

Engineering Studies 4 Personal and Public Transport - Part 2

Zuizie	Study online at quizlet.com/_1wt41v		-
1. insulator	a material of such low conductivity that the flow of current through it is usually	16. safety glass	a generic term for glass that has been processed in order to resist shattering
2. integrated circuit	negligible a semiconductor wafer on which electrical components such as resistors, transistors, capacitors have been manufactured; also known as a chip or microchip	17. semiconductor	a substance whose electrical conductivity is intermediate between that of a metal and an insulator and whose conductivity increases with temperature and in the presence of impurities
3. laminated glass	polymer interlayer of polyvinyl butyral (PVB), joined under heat and pressure in a furnace called an autoclave	18. spheroidising	heat-treatment in which pearlite lamellae are broken down to form spheroids
		19. tempered glass	glass heat-treated to create a compressive surface layer by controlled cooling of the
4. microprocessor	a programmable computer processor manufactured on a single 'chip', or in some		surface
5. momentum	cases, multiple chips a measure of the motion of a body equal to	20. tempering	reheating of a quenched steel to a sub- critical temperature in order to improve ductility and toughness
	the product of its mass and velocity	21. transformer	an electrical device, which by electromagnetic induction allows the voltage
6. non-ferrous	containing no or minimal iron		
7. normalising	a heat treatment process for ferrous alloys involving heating the material above the upper critical temperature, then cooling in still air, the object being to enhance toughness by refining grain size		of an alternating current to be stepped up or down
		22. transistor	a semiconductor device with three connections, capable of amplification in addition to being used to switch electronic
8. passive safety	any device which automatically provides protection for the occupants of a vehicle, such as the bumpers, seat belts, air bags etc.	23. work	signals on and off a measure of the energy expended by a force in moving an object a certain distance
9. pearlite	a phase of carbon steel and cast iron consisting of ferrite and cementite formed into distinct layers on slow cooling from austenite		
10. phase diagram	a diagram in which the existence and coexistence of various phases are identified by regions and lines		
11. power	a measure of the work done within a specified time or a measure of the rate at which work is being done, expressed in watts (W) or kilowatts (kW)		
12. quenching	involves the use of a variety of rates of cooling to cause a steel to harden; this is done in water, brine and oil		
13. reactance	that part of the impedance of an alternating current (AC) circuit that is due to the inductance and capacitance		
14. rectifier	an instrument containing diodes that		

allows the conversion of AC current to DC

the property of a device which opposes the flow of an electric current, measured in

15. resistance

oh ms