53 Both electric bulb and electric heater produce thermal energy. ( )
- 54 The produced sound energy helps the hair dryer to do its function. ( )
- 55 Water is one of the sources of electricity production in Egypt ( )
- 56 Wood is a fossil fuel that is used in warming houses ( )



- 57 In wind turbines, the kinetic energy is converted into chemical energy. ( )
- 58 When water freezes, its volume decreases. ( )
- 59 A canyon may take one year only to be formed ( )
- 60 Smog doesn't cause any damage in the human respiratory system ( )
- 61 Using fossil fuels keeps the environment from pollution. ( )
- 62 Both coal and wood produce thermal energy when they are burned ( )
- 63 You need gasoline to move a bicycle ( )
- 64 When fuel is burned, it produces thermal energy. ( )
- 65 Green plants are one of the nonrenewable resources of energy. ( )
- 66 Water and gasoline are two renewable resource of energy ( )
- 67 Chemical energy is the energy that stored in food and battery. ( )
- 68 Energy may be destroyed inside different devices. ( )
- 69 Most of energy chains start with the moon ( )
- 70 There is a stored chemical energy inside the food we eat. ( )
- 71 Sand dunes are formed by erosion only. ( )
- 72 Machines make our life easier. ( )
- 73 Dams are built on river to control the wind flow. ( )
- 74 Rivers store kinetic energy. ( )
- 75 Dams are built on rivers in order to generate solar energy ( )
- 76 The watermills convert electrical energy into kinetic energy. ( )
- 77 Electricity generated by wind turbines is transmitted through wind. ( )
- 78 Using solar energy is a way to conserve fossil fuels. ( )
- 79 Electrical energy can be generated from both waterfalls and wind movement. ( )
- 80 The flow of water can be controlled to generate electricity in dams. ( )

**Question 03**

**Complete the following sentences**

- 1 ..... and ..... may sculpt landscapes.



- 2 Sediment down is a process of .....
- 3 Wadi Nakhr located in the country of .....
- 4 Chemical weathering ..... the structure of rocks.
- 5 ..... are deep valleys carved by flowing water.
- 6 The origin of sand is the breaking down of some types of .....
- 7 The process of transporting small rocks from one place to another by the help of water or wind is known as .....
- 8 Wind, ..... and gravity are natural factors that control erosion process.
- 9 The shape of coastal rocks is affected by the force of ..... and wind.
- 10 Types of weathering can be classified into mechanical weathering and ..... weathering
- 11 ..... is the process of lying down of sediments after its erosion.
- 12 Lichens produce acids on rocks that dissolves its .....
- 13 Formation of limestone caves is an example of ..... weathering.
- 14 Strong wind and hurricanes carry ..... for a long distance.
- 15 Gentle winds can form small ..... like that present at sea beaches.
- 16 When strong ..... blow in the desert, large sand dunes are formed.
- 17 Nile River Delta in Egypt is formed due to ..... process
- 18 When the force of wind ....., the sand can't travel for a long distance
- 19 Rain water is pulled downhill forming small stream due to .....
- 20 Blowing of strong ..... in the desert may form large sand dunes.
- 21 The flow of energy till be with us is known as .....
- 22 Both valley and canyon often have .....flow through their lowest points
- 23 Energy cannot be ..... nor .....
- 24 Light energy is converted into ..... energy which is stored in the form of sugar inside the trees.
- 25 Energy can neither be ..... nor ....., but only ..... from one form to another
- 26 To operate an electric mixer, we use ..... energy.
- 27 Fuel is used as a source of ..... energy.





- 28 We need ..... energy for cooking food and warming houses.
- 29 Wood and ..... are examples of biofuel, while ..... and ..... are examples of fossil fuel.
- 30 Factories may cause pollution of ....., ..... and ..... due to the chemical they use
- 31 Global warming causes the raise of ..... of earth and change its .....
- 32 Coal and ..... can be used in electric power stations to generate electricity
- 33 Turbines in electric power stations are turned by steam and they produce ..... energy to run the ..... of the electric power stations
- 34 The electric generator changes ..... energy into ..... energy
- 35 In the washing machine electrical energy converted into ..... energy.
- 36 When you ride a bicycle, the ..... energy stored in your body is converted into ..... energy which causes the bicycle to move
- 37 Energy produced from the radio which helps the device do its main function is ..... energy
- 38 The mobile phone converts chemical energy stored in its batteries into ..... energy and ..... energy.
- 39 In water turbines, the ..... energy of water movement is converted into a type of electrical energy which is called ..... energy.
- 40 To avoid air pollution, we must use ..... resources of energy such as water.
- 41 The Sun provides Earth with light and .....
- 42 ..... used to control the flow of water and increases the potential energy of water to generate electricity.
- 43 Solar panels are used to generate ..... energy
- 44 Most of the energy we use is produces inside the .....
- 45 The energy that is produced from the battery and used to operate a toy car is ..... energy.
- 46 The electric lamp converts ..... energy into light and heat energy.
- 47 The energy can be ..... from one form to another
- 48 In hand bell, kinetic energy is converted into ..... energy.
- 49 Both wind and water movement produce ..... energy that is used to rotate turbines to generate ..... energy.
- 50 Wind blows due to the difference in ..... between the cold air and the hot air.
- 51 By increasing the rotation of wind turbine blades, the wind turbine generates more ..... energy.





- 52 When the ..... energy of wind increases, the speed of rotation of turbine blades will .....
- 53 Renewable energy resources include ....., ..... and .....
- 54 When we expose our bodies to the Sun, we feel .....
- 55 We can use solar energy in cooking by using curved mirror which collect and focus ..... onto metal pots to heat them.
- 56 Canyon is a special type of ..... that has steep sides
- 57 After rocks weathering, the process of ..... occurs sand and Soil moved to another place
- 58 Formation of red rust in some rock is evidence of occurring ..... process.
- 59 ..... is the breaking down of rocks into smaller pieces.
- 60 Mechanical weathering ..... the structure of rocks.
- 61 Most caves are formed due .....
- 62 The cycle of ..... and ..... until rock breaks
- 63 The pieces of rock that are formed by weathering are known as .....
- 64 Batteries which put inside the toy is considered .....
- 65 The missions of mars depend on ..... and .....
- 66 We must not ..... and ..... of water.
- 67 Water from ..... is used in electricity generation.

