Q=QUESTION A=ANSWER	question_description answer_description	question_exp answer_expla	question_type answer_isright	question_difficulty answer_position
Q	An existing 400 W electric bulb working at 10 hrs/day on burning is to be replaced with 325 W energy efficient bulb which cost Rs. 300 more than the existing bulb. What will be the approximate simple payback period if electricity costs at Rs. 7 per unit?		M	1
A	2.5 months		0	1
A	0.7 months		0	2
A	1.8 months		1	3
A	1.2 months		0	4
Q	The use of blower door attachment in energy auditors tool box		M	1
A	To measure building and structure tightness		1	1
A	Combustion efficiency of furnaces		0	2
A	To identify problem with air flows		0	3
A	Measuring performance of electrical systems		0	4
Q	Functional energy audit does not include which of the following?		M	1
A	Analyzing energy gain and losses due to specific structure of building		1	1
A	Analyzing energy requirement and ECOs for domestic hot water supply system		0	2
A	Analyzing energy requirement and ECOs for HVAC processes		0	3
A	Analyzing energy requirement and ECOs for Air distribution system for building		0	4
Q	The last step of the energy audit process is		M	1
A	Collection of facility data		0	1
A	Formation of audit team		0	2
A	Energy Bill analysis		0	3
A	Recommendation of ECOs		1	4
Q	“The judicious and effective use of energy to maximize profits and enhance competitive positions”. This can be the most accurate definition of:		M	1
A	Energy conservation		0	1
A	Energy management		1	2
A	Energy policy		0	3
A	Energy Audit		0	4
Q	Energy cost control programs will result in both reduced_____and reduced emissions of environmental pollutants		M	
A	Energy consumption		1	
A	Material consumption		0	

A	Time consumption		0	
A	Human Work		0	
Q	Pie chart representation of energy consumption is nothing but------		M	
A	Energy audit report		0	
A	Energy profile		1	
A	Energy map		0	
A	Energy integration		0	
Q	Replacement of DC generator by solid state variable speed drivers (VSD) …… overall efficiency.		M	
A	Doesn't affect		0	
A	Increases		1	
A	Decreases		0	
A	Stabilizes		0	
Q	Application of occupancy sensors is well suited for .		M	
A	Day light based controllers		0	
A	Night based controllers		0	
A	Motor controllers		0	
A	Movement or noise detector in room space		1	
Q	Usually a butterfly valve is used in		M	
A	On off control		0	
A	Load unload control		0	
A	Throttle control		1	
A	Turn valve control		0	
Q	Which of the following is NOT a type of lighting control?		M	
A	Dimmers		0	
A	Timers		0	
A	VSD		1	
A	Photosensors		0	
Q	How do LEDs generate light?		M	
A	By moving electrons in compound semiconductors		1	
A	By heating up filament		0	
A	By ionizing mercury vapor in a glass tube		0	
A	By moving electric current through a tube containing gas		0	
Q	How much power is consumed by throttle controlled compressor when delivering no air?		M	
A	50% of its full load power		0	

A	70% of its full load power		1	
A	30% of its full load power		0	
A	40% of its full load power		0	
Q	Which of the following statement is wrong about mercury vapor lamps?		M	
A	They have short life		1	
A	They have long life		0	
A	Their output decreases as they age		0	
A	They consume same amount of energy even though output decreases with age		0	
Q	_____ is the key parameter used in pinch technology.		M	
A	Capacity		0	
A	Heat duty		0	
A	ΔT_{min}		1	
A	Flow rate		0	
Q	Provided, if C_C and CH are heat capacity flow rates of cold and hot process streams respectively, then in pinch decomposition diagram, for a match of hot and cold process streams to be feasible at the pinch, which is the necessary and sufficient condition for stream matching below the pinch?		M	
A	$Cc \geq C_H$		0	
A	$Cc \leq C_H$		1	
A	$Cc = C_H$		0	
A	It do not depend upon heat capacities		0	
Q	The temperature up to which the process stream is to be heated or cooled is _____.		M	
A	Source temperature		0	
A	Target temperature		1	
A	Approach temperature		0	
A	Threshold temperature		0	
Q	Source temperature of a process stream is 60 K and target temperature is 160 K. If heat capacity rate of a stream is 2.5 KW/ K how much heat should be removed from or added to this stream?		M	
A	250 KW should be removed		0	
A	50 KW should be added		0	
A	250 KW should be added		1	
A	100 KW should be removed		0	

