

The alternating current is a constant flow of electricity which travels around a circuit in one direction.

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

The rate at which the current alternates- called the voltage- is measured in hertz (Hz)

صح ☐

خطأ ☒

.The current supplied to most homes is three-phase - it forms three sine waves

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

At the point where current enters the grid, the electricity flows through step-up transformers which

increase voltage and increse amperage ☐

decrease voltage and decrease amperage ☐

decrease voltage and increase amperage ☐

increase voltage and decrease amperage ☒



The electricity supply from PVs can be used to



.can be used immediately ☒

.can be wasted ☐



.charge rechargeable batteries ☒



.can be fed into the power grid and sold to the electric company ☒

.Your answer is correct

الإجابات الصحيحة هي: charge rechargeable batteries., can be fed into the power grid and sold to the electric company., can be used immediately

On AC supply, the difference between live and neutral is that conductors on the neutral side of appliances are connected to the ground

صح ☒

خطأ ☐

When current flows directly from a live conductor to a neutral conductor is



short circuit ☒

open circuit ☐

printed circuit ☐

integrated circuit ☐

.Your answer is correct

الإجابة الصحيحة هي: short circuit

:Types of electrical and electronic components are such as



power stations ☐

control systems ☒



logic gates ☒



sensors ☒

A circuit that can be populated with a large number of components



short ☐

printed ☒

open ☐

intergrated ☐

.Your answer is correct

الإجابة الصحيحة هي: printed

.Photosensor detects light and sends signal to produce current when light is on

صح ☐

خطأ ☒

.In engineering, motor usually refers to petrol and diesel engine

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

.Petrol and diesel engines are internal combustion engines

صح ☒

خطأ ☐

.Diesel engines are fitted with spark plugs, in each cylinder, to ignite the fuel

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

.Diesel engines operate at speeds than petrol engines

similar ☐

lower ☒

not related ☐

higher ☐



.Idler gears change the direction of a follower

صح ☒

خطأ ☐

الإجابة الصحيحة هي "صح"

An engine is fitted to the input shaft via a gear wheel called the

follower ☐

idler ☐

driver ☒

worm ☐



.gears are used to transmit drive through an angle



Worm ☒



Crown ☒



Helical ☐

Bevel ☒

.Your answer is correct

الإجابات الصحيحة هي: Worm, Bevel, Crown

:All electrical circuits includes



capacitor ☐



electrical supply ☒



electrical conductor ☒

one or more electrical components ☒

Another term for amperage

electrical power ☐

voltage ☐

current ☒

electrical supply ☐



.Your answer is correct

الإجابة الصحيحة هي: current

The current flowing through a circuit, measured in amps, equals the voltage of the electrical supply, measured in volts, multiplied by the total resistance

صح ☐

خطأ ☒

..... Gravel used in concrete is

Cement ☐

Batching ☐

Fine aggregate ☐

Coarse aggregate ☐

إجابتك غير صحيحة.

الإجابة الصحيحة هي: Coarse aggregate

..... :3D view, with corner of the object at the front

an oblique projection ☐

a plan ☐

a section ☐

an isometric projection ☐

إجابتك غير صحيحة.

الإجابة الصحيحة هي: an isometric projection

low alloy steels, which contain or more iron

☐ 90 %

☐ 50%

☐ 70%

☐ 20%

الإجابة الصحيحة هي: 90 %

Sometimes, there's surplus heat, and it can't all be recycled. At other times there isn't quite enough recycled heat to keep up with peak demand for heat energy further along the process

☒ صح

☐ خطأ

الإجابة الصحيحة هي "صح"

.In order to become ceramics, materials must be vitrified

☐ صح

☒ خطأ

الإجابة الصحيحة هي "خطأ"

.Gears can provide a by using different gear ratios

leverage ☐

a mechanical advantage ☐

couple ☐

thrust ☐

الإجابة الصحيحة هي: a mechanical advantage

The radius of the curve in the motorway is constant, so the edges of the road follow chords of a .circle

صح ☐

خطأ ☐

الإجابة الصحيحة هي "خطأ"

.In everyday English, fluid usually means a liquid

صح ☐

خطأ ☐

الإجابة الصحيحة هي "صح"

Woods may have knots in it

Engineered wood ☐

Softwood ☐

Solid wood ☐

All answer ☐

إجابتك غير صحيحة.