**Question 04**

**write scientific term for each of the following**

- 1 Rising the temperatures of Earth. ( )
- 2 Rains that formed by combination of carbon dioxide with water vapor of air. ( )
- 3 The clean energy resources that can be used in electric generation. ( )
- 4 Energy stored uphill water rivers. ( )
- 5 Energy that makes turbines and generators in dams works. ( )
- 6 The process by which sediments lay down after its erosion. ( )





- 7 A process in which small broken rocks move from a place by the help of wind or water. ( )
- 8 Part of the plant grows inside cracks of rocks causing its weathering ( )
- 9 A gas in air combines with iron of some rocks and causes its weakness. ( )
- 10 Moving fragments of rocks or soil around. ( )
- 11 It is the process in which weathered rocks and soil are layed down or dropped by wind, water or gravity. ( )
- 12 A fan-shaped (triangular) mass of sediment that is formed where a river enters a larger body of water like seas. ( )
- 13 A hill of sand created by the wind. ( )
- 14 The pathway from input to output energy. ( )
- 15 It is a special type of valleys which its sides are steep. ( )
- 16 Energy is neither created nor destroyed, but it changes from one form to another. ( )
- 17 The energy used to play a drum. ( )
- 18 A kind of energy that is produced from the electrical heater and burning coal ( )
- 19 A device used to convert electrical energy into light energy. ( )
- 20 The energy produced when the wood of trees is burned ( )
- 21 Any substance that produces thermal energy when it is burned. ( )
- 22 The energy produced when the wood is burned ( )
- 23 It is the main source of most forms of energy on the Earth's surface ( )
- 24 It is a form of bio fuel made up of some types of plants such as grass and wood chips. ( )
- 25 A robot vehicle that can be controlled from a distance and is used to explore the surface of mars ( )
- 26 The form of energy that is stored in battery of a remote-control toy cars. ( )
- 27 The energy produced from playing guitar. ( )
- 28 Energy that always produced due to friction. ( )
- 29 The wasted energy of a computer ( )
- 30 The energy that is produced from the blender and helps it in doing its job. ( )
- 31 A mill that is turned by water flow. ( )





- 32 A mill that is operated by wind movement. ( )
- 33 The type of energy that is produced from wind turbines to operate different home devices. ( )
- 34 They help farmers in cold regions to plant crops which grow only in warm climate. ( )
- 35 They are lowland areas between mountains and have gently sloped sides around rivers ( )
- 36 A panel designed to absorb the energy of the Sun to generate electricity. ( )
- 37 A turbine that uses the power of flowing air to generate electricity. ( )
- 38 A turbine in which the kinetic energy of moving water is used to generate hydroelectric energy. ( )
- 39 A build on the river that controls the flow of water and increases the potential energy of water ( )
- 40 A type of electrical energy generated by water turbines in dams. ( )
- 41 They are used in crushing grain. ( )
- 42 It is a form of fossil fuel that was formed from dead plants under the effect of extreme heat and pressure ( )
- 43 They are deep valleys carved by flowing water. ( )
- 44 A process in which rocks are broken down into smaller particles. ( )
- 45 The kind of weathering that changes the structure and color of rocks. ( )
- 46 It is a type of weathering through which acids of lichens dissolve minerals of rocks. ( )
- 47 Break the rocks into pieces without any change in its structure. ( )

**Question 05**

**Give Reason for each of the following**

- 1 Iron in rocks may rust.  
.....
- 2 Water plays an important role in the formation of limestone caves.  
.....
- 3 The root of trees can be agent for shaping the Earth surface.  
.....



- 4 Formation of delta when a river meets a sea  
.....
- 5 Formation of small sand dunes on a beach  
.....
- 6 Formation of large sand dunes at Western Desert in Egypt  
.....
- 7 A river stream enters a sea.  
.....
- 8 Trees and other plants are growing on both sides of small canyons.  
.....
- 9 Mars rover curiosity operates for long period of time on Mars without any need to be charged  
.....
- 10 Using wood of trees as a fuel has negative effects on the environment  
.....
- 11 Wood is considered as a fuel.  
.....
- 12 We must conserve the fossil fuels  
.....
- 13 We must turn off lights that we are do not need  
.....
- 14 Gasoline is burned inside a car engine  
.....
- 15 Wind considered as renewable resources of energy  
.....
- 16 Coal considered as non-renewable resources of energy  
.....
- 17 Smog of cars is very dangerous to human health.  
.....
- 18 Fossil fuels cannot be replaced as quickly as they are used  
.....
- 19 Generator are important in electric power stations  
.....



- 20 Some rocks appear red .  
.....
- 21 Using wood as a fuel has negative effects on the environment  
.....
- 22 Farmers must decrease the use of pesticides  
.....
- 23 We feel warm at night although the sun is not visible in the sky  
.....
- 24 Hydroelectric dams are built on rivers  
.....
- 25 Humans used windmills and watermills from hundreds of years ago  
.....
- 26 Kinetic energy of wind affects the speed of wind turbine blades rotation  
.....
- 27 Water turbines are placed in waterfalls areas  
.....
- 28 Sometimes wind turbines are useless  
.....
- 29 The body has energy inside it  
.....
- 30 The energy can change its forms but it never goes away  
.....

**Question 06**

**What happens if ?**

- 1 A red-colored rust is formed on some rocks.  
.....
- 2 Oxygen of air reacts with iron of some rocks.  
.....
- 3 The lichens growing on rocks produce acids  
.....
- 4 Acidic rain falls on rocks  
.....



- 5 A river carries sediments meet a sea.  
.....
- 6 Wind that is carrying sand particles hits a big rock  
.....
- 7 A river erodes the sediments of a mountain over a long period of time  
.....
- 8 The amount of fossil fuels if people don't conserve their use  
.....
- 9 Acid rain falls on building.  
.....
- 10 To the Earth's temperature if we use renewable resources of energy instead of fossil fuels  
.....
- 11 Sunlight falls on a greenhouse  
.....
- 12 Water of sea evaporates then condenses in air  
.....
- 13 Wind doesn't blow in an area that contains many modern wind turbines  
.....
- 14 The kinetic energy of a wind that is applied on the wind turbine increases  
.....
- 15 The presence of solar panels in some electrical devices  
.....
- 16 The solar cell in a calculator exposed to sunlight  
.....
- 17 There is difference in temperature of air around Earth  
.....
- 18 On shaking a hand bell. (according to the change of energy)  
.....
- 19 On turning an electric lamp. (according to changing in energy)  
.....