Q	Source temperature of stream 1 is 673 K and target temperature is 373 K and heat capacity rate of a stream is 1.5 KW/ K . Source temperature of stream 2 is 293 K and target temperature 553 K with heat capacity rate 2.5 KW/ K. Heat can be exchanged from hot to cold stream, then how much external hot or cold utility is required to be supllied and to which stream in order to achieve its target temperature?		M	
A	200 KW of hot utility is to be supplied to stream 1		0	
A	200 KW of cold utility is to be supplied to stream 2		0	
A	200 KW of hot utility is to be supplied to stream 2		1	
A	200 KW of cold utility is to be supplied to stream 2		0	
Q	According to rules for heat exchanger network design to satisfy minimum utility target, developed by scientist, Linnhoff, in pinch composition diagram, the hot utility can be used_____		M	
A	Only below the pinch (i.e. cold side of pinch)		0	
A	Only above the pinch (i.e. hot side of pinch)		1	
A	Either below or above the pinch (i.e. either cold or hot side of pinch)		0	
A	Exactly at the pinch		0	
Q	The difference between cummulative enthalpy values corresponding to the upper ends of hot and cold temperature-enthalpy curves represents		M	
A	Minimum cold utility required at specific ΔT_{min} value for the specific system of hot and cold process streams where exchnage of heat among the streams is allowed		0	
A	Total cold utility required the specific system of hot and cold process streams where exchnage of heat among the streams is not allowed		0	
A	Total hot utility required the specific system of hot and cold process streams where exchnage of heat among the streams is not allowed		0	
A	Minimum hot utility required at specific ΔT_{min} value for the specific system of hot and cold process streams where exchnage of heat among the streams is allowed		1	
Q	According to Linnhoff's rules of heat exchanger networking, which of the following should not be placed, in above pinch region?		M	
A	Steam heaters		0	
A	Furnaces		0	
A	Coolers		1	
A	Reboiler		0	

Q	In a given heat exchanger network, the minimum number of heat exchangers required are 8 and the number of process stream are 5, then, according to Hohmann's rule, what is the number of distinct utilities required in this heat exchanger network?		M	
A	4		1	
A	2		0	
A	3		0	
A	1		0	
Q	The hot stream available at 250 ^{o}C is to be cooled down to 40 ^{o}C using the available cold utility of 31.5 MW. Calculate the heat capacity flow rate (in MW/K) of this hot stream.		M	
A	0.15		1	
A	1.5		0	
A	15		0	
A	150		0	
Q	In composite curves the areas where the hot and cold composite curves do not show the minimum utility requirements by reading the enthalpy axis, represents		M	
A	Minimum hot utility		0	
A	Minimum cold utility		0	
A	Heat recovery		1	
A	Pinch temperature		0	
Q	The section above the pinch in conventional composite curve		M	
A	Heat sink		1	
A	Heat source		0	
A	Qc min		0	
A	Area where system reject heat		0	
Q	Stream splitting below the pinch takes place when		M	
A	N_H <Nc and Ch≤ Cc		1	
A	N_H >Nc and Ch≤ Cc		0	
A	N_H <Nc and Ch≥ Cc		0	
A	N_H >Nc and Ch≥ Cc		0	
Q	In composite curves diagram, as cold composite curve shifts to right, _____		M	
A	ΔT_{min} as well minimum utilities requirement goes on increasing		1	
A	ΔT_{min} as well minimum utilities requirement goes on decreasing		0	

A	ΔT_{min} increases but minimum utilities requirement decreases		0	
A	ΔT_{min} decreases but minimum utilities requirement increases		0	
Q	During heat exchanger networking, as ΔT_{min} increases _____		M	
A	Capital cost decreases and operating cost increases		1	
A	Capital cost increases and operating cost decreases		0	
A	Both the capital cost and operating cost increases		0	
A	Both the capital cost and operating cost decreases		0	
Q	_____ is the temperature at which the ability to transfer heat between the process streams is most constrained.		M	
A	Minimum approach temperature		0	
A	Threshold approach temperature		0	
A	Pinch temperature		1	
A	Target temperature		0	
Q	Cold process streams are those which_____		M	
A	have low enthalpy		0	
A	have low temperature		0	
A	are need to be heated		1	
A	are need to be cooled		0	
Q	In conventional problem except threshold, increasing ΔTmin will		M	
A	Increase the requirement of cold utilities		1	
A	Decrease the requirement of cold utilities		0	
A	Increase the heat recovery		0	
A	Decrease the requirement of hot utilities		0	
Q	In Heat exchanger network, on the cold side of pinch, which of the following utility can be provided?		M	
A	Flue gas		0	
A	Hot Air		0	
A	Dry Steam		0	
A	Cooling water		1	
Q	Area targeting can be carried out through		M	
A	Composite curve		0	
A	Balanced composite curves		1	
A	Balanced hot composite curve		0	
A	Grand composite curve		0	