الإجابة الصحيحة هي: All answer

Solid wood that has been sawn into specific shapes and sizes, but whose natural structure, consisting

☐ صح

☐ خطأ

الإجابة الصحيحة هي "صح"

.The first draft of a drawing is the working version for production or construction

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

An exploded view is a 3D view, showing an assembly taken to pieces

صح ☒

خطأ ☐

الإجابة الصحيحة هي "صح"

..... Maximum loads are based on predicted

non of the above .a ☐

specifications .b ☐

worst-case scenarios .c ☒

built-and-braces .d ☐



.Your answer is correct

الإجابة الصحيحة هي: worst-case scenarios

.This drawing has been superseded. It's not the _____ drawing

all the above .a ☐

current .b ☒

preliminary .c ☐

first draft .d ☐



.For engineering drawings, 1:100 is commonly used in schematics

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

An isometric is a 3D view, with the 2D face of the object at the front

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

A section is a 2D view inside an object, as if it is cut through

صح ☒

خطأ ☐

الإجابة الصحيحة هي "صح"

.Enlarged drawings show components smaller than their actual size

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

Specifications are documents which describe the materials, sizes and technical requirements of components.

صح ☒

خطأ ☐

الإجابة الصحيحة هي "صح"

I still need to----- on the latest set of drawings

a. note ☐

b. issue ☐

c. comment ☒

d. circulate ☐



The distance from the center of the wheel and the edge of the tyre is called

diameter ☐

arc ☐

chord ☐

radius ☒



.Your answer is correct

الإجابة الصحيحة هي: radius

.A flat surface may be plumb if it is sloping at an angle to the horizontal or vertical plane

صح ☐

خطأ ☒

The height of the towers is measured



vertically ☒

horizontally ☐

plumb ☐

incline ☐

.Your answer is correct

الإجابة الصحيحة هي: vertically

A theodolite is an optical device used for measuring



length ☐

angles ☒

width ☐

height ☐

.Wingspan in aircraft is the total distance spanned by both wings

صح ☒

خطأ ☐

الإجابة الصحيحة هي "صح"

.The highest point of a horizontal pipe is called invert

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

.In civil engineering, the following precautions can help to prevent costly setting-out mistakes

Always use a steel tape measure (never a plastic one) .1



.to ensure it does not stretch under tension

Check that both diagonals of rectangular shapes are equal .2



.to check that corners are right-angles

,Measure dimensions in two directions, from parallel gridlines .3



to double-check your measurements

Add up chain dimensions to give running dimensions .4



.to prevent slight errors being multiplied

.The bolt won't fit tightly enough in the hole, so there'll be too much play

صح ☒

خطأ ☐

الإجابة الصحيحة هي "صح"

.A.The shaft will shorten and narrow slightly as it cools; thus, it expands

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

.The wheel will have to fit very tightly on the axle

.It'll contract ☐

.It needs a clearance fit ☐

.It needs an interference fit ☒

.It'll bind ☐



.Your answer is correct

.الإجابة الصحيحة هي: It needs an interference fit

A blueprinted engine is built to together very precisely, thanks to almost perfect
.clearance between moving parts

variation ☐

range ☐

fit ☒

tolerance ☐



A lot of heat is generated in this part of the process. And all of that output is recycled- it provides a demand of heat for the next stage of the process. So it's quite an efficient system

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

Sometimes, there's surplus heat, and it can't all be recycled. At other times there isn't quite enough recycled heat to keep up with peak demand for heat energy further along the process

صح ☒

خطأ ☐

الإجابة الصحيحة هي "صح"

Some material is lost in the washing process, but the mass of water absorbed is greater than .the mass of material lost. So there's a net in total mass



demand ☐

supply ☐

gain ☒

loss ☐

.Your answer is correct

الإجابة الصحيحة هي: gain

Carbon (C) is a



ferrous ☐

non-metal ☒

non-ferrous ☐

Metal ☐

..... Copper (Cu) is a

alloy ☐

non-ferrous metal ☒

non-metal ☐

ferrous metal ☐



.Your answer is correct

الإجابة الصحيحة هي: non-ferrous metal

Oxygen, iron, and aluminium are

.composites ☐

.elements ☒

.alloys ☐

.compounds ☐



,Steel is an alloy of iron and carbon and comes in different grades

صح ☒

خطأ ☐

الإجابة الصحيحة هي "صح"

High strength low alloy steels contains larger quantities of alloys such as chromium, nickel, manganese, molybdenum and vanadium

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

Tool steels contain



tungsten and cobalt ☒

tin and lead ☐

chromium and zinc ☐

all the above ☐

.Your answer is correct

الإجابة الصحيحة هي: tungsten and cobalt

Duralumin, an alloy contains



magnesium ☒

copper ☒

zinc ☐

titanium ☐



Precious metals are

silver ☒

copper ☐

steel ☐

gold ☒

titanium ☐

.Your answer is correct

الإجابات الصحيحة هي: gold, silver

Bronze is made of

copper ☒

tin ☒

cobalt ☐

zinc ☐

lead ☒

.Your answer is correct

الإجابات الصحيحة هي: copper, tin, lead

.Hot-dip galvanization is placing steel in molten zinc

صح ☒

خطأ ☐

Electroplating

- ✓ ☒ .is electro-galvanized
- ✓ ☒ .is placing steel component in an electrolyte
- ☐ .is placing a piece of zinc in the electrolyte
- ☐ .is connecting a piece of zinc to the anode
- ✓ ☒ .is connecting a steel component to the cathode

.Your answer is partially correct

لقد حددت 3 بشكل صحيح.