- 20 The change of energy when you turn on the television  
.....
- 21 You put your hands near a lighted lamp.  
.....
- 22 Rubbing your hand together (According to the change of energy)  
.....
- 23 The car movement if fuel runs out in a car.  
.....
- 24 The remains of marine were buried under the Earth's surface over millions of years  
.....
- 25 People increase using wood a fuel  
.....
- 26 The waves crash the beach.  
.....
- 27 Sediments lays back down.  
.....
- 28 Making deforestation.  
.....
- 29 Water passing through black tubes.  
.....
- 30 Stop building of dams.  
.....

**Question 07**

**cross the odd word**

- 1 Weathering - Photosynthesis - Deposition - Erosion.
- 2 Acid rains – wind - plant root - temperature.
- 4 Wood - Coal - Oil - Natural gas
- 5 Gasoline - Coal - Natural gas - Wind.
- 6 Wood - natural gas – gasoline - glass.



Question 08

Answer the following questions

- 1 **Mention the type of weathering in the following:**
  - a Acid rain falls on rocks
  - b Freezing of water inside cracks
- 2 **What are the types of Weathering.**  
.....
- 3 **What are the factors that cause mechanical weathering?**  
.....
- 4 **What is the role of wind in mechanical weathering?**  
.....
- 5 **There are many types of sediments. Mention 2 types of them.**  
.....
- 6 **Determine the two factors that affect the Earth's surface.**  
.....
- 7 **Mention one different between the formation of dunes and formation of delta.**  
.....
- 8 **How were the chemical weathering and mechanical weathering differ?**  
.....
- 9 **How were the chemical weathering and mechanical weathering similar?**  
.....
- 10 **Mention the different between erosion and deposition and rearrange the two processes.**  
.....
- 11 **What is the definition of law of conservation energy?**  
.....
- 12 **Explain the function of rover curiosity**  
.....
- 13 **Determine the causes of air pollution.**  
.....
- 14 **Determine the causes of global warming.**  
.....



الصف  
الرابع  
الابتدائي  
٢٠٢٥

بنك أسئلة

# التميز

أ/ محمود سعيد

Model Answers

# Science

Final Revision

BY

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مذكرتي  
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Second term Questions Bank



Question 01

choose the corret answer

- 1 At the convergence of flowing river water that carries clay and sediments with the sea, landform which is called ..... is formed  
 (a) delta (b) sand dune (c) dam (d) canyon
- 2 Which of the following landforms is steep and formed due to power of flowing water erosion?  
 (a) Plains (b) Valleys (c) Canyons (d) Mountains
- 3 When a rock blocks the path of flying sand, a ..... may be formed.  
 (a) dune (b) river (c) valley (d) canyon
- 4 A triangular landform formed from very fine bits of sand and clay that formed due to flow of river into the sea is a.....  
 (a) canyon (b) delta (c) sand dunes (d) valley
- 5 If the rain falls over a canyon for several times per year, .....  
 (a) its depth increases (b) its depth decreases (c) it becomes flat (d) not be affected
- 6 The input energy when using the lamp is the ..... energy.  
 (a) electrical (b) potential (c) kinetic (d) thermal
- 7 Steep valley forms due to flowing water erosion are called .....  
 (a) canyon (b) sand dune (c) hill (d) delta
- 8 Which of the following landforms is steep and formed due to power of flowing water erosion?  
 (a) plains (b) valley (c) canyons (d) Mountains
- 9 The solar energy is converted into ..... energy in greenhouses.  
 (a) electrical (b) sound (c) thermal (d) Potential
- 10 When rocks break down into small pieces without change in its structure, this indicates the occurrence of..... process.  
 (a) mechanical weathering (b) chemical weathering (c) erosion by wind (d) erosion by water





- 11 The dropping of sediments in a new place, is known as .....
- (a) weathering (b) deposition (c) freezing (d) erosion
- 12 Dissolving metals forming rocks is an example for.....
- (a) mechanical weathering (b) weathering by wind (c) deposition in rivers (d) chemical weathering
- 13 Which of the following is from causes of mechanical weathering?
- (a) Heat (b) Acid (c) Lichens (d) Oxygen
- 14 All the following are processes that can change Earth's surface, except .....
- (a) digestion (b) erosion (c) weathering (d) deposition
- 15 ..... is the process in which sediments move to other place on the Earth's surface
- (a) Erosion (b) Weathering (c) Deposition (d) Melting
- 16 ..... causes mechanical weathering.
- (a) Oxygen (b) Acid rain (c) Lichens (d) Wind
- 17 ..... may cause chemical weathering or mechanical weathering.
- (a) Oxygen (b) Water (c) Rocks (d) Lichens
- 18 Rusting of iron forming rocks is an example of .....
- (a) mechanical weathering (b) weathering by wind (c) deposition in rivers (d) chemical weathering
- 19 From factors of mechanical weathering .....
- (a) oxygen (b) acid rains (c) temperature (d) acids of lichens
- 20 Lichens produce ..... on rocks that dissolve minerals found in these rocks.
- (a) oxygen (b) acids (c) water (d) rain
- 21 The unusable energy that produced from the electric lamp ..... energy
- (a) potential (b) chemical (c) thermal (d) light
- 22 Limestone caves are formed due to the combination of.....
- (a) dissolved minerals (b) red-colored rusts (c) living organisms (d) acid rains
- 23 The wasted energy in most devices in the form of ..... energy.
- (a) electric (b) thermal (c) sound (d) kinetic