Q	According to scientist Hohmann, if N_S = number of process streams and N_U = number of distinct hot and cold utility sources, then, minimum number of heat exchangers ($N_{HX,min}$) requireed in heat exchanger network to be designed to exchange heat between all these process and utility streams, is given by equation_____		M	
A	$N_{HX,min} = N_S + N_U + 1$		0	
A	$N_{HX,min} = N_S + N_U - 1$		1	
A	$N_{HX,min} = N_S + N_U$		0	
A	$N_{HX,min} = N_S - N_U$		0	
Q	During heat exchanger network design to satisfy minimum utility requirement, in pinch decomposition diagram, heat from hot to cold streams can not be tramsferred_____		M	
A	Above the pinch		0	
A	Below the pinch		0	
A	Across the pinch		1	
A	Near the pinch		0	
Q	A cold composite curve can be shifted _____to change minimum approach temperature difference as well minimum utility requirements.		M	
A	Vertically		0	
A	Horizontally		1	
A	Diagonally		0	
A	Not possible to shift in any direction		0	
Q	Calculate the annualized cost of Heat exchanger Network, if return on investment is 0.6, total purchase cost of heat exchangers is Rs. 36 lakhs and utility cost is Rs. 4 lakhs/yr		M	
A	Rs. 24 lakhs		0	
A	Rs. 25.6 lakhs		1	
A	Rs. 38.4 lakhs		0	
A	Rs. 20 lakhs		0	

Q	During pinch analysis, when temperature interval (TI) method is used to find pinch temperature and minimum utility requirement, if $(mC_p)_{hot}$ & $(mC_p)_{cold}$ indicates heat capacity flow rates of hot and cold process streams respectively, ΔT_i gives temperature difference corresponding to specific temperature interval and ΔT_{min} -gives minimum approach temperature difference, then, the heat content, Q_i in each temperature interval of TI diagram is calculated by equation _____		M	
A	$Q_i = [\sum (mC_p)_{hot} - \sum (mC_p)_{cold}] \times \Delta T_{min}$		0	
A	$Q_i = [\sum (mC_p)_{hot} + \sum (mC_p)_{cold}] \times \Delta T_{min}$		0	
A	$Q_i = [\sum (mC_p)_{hot} + \sum (mC_p)_{cold}] \times \Delta T_i$		0	
A	$Q_i = [\sum (mC_p)_{hot} - \sum (mC_p)_{cold}] \times \Delta T_i$		1	
Q	The temperature of water vapour released from the solution after facing boiling point elevation is _____		M	
A	Equal to 100^oC		0	
A	Below 100^oC		0	
A	Above 100 °C		1	
A	0 ^oC		0	
Q	What do we mean by the term Evaporator Consumption?		M	
A	Steam consumed in 1hr		1	
A	Steam produced in 1hr		0	
A	Feed supplied in 1hr		0	
A	Feed supplied in 1day		0	
Q	An evaporator is operating at an atmospheric pressure is fed at the rate of 10000Kg/hr of weak liquor containing 4% caustic soda .Thick liquor leaving the evaporator contains 25%caustic soda then capacity of the evaporator is		M	
A	8400Kg/hr		1	
A	10000 Kg/hr		0	
A	1600 Kg/hr		0	
A	9000 Kg/hr		0	
Q	Which type of feeding arrangement is supposed to give maximum steam economy to a particular consumption?		M	
A	Forward feed		0	
A	Backward feed		1	
A	Parallel feed		0	

A	Mixed feed		0	
Q	The boiling point of the solution _____ from 1st to last effect in a backward feed evaporator.		M	
A	Increases		0	
A	Remains same		0	
A	Decreases		1	
A	Oscillates		0	
Q	Steam economy of single effect evaporator is always _____		M	
A	1		0	
A	<1		1	
A	>1		0	
A	0		0	
Q	In _____feed multiple effect evaporator system, the vapor flows from first to last effect and liquid flow from last to first effect.		M	
A	Forward		0	
A	Backward		1	
A	Mixed		0	
A	Parallel		0	
Q	What is the steam economy of an evaporator if the evaporator capacity is 40kg/hr and the steam consumption is 65kg/hr?		M	
A	0.7		0	
A	0.61		1	
A	0.8		0	
A	0.5		0	
Q	In a triple effect evaporator the lowest pressure will be for		M	
A	1st Effect		0	
A	2ndEffect		0	
A	3rdEffect		1	
A	2nd and 3rd Effect with same pressure		0	
Q	What is the driving force for evaporation if a solution boils at a temperature of 396 K and boiling point of water at a pressure in the vapor space is 373K, temperature of the condensing steam is 410 K		M	
A	23 K		0	
A	14 K		1	
A	37 K		0	