الإجابات الصحيحة هي: is connecting a steel component to the cathode., is placing a piece of zinc in the electrolyte., is connecting a piece of zinc to the anode., is electro-galvanized

Rubber is



.a synthetic polymer ☐

.a natural polymer ☒

.comes from latex ☒

.is manmade ☐

.Your answer is correct

الإجابات الصحيحة هي: .a natural polymer., comes from latex

.Thermoplastics can be heated and moulded numerous times

صح ☒

خطأ ☐

.Woods that come from from deciduous trees is called softwood

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

.Vehicle windscreens are made from tempered glass

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

A retarder is added to concrete to delay setting process in order to provide workers more time
to pour the concrete

صح ☒

خطأ ☐

الإجابة الصحيحة هي "صح"

.A mineral is a natural and organic material

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

:Non-metallic minerals include

Gold ☐

Aluminum ore ☐

iron ore ☐

diamond ☒



.Your answer is correct

الإجابة الصحيحة هي: diamond

An additive that helps the concrete to flow more easily is called

cement ☐

plasticizer ☒

water ☐

retarder ☐



.The glass when gets broken, it breaks into sharp pieces



toughened glass ☐

annealed glass ☒

safety glass ☐

laminated glass ☐

.Your answer is correct

الإجابة الصحيحة هي: annealed glass

.Bolts have threads grooves on the outside of the bolt's shaft

صح ☒

خطأ ☐

الإجابة الصحيحة هي "صح"

.Spring washers spread the load over the surface of the component as the bolt is tightened

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

Engineering Woods are (Has multiple answers)

Hardwood ☐

MDF ☒

particle boards ☒

OSB ☒

glulams ☒

.Your answer is correct

الإجابات الصحيحة هي: MDF, OSB, particle boards, glulams

When water is added to cement, a chemical reaction occurs, and the cement begins to



set ☒

flow ☐

batch ☐

cast ☐

.Your answer is correct

الإجابة الصحيحة هي: set

Gravel is called

concrete ☐

cement ☐

coarse aggregate ☒

fine aggregate ☐



In situations where components are subjected to shocks, spring washers allow
between the bolt and the component

spreading the load ☐

movement ☒

no movement ☐

none of the above ☐

.Your answer is correct

الإجابة الصحيحة هي: movement

.Bolts with hexagonal hole in their heads, called a socket head, use to turn them

spanner ☐

Slot head screw driver ☐

Allen key ☒

.Self-tapping screws require predrilled holes

صح ☐

خطأ ☒

الإجابة الصحيحة هي "خطأ"

.Machine screws are small-diameter bolts with nuts or screwed into threaded holes

صح ☒

خطأ ☐

الإجابة الصحيحة هي "صح"

..... A wall plug is (More than one answer)



a fastner ☒

a slot head screw ☐

a self-tapping screw ☐



a screw anchor ☒

.Your answer is correct

الإجابات الصحيحة هي: a screw anchor, a fastner

.Welding means temporary joining two pieces of material by heating the joint between them

صح ☐

خطأ ☒

Shielded metal arc welding uses (Has more than one answer)



.a special coating on the welding rod which produces a shielding gas ☒



.a consumable electrode ☒

.a separate gas supply, blown onto the weld as a shielding gas ☐

.a gas whose purpose is to increase the temperature of the welding process ☐

.Your answer is correct

الإجابات الصحيحة هي: a consumable electrode., a special coating on the welding rod which produces a shielding gas

Gas welding uses (Has more than one answer)

- ✓ ☒ .a shielding gas generated by burned oxyfuel
- ✓ ☒ .burning gas
- ✓ ☒ .a gas whose purpose is to increase the temperature of the welding process
- ✓ ☒ .a separate welding rod which is not an electrode

.Your answer is correct

الإجابات الصحيحة هي: burning gas., a separate welding rod which is not an electrode., a shielding gas generated by burned oxyfuel., a gas whose purpose is to increase the temperature of the welding process.

.Trusses are frameworks

☒ صح ✓

☐ خطأ

الإجابة الصحيحة هي "صح"

.Struts are designed to resist compression

☒ صح ✓

☐ خطأ

الإجابة الصحيحة هي "صح"