- 24 Rusting of a statue is an example of the action of ..... process.  
 (a) deposition (b) erosion (c) mechanical weathering (d) **chemical weathering**
- 25 Rocks can be broken down into small particles by the exposure to all of the following, except .....  
 (a) rain water (b) wind (c) **moon** (d) water waves
- 26 The formation of canyons takes .....  
 (a) few minutes (b) few hours (c) few days (d) **many years**
- 27 Which of the following does not cause mechanical weathering?  
 (a) Plant root (b) **Acid rains** (c) Wind movement (d) Water movement
- 28 Sand is formed due to breaking down of .....  
 (a) glass (b) wood (c) **rocks** (d) Plastic
- 29 Which of the following is evidence of erosion? forming of .....  
 (a) **Sand dunes** (b) Rock crumbs (c) Nile river delta (d) Sedimentary rock
- 30 The formation of sand dunes in Eastern Desert in Egypt is due to the movement of .....  
 (a) floods (b) **winds** (c) waves (d) torrents
- 31 The delta is formed when the river stream entering all of the following except .....  
 (a) A lake (b) A sea (c) **A mountain** (d) an ocean
- 32 Both hair dryer and electric water kettle produce ..... energy.  
 (a) **thermal** (b) light (c) electric (d) potential
- 33 When a river meets a sea or an ocean, a ..... is formed.  
 (a) canyon (b) volcano (c) mountain (d) **delta**
- 34 The output energy when playing drums is the ..... energy.  
 (a) chemical (b) light (c) **sound** (d) potential
- 35 The output energy when using the hair dryers is the ..... energy.  
 (a) electrical (b) potential (c) light (d) **thermal**
- 36 The stored energy inside the battery of a mobile phone is..... energy  
 (a) electrical (b) light (c) **Chemical** (d) sound
- 37 When you use the hand bell, the .... energy changed into sound energy.  
 (a) Electrical (b) potential (c) thermal (d) **kinetic**





- 38 The energy source in a toy car is the .....
- (a) engine (b) tires (c) battery (d) fuel
- 39 The idea of design and work of the robot that explores the surface of Mars depends on the idea of transforming .....
- (a) electric to kinetic (b) potential to kinetic (c) light to electric (d) kinetic to electric
- 40 The Sun provide us with ....., .....
- (a) Sound - Heat (b) Light - Electricity (c) Sound - Light (d) Heat - Light
- 41 Which of the following energy forms isn't produced from the Sun?
- (a) Thermal energy (b) Light energy (c) Kinetic energy (d) Radiation energy
- 42 When the blades of wind turbines rotate, this causes their turbines to rotate that leads to generating ..... energy.
- (a) electrical (b) solar (c) chemical (d) Potential
- 43 Water flows through turbines in hydroelectric dams to generate ..... energy
- (a) electrical (b) potential (c) solar (d) light
- 44 Among forms of fuel that present in car fuel stations are .....
- (a) gasoline - wood (b) natural gas - coal (c) wood - coal (d) natural gas - gasoline
- 45 All of the following are forms of fuel, except .....
- (a) natural gas (b) gasoline (c) coal (d) glass
- 46 ..... is considered as the main resource of energy on the Eath's surface
- (a) Gasoline (b) the sun (c) natural gas (d) the moon
- The output energy that is not from the job of hair dryer is .....
- 47 (a) chemical (b) sound (c) kinetic (d) light
- 48 During riding a bike, some kinetic energy is converted into ..... energy due to friction of bike's tire with the road.
- (a) chemical (b) potential (c) thermal (d) electrical
- 49 The produced energy from radio that reflects its main function is ..... energy
- (a) electric (b) sound (c) light (d) chemical
- 50 Input energy when using the hair dryer is ..... energy.
- (a) electrical (b) potential (c) light (d) kinetic





- 51 Wood is considered as .....
- (a) bio fuel (b) fossil fuel (c) liquid fuel (d) gaseous fuel
- 52 ..... is a type of biofuel which is made of wood.
- (a) Coal (b) Oil (c) Charcoal (d) Natural gas
- 53 All the following are forms of fossil fuel, except .....
- (a) water (b) coal (c) natural gas (d) Oil
- 54 Extreme heat and pressure under the earth's surface has an important role in forming .....
- (a) wood (b) wind (c) fossil fuel (d) biofuel
- 55 From examples of renewable resources of energy is .....
- (a) oil (b) wind (c) coal (d) natural gas
- 56 The sun and wind are considered as ..... resources of energy.
- (a) renewable (b) nonrenewable (c) destroyed (d) Harmful
- 57 The resource that we consume in a rate faster than its formation in nature.....
- (a) Wind (b) Water (c) Solar energy (d) Fossil fuel
- 58 In a battery of a toy car ..... energy changes into electrical energy
- (a) chemical (b) sound (c) thermal (d) kinetic
- 59 In water turbines, the ..... energy of water is changed into electrical energy
- (a) chemical (b) kinetic (c) thermal (d) light
- 60 Energy produced from flowing water of waterfalls, dams and turbines is called .....
- (a) mechanical energy (b) hydroelectric energy (c) chemical energy (d) kinetic energy
- 61 When a rock's surface is eroded due to weather factors such as air or water, this indicates the occurrence of..... process.
- (a) weathering (b) deposition (c) transfer (d) Erosion
- 62 Water turbines can generate more electricity by increasing the ..... energy of water that is stored behind dams.
- (a) light (b) sound (c) thermal (d) potential
- 63 Curiosity rover is designed to explore .....
- (a) Mars planet (b) the Moon (c) the sun (d) Earth planet





- 64 The ..... on the rover curiosity convert solar energy into ..... energy which is used to charge its batteries  
 (a) Solar panels electrical (b) Batteries electrical (c) Solar panels sound (d) Batteries sound
- 65 The output energy in the Mars exploration vehicle is ..... energy.  
 (a) electrical (b) light (c) kinetic (d) solar
- 66 By rubbing hands ..... energy is changed into thermal energy.  
 (a) chemical (b) kinetic (c) sound (d) potential
- 67 A plugged-in lamp can turn ..... energy to ..... energy.  
 (a) electrical, light (b) kinetic, light (c) chemical, light (d) chemical, heat
- 68 Fossil fuel is extracted from .....  
 (a) the Earth's surface (b) the underground (c) the food (d) the water
- 69 Fossil fuels need ..... to be formed under the Earth's surface.  
 (a) five years (b) ten years (c) hundreds of years (d) millions of years
- 70 All forms of fossil fuel are formed .....  
 (a) above earth's surface (b) under earth's surface (c) above water surface (d) in air around us
- 71 All the following are forms of fossil fuel, except .....  
 (a) water (b) coal (c) natural gas (d) oil
- 72 Among the following resources, we must conserve.....  
 (a) Solar energy - coal (b) Solar energy - wind (c) Solar energy and oil (d) Oil and coal
- 73 Energy produced from the electric bulb is ..... energy.  
 (a) chemical (b) sound (c) light (d) kinetic
- 74 All of the following are examples of renewable energy resources, except .....  
 (a) fossil fuel (b) waterfalls (c) wind (d) sunlight

## Question 02

put ( true ) or ( false )

- 1 When iron in rocks rusts, the rock becomes stronger.
- 2 When water freezes, its volume increases.



- 3 Gravity pulls rocks down the mountainsides causing its erosion. ✓
- 4 Deposition process never change the shape of the land. ✗
- 5 Nile delta is a triangle-shaped mass of mud and other sediments. ✓
- 6 The volume of water decreases when it freezes. ✗
- 7 The Earth's surface never changes over time. ✗
- 8 Canyons can take millions of years to be formed ✓
- 9 Sea waves may cause erosion of beaches. ✓
- 10 Both sandcastles and canyons can be formed in few hours. ✗
- 11 Canyons are special types of valleys that have steep sides. ✓
- 12 Mechanical weathering causes changing in the structure of the rocks and new substance is formed. ✗
- 13 Erosion process is usually followed by weathering process. ✗
- 14 Deposition process never change the shape of the land. ✗
- 15 Plant roots growing in crack of rocks cause chemical weathering ✗
- 16 Wind can be considered as one of the factors that cause weathering. ✓
- 17 All physical factors of mechanical weathering lead to breaking down of rocks. ✓
- 18 Water causes both mechanical and chemical weathering. ✓
- 19 The process of deposition occurs when sediment down. ✓
- 20 Sandcastle wrecked during a long period of time. ✗
- 21 Hot and cold cause rocks to break. ✓
- 22 Wind can pick up sand grains in forming sand dunes. ✓
- 23 Weathering and deposition take place together ✗
- 24 Energy is created and destroyed. ✗
- 25 Hydropower is a clean energy resource. ✓
- 26 Deltas are formed by weathering process. ✗
- 27 Canyons are similar in their colors, texture and shapes. ✗
- 28 Strong wind and hurricanes carry sand grains for a short distance. ✗
- 29 Erosion is the process in which the small particles are moved to other places. ✓
- 30 Floods are one of the factors that causes water erosion. ✓



- |    |                                                                                         |   |
|----|-----------------------------------------------------------------------------------------|---|
| 31 | Gravity doesn't affect the small rocks that have been broken down from mountains.       | ✗ |
| 32 | Both valleys and canyons often have river in their bottom.                              | ✓ |
| 33 | Small sand dunes are formed due to strong wind.                                         | ✗ |
| 34 | Dunes are lowland areas which have gentle sloped sides.                                 | ✗ |
| 35 | Small hills of sand found in a desert are known as canyons                              | ✗ |
| 36 | Mars is located a few meters away from Earth.                                           | ✗ |
| 37 | Mars Curiosity can be operated from a distance                                          | ✓ |
| 38 | A toy car can continue moving even after its battery runs out.                          | ✗ |
| 39 | Acid rains formed by combination of carbon dioxide with water vapor of air              | ✓ |
| 40 | We have to conserve all forms of fuel.                                                  | ✓ |
| 41 | Coal was formed from the sea animals remains.                                           | ✗ |
| 42 | Charcoal is formed from decomposition of remains of ancient plants                      | ✗ |
| 43 | Biofuels are from nonrenewable resources of energy.                                     | ✗ |
| 44 | Fossil fuels that human made from corn can be replaced as it is used                    | ✗ |
| 45 | Generator in the electric power station changes potential energy into electrical energy | ✗ |
| 46 | Wind, oil and natural gas are natural resources used to generate clean energy           | ✗ |
| 47 | Using solar energy is a way to conserve fossil fuels.                                   | ✓ |
| 48 | Windmills always do their job all the time, because the wind never stop blowing         | ✗ |
| 49 | The Sun is the main source of energy on Earth.                                          | ✓ |
| 50 | The Sun provides the Earth with light and heat.                                         | ✓ |
| 51 | Wind is a renewable energy resource.                                                    | ✓ |
| 52 | Energy cannot be transformed from one form to another                                   | ✗ |
| 53 | Both electric bulb and electric heater produce thermal energy.                          | ✓ |
| 54 | The produced sound energy helps the hair dryer to do its function.                      | ✗ |
| 55 | Water is one of the sources of electricity production in Egypt                          | ✓ |
| 56 | Wood is a fossil fuel that is used in warming houses                                    | ✗ |
| 57 | In wind turbines, the kinetic energy is converted into chemical energy.                 | ✗ |



- |    |                                                                            |   |
|----|----------------------------------------------------------------------------|---|
| 58 | When water freezes, its volume decreases.                                  | ✗ |
| 59 | A canyon may take one year only to be formed                               | ✗ |
| 60 | Smog doesn't cause any damage in the human respiratory system              | ✗ |
| 61 | Using fossil fuels keeps the environment from pollution.                   | ✗ |
| 62 | Both coal and wood produce thermal energy when they are burned             | ✓ |
| 63 | You need gasoline to move a bicycle                                        | ✗ |
| 64 | When fuel is burned, it produces thermal energy.                           | ✓ |
| 65 | Green plants are one of the nonrenewable resources of energy.              | ✗ |
| 66 | Water and gasoline are two renewable resource of energy                    | ✗ |
| 67 | Chemical energy is the energy that stored in food and battery.             | ✓ |
| 68 | Energy may be destroyed inside different devices.                          | ✗ |
| 69 | Most of energy chains start with the moon                                  | ✗ |
| 70 | There is a stored chemical energy inside the food we eat.                  | ✓ |
| 71 | Sand dunes are formed by erosion only.                                     | ✗ |
| 72 | Machines make our life easier.                                             | ✓ |
| 73 | Dams are built on river to control the wind flow.                          | ✗ |
| 74 | Rivers store kinetic energy.                                               | ✗ |
| 75 | Dams are built on rivers in order to generate solar energy                 | ✗ |
| 76 | The watermills convert electrical energy into kinetic energy.              | ✗ |
| 77 | Electricity generated by wind turbines is transmitted through wind.        | ✗ |
| 78 | Using solar energy is a way to conserve fossil fuels.                      | ✓ |
| 79 | Electrical energy can be generated from both waterfalls and wind movement. | ✓ |
| 80 | The flow of water can be controlled to generate electricity in dams.       | ✓ |

Question 03

Complete the following sentences

- 1 Water and wind may sculpt landscapes.
- 2 Sediment down is a process of deposition
- 3 Wadi Nakhr located in the country of Oman





- 4 Chemical weathering **changes** the structure of rocks.
- 5 **Canyons** are deep valleys carved by flowing water.
- 6 The origin of sand is the breaking down of some types of **rocks**
- 7 The process of transporting small rocks from one place to another by the help of water or wind is known as **erosion**
- 8 Wind, **water** and gravity are natural factors that control erosion process.
- 9 The shape of coastal rocks is affected by the force of **water** and wind.
- 10 Types of weathering can be classified into mechanical weathering and **chemical** weathering
- 11 **deposition** is the process of lying down of sediments after its erosion.
- 12 Lichens produce acids on rocks that dissolves its **minerals**
- 13 Formation of limestone caves is an example of **chemical** weathering.
- 14 Strong wind and hurricanes carry **sand grains** for a long distance.
- 15 Gentle winds can form small **sand dunes** like that present at sea beaches.
- 16 When strong **winds** blow in the desert, large sand dunes are formed.
- 17 Nile River Delta in Egypt is formed due to **deposition** process
- 18 When the force of wind **decreases**, the sand can't travel for a long distance
- 19 Rain water is pulled downhill forming small stream due to **gravity**
- 20 Blowing of strong **wind** in the desert may form large sand dunes.
- 21 The flow of energy till be with us is known as **energy chain**
- 22 Both valley and canyon often have **river** flow through their lowest points
- 23 Energy cannot be **created** nor **destroyed**
- 24 Light energy is converted into **chemical** energy which is stored in the form of sugar inside the trees.
- 25 Energy can neither be **created** nor **destroyed**, but only **changed** from one form to another
- 26 To operate an electric mixer, we use **electrical** energy.
- 27 Fuel is used as a source of **thermal** energy.
- 28 We need **thermal** energy for cooking food and warming houses.
- 29 Wood and **charcoal** are examples of biofuel, while **oil** and **coal** are examples of fossil fuel.
- 30 Factories may cause pollution of **air**, **soil** and **water** due to the chemical they use





- 31 Global warming causes the raise of **temperature** of earth and change its **climate**
- 32 Coal and **oil** can be used in electric power stations to generate electricity
- 33 Turbines in electric power stations are turned by steam and they produce **kinetic** energy to run the **generator** of the electric power stations
- 34 The electric generator changes **kinetic** energy into **electric** energy
- 35 In the washing machine electrical energy converted into **kinetic** energy.
- 36 When you ride a bicycle, the **chemical** energy stored in your body is converted into **kinetic** energy which causes the bicycle to move
- 37 Energy produced from the radio which helps the device do its main function is **sound** energy
- 38 The mobile phone converts chemical energy stored in its batteries into **light** energy and **sound** energy.
- 39 In water turbines, the **kinetic** energy of water movement is converted into a type of electrical energy which is called **hydroelectric** energy.
- 40 To avoid air pollution, we must use **renewable** resources of energy such as water.
- 41 The Sun provides Earth with light and **heat**
- 42 **Dam** used to control the flow of water and increases the potential energy of water to generate electricity.
- 43 Solar panels are used to generate **electrical** energy
- 44 Most of the energy we use is produces inside the **sun**
- 45 The energy that is produced from the battery and used to operate a toy car is **electrical** energy.
- 46 The electric lamp converts **electrical** energy into light and heat energy.
- 47 The energy can be **changed** from one form to another
- 48 In hand bell, kinetic energy is converted into **sound** energy.
- 49 Both wind and water movement produce **kinetic** energy that is used to rotate turbines to generate **electrical** energy.
- 50 Wind blows due to the difference in **temperature** between the cold air and the hot air.
- 51 By increasing the rotation of wind turbine blades, the wind turbine generates more **electrical** energy.
- 52 When the **kinetic** energy of wind increases, the speed of rotation of turbine blades will **increase**
- 53 Renewable energy resources include **sun**, **wind** and **water**
- 54 When we expose our bodies to the Sun, we feel **warm**
- 55 We can use solar energy in cooking by using curved mirror which collect and focus **sun light** onto metal pots to heat them.





- 56 Canyon is a special type of **valley** that has steep sides
- 57 After rocks weathering, the process of **erosion** occurs sand and Soil moved to another place
- 58 Formation of red rust in some rock is evidence of occurring **chemical weathering** process.
- 59 **weathering process** is the breaking down of rocks into smaller pieces.
- 60 Mechanical weathering **doesn't change** the structure of rocks.
- 61 Most caves are formed due **to chemical weathering**
- 62 The cycle of **freezing** and **melting** until rock breaks
- 63 The pieces of rock that are formed by weathering are known as **sediments**
- 64 Batteries which put inside the toy is considered **as source of energy**
- 65 The missions of mars depend on **vehicles** and **robots**
- 66 We must not **pollute** and **waste** of water.
- 67 Water from **dam on river** is used in electricity generation.

Question 04

write scientific term for each of the following

- |   |                                                                                       |                                |
|---|---------------------------------------------------------------------------------------|--------------------------------|
| 1 | Rising the temperatures of Earth.                                                     | Global warming                 |
| 2 | Rains that formed by combination of carbon dioxide with water vapor of air.           | Acid rains                     |
| 3 | The clean energy resources that can be used in electric generation.                   | Renewable energy resources     |
| 4 | Energy stored uphill water rivers.                                                    | Gravitational potential energy |
| 5 | Energy that makes turbines and generators in dams works.                              | Kinetic energy                 |
| 6 | The process by which sediments lay down after its erosion.                            | Deposition process             |
| 7 | A process in which small broken rocks move from a place by the help of wind or water. | Erosion                        |
| 8 | Part of the plant grows inside cracks of rocks causing its weathering                 | Plant root.                    |
| 9 | A gas in air combines with iron of some rocks and causes its weakness.                | Oxygen gas                     |





- |    |                                                                                                                  |                               |
|----|------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 10 | Moving fragments of rocks or soil around.                                                                        | Erosion                       |
| 11 | It is the process in which weathered rocks and soil are layed down or dropped by wind, water or gravity.         | Deposition                    |
| 12 | A fan-shaped (triangular) mass of sediment that is formed where a river enters a larger body of water like seas. | Delta                         |
| 13 | A hill of sand created by the wind.                                                                              | Sand dune                     |
| 14 | The pathway from input to output energy.                                                                         | energy chain                  |
| 15 | It is a special type of valleys which its sides are steep.                                                       | Canyon                        |
| 16 | Energy is neither created nor destroyed, but it changes from one form to another.                                | Law of conservation of energy |
| 17 | The energy used to play a drum.                                                                                  | Kinetic energy                |
| 18 | A kind of energy that is produced from the electrical heater and burning coal                                    | Thermal energy                |
| 19 | A device used to convert electrical energy into light energy                                                     | Electric lamp                 |
| 20 | The energy produced when the wood of trees is burned                                                             | Thermal energy                |
| 21 | Any substance that produces thermal energy when it is burned.                                                    | Fuel                          |
| 22 | The energy produced when the wood is burned                                                                      | Thermal energy                |
| 23 | It is the main source of most forms of energy on the Earth's surface                                             | sun                           |
| 24 | It is a form of bio fuel made up of some types of plants such as grass and wood chips.                           | Liquid fuel                   |
| 25 | A robot vehicle that can be controlled from a distance and is used to explore the surface of mars                | mars rover<br>curiosity robot |
| 26 | The form of energy that is stored in battery of a remote-control toy cars.                                       | Chemical energy               |
| 27 | The energy produced from playing guitar.                                                                         | Sound energy                  |
| 28 | Energy that always produced due to friction.                                                                     | thermal energy                |
| 29 | The wasted energy of a computer                                                                                  | Thermal energy                |
| 30 | The energy that is produced from the blender and helps it in doing its job.                                      | kinetic energy                |
| 31 | A mill that is turned by water flow.                                                                             | watermill                     |
| 32 | A mill that is operated by wind movement.                                                                        | windmill                      |
| 33 | The type of energy that is produced from wind turbines to operate different home devices.                        | Electrical energy             |





- |    |                                                                                                            |                                 |
|----|------------------------------------------------------------------------------------------------------------|---------------------------------|
| 34 | They help farmers in cold regions to plant crops which grow only in warm climate.                          | greenhouses                     |
| 35 | They are lowland areas between mountains and have gently sloped sides around rivers                        | valley                          |
| 36 | A panel designed to absorb the energy of the Sun to generate electricity.                                  | Solar panel                     |
| 37 | A turbine that uses the power of flowing air to generate electricity.                                      | Wind turbine                    |
| 38 | A turbine in which the kinetic energy of moving water is used to generate hydroelectric energy.            | Water turbine                   |
| 39 | A build on the river that controls the flow of water and increases the potential energy of water           | Dam                             |
| 40 | A type of electrical energy generated by water turbines in dams.                                           | Hydroelectric energy            |
| 41 | They are used in crushing grain.                                                                           | old windmills<br>old watermills |
| 42 | It is a form of fossil fuel that was formed from dead plants under the effect of extreme heat and pressure | Coal                            |
| 43 | They are deep valleys carved by flowing water.                                                             | Canyon                          |
| 44 | A process in which rocks are broken down into smaller particles.                                           | Weathering                      |
| 45 | The kind of weathering that changes the structure and color of rocks.                                      | Chemical weathering             |
| 46 | It is a type of weathering through which acids of lichens dissolve minerals of rocks.                      | Chemical weathering             |
| 47 | Break the rocks into pieces without any change in its structure.                                           | Mechanical weathering           |

## Question 05

Give Reason for each of the following

- 1 Iron in rocks may rust.  
**Due to reaction between iron and oxygen of air**
- 2 Water plays an important role in the formation of limestone caves.  
**Because water dissolves minerals in rocks then these dissolved minerals combine forming new shapes**
- 3 The root of trees can be agent for shaping the Earth surface.  
**Because plant root break down rock when it grows mechanical weathering**



- 4 Formation of delta when a river meets a sea  
Because the sediments are deposited at the end of the river
- 5 Formation of small sand dunes on a beach  
Because they are formed by the effect of weak winds
- 6 Formation of large sand dunes at Western Desert in Egypt  
Because they are formed by the effect of strong winds
- 7 A river stream enters a sea.  
A delta may be formed
- 8 Trees and other plants are growing on both sides of small canyons.  
Due to flow of water stream which is needed by plants to grow
- 9 Mars rover curiosity operates for long period of time on Mars without any need to be charged  
Because of solar panels that use sunlight to recharge its batteries
- 10 Using wood of trees as a fuel has negative effects on the environment  
Because continuity of cutting down trees leads to deforestation
- 11 Wood is considered as a fuel.  
Because wood produces thermal energy when it is burned
- 12 We must conserve the fossil fuels  
Because fossil fuels are formed over millions of years, so they cannot be replaced as we use them
- 13 We must turn off lights that we are do not need  
To conserve electricity
- 14 Gasoline is burned inside a car engine  
When gasoline burned it produce Thermal energy  
Thermal energy change into kinetic energy which cause car move
- 15 Wind considered as renewable resources of energy  
Because it replaced shortly after using
- 16 Coal considered as non-renewable resources of energy  
Because it used at a rate faster than they renewed



- 17 Smog of cars is very dangerous to human health.  
Because it causes irritation of human's eyes and lungs
- 18 Fossil fuels cannot be replaced as quickly as they are used  
Because it takes millions of years to form
- 19 Generator are important in electric power stations  
Because it changes kinetic energy into electrical energy
- 20 Some rocks appear red .  
Because oxygen reacts with iron forming iron rust
- 21 Using wood as a fuel has negative effects on the environment  
Because cutting tree cause deforestation
- 22 Farmers must decrease the use of pesticides  
Because it causes pollution of water and soil
- 23 We feel warm at night although the sun is not visible in the sky  
Because atmosphere, land and water absorb thermal energy from sun
- 24 Hydroelectric dams are built on rivers  
To control water flow and increase the potential energy of water to generate electricity
- 25 Humans used windmills and watermills from hundreds of years ago  
To grind grains to make flour
- 26 Kinetic energy of wind affects the speed of wind turbine blades rotation  
when kinetic energy of wind increase  
→ the blades rotate faster  
→ wind turbine generates more electricity
- 27 Water turbines are placed in waterfalls areas  
Because it changes kinetic energy of water into electrical energy
- 28 Sometimes wind turbines are useless  
when wind doesn't blow  
→ wind turbine blades don't move  
→ don't generate electricity
- 29 The body has energy inside it  
because when we eat food, our body stores chemical energy



- 30** The energy can change its forms but it never goes away  
**Because of law of conservation of energy (energy neither be created nor destroyed but only converted from one form to another)**

**Question 06**

**What happens if ?**

- 1** A red-colored rust is formed on some rocks.  
**The rocks become weak and can break down easily**
- 2** Oxygen of air reacts with iron of some rocks.  
**It forms red-colored rust and rocks become weak and break down easily**
- 3** The lichens growing on rocks produce acids  
**It dissolves minerals in rock and break it down**
- 4** Acidic rain falls on rocks  
**It dissolves minerals in rock and break it down**
- 5** A river carries sediments meet a sea.  
**A delta may be formed**
- 6** Wind that is carrying sand particles hits a big rock  
**Sand dunes may be formed**
- 7** A river erodes the sediments of a mountain over a long period of time  
**A canyon may be formed**
- 8** The amount of fossil fuels if people don't conserve their use  
**Fossil fuels will run out on the earth**
- 9** Acid rain falls on building.  
**It dissolves rocks**
- 10** To the Earth's temperature if we use renewable resources of energy instead of fossil fuels  
**The earth's temperature will not increase**
- 11** Sunlight falls on a greenhouse  
**Radiant energy from sun changed into thermal energy**
- 12** Water of sea evaporates then condenses in air  
**Formation of clouds and rain may fall**



- 13 Wind doesn't blow in an area that contains many modern wind turbines  
**The blades of wind turbines don't move and it can't generate electricity**
- 14 The kinetic energy of a wind that is applied on the wind turbine increases  
**the blades rotate faster → wind turbine generate more electricity**
- 15 The presence of solar panels in some electrical devices  
**Solar energy changed into electrical energy**
- 16 The solar cell in a calculator exposed to sunlight  
**Solar energy changed into electrical energy that charge calculator battery**
- 17 There is difference in temperature of air around Earth  
**Wind blow**
- 18 On shaking a hand bell. (according to the change of energy)  
**Kinetic energy changes into sound energy**
- 19 On turning an electric lamp. (according to changing in energy)  
**The electrical energy changes into light and thermal energies**
- 20 The change of energy when you turn on the television  
**Electrical energy changes into sound, light and thermal energies**
- 21 You put your hands near a lighted lamp.  
**You feel warm, because some electrical energy is converted into thermal energy**
- 22 Rubbing your hand together (According to the change of energy)  
**Kinetic energy changes into thermal energy**
- 23 The car movement if fuel runs out in a car.  
**The car movement decreases until it stops**
- 24 The remains of marine were buried under the Earth's surface over millions of years  
**Formation of oil or natural gas**
- 25 People increase using wood a fuel  
**It causes deforestation (negative effects on the environment)**
- 26 The waves crash the beach.  
**It will cause erosion process and moving sand from place to another**



- 27 Sediments lays back down.  
**The deposition process will happen**
- 28 Making deforestation.  
**Cut down trees cause negative effects on the environment**
- 29 Water passing through black tubes.  
**Solar water heater will change solar energy into thermal energy so the water will heat up**
- 30 Stop building of dams.  
**We cannot control the flow of water and can't produce hydroelectric energy**

**Question 07**

**cross the odd word**

- 1 Weathering - Photosynthesis - Deposition - Erosion. **Photosynthesis process**
- 2 Acid rains – wind - plant root - temperature. **Acid rains**
- 4 Wood - Coal - Oil - Natural gas **Wood (biofuel)**
- 5 Gasoline - Coal - Natural gas - Wind. **Wind (renewable)**
- 6 Wood - natural gas – gasoline - glass. **glass**

**Question 08**

**Answer the following questions**

- 1 **Mention the type of weathering in the following:**
  - a Acid rain falls on rocks **chemical weathering**
  - b Freezing of water inside cracks **mechanical weathering**
- 2 What are the types of Weathering.  
**mechanical weathering – chemical weathering**
- 3 What are the factors that cause mechanical weathering?  
**1. wind                      2. temperature**
- 4 What is the role of wind in mechanical weathering?  
**Wind pushes the sand from a place to another, then friction occurs between sand and rocks causing their breaking down**



- 5 There are many types of sediments. Mention 2 types of them.  
**Sand and soil**
- 6 Determine the two factors that affect the Earth's surface.  
**Water – wind**
- 7 Mention one different between the formation of dunes and formation of delta.  
**Sand dunes are formed by deposition by wind  
Delta is formed by deposition by water**
- 8 How were the chemical weathering and mechanical weathering differ?  
**Mechanical weathering is the breaking down of rocks due to physical factors (wind – water) without changing their structure.  
Chemical weathering is the change in the structure of rocks due to chemical reactions**
- 9 How were the chemical weathering and mechanical weathering similar?  
**both of them break down rocks.**
- 10 Mention the different between erosion and deposition and rearrange the two processes.  
**Erosion is process of moving sediments from place to another.  
Deposition is the process of laying down sediments in new place.  
Erosion happens first then deposition.**
- 11 What is the definition of law of conservation energy?  
**Energy neither be Created nor destroyed but only converted from one form to another**
- 12 Explain the function of rover curiosity  
**Explore the surface of Mars**
- 13 Determine the causes of air pollution.  
**1- Burning of fossil fuels produce carbon dioxide gas  
2- Using chemicals in factories**
- 14 Determine the causes of global warming.  
**Because increasing the amount of carbon dioxide gas in the air causing rise in Earth's temperature**

انتهت الأسئلة مع أطيب الامنيات بالنجاح والتوفيق

جميع اسئلة الشيت اسئلة رسمية من اسئلة التقييمات و امتحانات المحافظات و اسئلة كتاب المدرسة