A	396 K		0	
Q	_____ operates like a refrigeration cycle and requires an external fluid as the working medium.		M	
A	Multiple effect distillation		0	
A	Vapor recompression		0	
A	Reboiler flashing		0	
A	Heat pumping		1	
Q	Select the correct statement from options given below.		M	
A	Pumps are required in case of backward feed multiple effect evaporator		1	
A	Pumps are required in case of forward feed multiple effect evaporator		0	
A	Pumps are required in case of both the forward as well backward feed multiple effect evaporator		0	
A	Pumps are not at all required in either of the forward or backward feed multiple effect evaporator		0	
Q	In backward feed triple effect evaporator (TEE), the temperature of steam and boiling point temperatures in 1^{st}, 2^{nd} and 3^{rd} effect are 130 ^{o}C, 115 ^{o}C, 95 ^{o}C and 72 ^{o}C respectively. The flow rates of steam supplied to the 1^{st} effect and vapor leaving the 1^{st}, 2^{nd} and 3^{rd} effect are 3480, 3160, 2720 and 2110 kg/hr respectively. The latent heats of vaporization of steam and vapors leaving 1^{st}, 2^{nd} and 3^{rd} effect are 2200, 2250, 2310 and 2380 kJ/kg respectively. The overall heat transfer coefficients for 1^{st}, 2^{nd} and 3^{rd} effect are 2500, 2000 and 1600 W/m^{2}K respectively. Then calculate the heat transfer area available in the 1^{st} effect of this TEE. Assume that there is no any boiling point rise in any of the effects.		M	
A	56.71 m^2		1	
A	49.38 m^2		0	
A	41.89 m^2		0	
A	47.43 m^2		0	
Q	Forward feed triple effect evaporator is used to concentrate 20000 kg/hr of feed solution containing 10 wt% of solute to 25wt% solute concentration. Assuming equal vapor generated in each effect, what will be concentration of solution leaving the second effect?		M	
A	18.50%		0	
A	17.50%		0	
A	15%		0	

A	16.70%		1	
Q	In which effect, the product concentration will lowest for a backward feed triple effect evaporator?		M	
A	1st Effect		0	
A	2nd Effect		0	
A	3rdEffect		1	
A	1st and 2nd Effect with same concentration		0	
Q	The slope of the Duhring's Plot is always _____		M	
A	Greater than one		1	
A	Equal to one		0	
A	Less than 1		0	
A	Less than zero		0	
Q	Which one of the following evaporator uses maximum mechanical energy to operate?		M	
A	Parallel feed multiple effect evaporator		0	
A	Mixed feed multiple effect evaporator		0	
A	Forward feed multiple effect evaporator		0	
A	Backward feed multiple effect evaporator		1	
Q	In forward feed tripple effect evaporator operation, the concentration of liquid product leaving the 2nd effect is _____ that of leaving from the 3rd effect.		M	
A	less than		1	
A	more than		0	
A	more or less than		0	
A	equal to		0	
Q	In forward feed triple effect evaporator (TEE) design, the temperature of steam used is 120 ^{o}C and boiling point temperature of solution in 3rd effect is 50 ^{o}C. There is no any boiling point rise in any effect. The overall gheat transfer coefficients for 1st, 2nd and 3rd effect are 3100, 2000 and 1100 W/m^{2}K respectively. Then calculate temperature driving force for the 2nd effect i.e. ΔT_2		M	
A	15.92 ^{o}C		0	
A	13.39 ^{o}C		0	
A	23.03 ^{o}C		0	
A	20.21 ^{o}C		1	
Q	About evaporator operation, select the wrong statement from options below:		M	

A	If feed to evaporator enters at temperature much below the boiling point of feed solution, about 1/4th of steam entering in evaporator is used just to heat the cold feed to its boiling point		0	
A	If feed to evaporator enters at temperature above the boiling point in evaporator, results in additional vaporization by flashing off the part of entering hot feed		0	
A	Preheating the feed increases the heat transfer area required in evaporator		1	
A	Preheating the feed reduces the heat transfer area required in evaporator		0	
Q	Which of the following is not a benefit of cogeneration?		M	
A	Increased efficiency of energy conversion and use		0	
A	Reduced power factor		1	
A	Reduced greenhouse gas emissions		0	
A	Reduced transmission losses		0	
Q	The Ranking Cycle is related to		M	
A	Boiler		0	
A	Condenser		0	
A	Steam turbine		1	
A	Pump		0	
Q	The cogeneration is not applicable to which type of industry?		M	
A	Sugar		0	
A	Refinery		0	
A	Paper and pulp		0	
A	Refractory / brick-making		1	
Q	A plant producing both, electrical power & process heat simultaneously is?		M	
A	Cogenital plant		0	
A	Cogenerial plant		0	
A	Cogeneration plant		1	
A	Conglomerate plant		0	
Q	Thermal efficiency of cogeneration plant is calculated as:		M	
A	Efficiency = (Heat output + Electrical power output) / (Electrical power input)		0	
A	Efficiency = (Heat output + Electrical power output) / (Heat input)		1	
A	Efficiency = (Heat output) / (Electrical power input)		0	
A	Efficiency = (Electrical power output) / (Heat input)		0	
Q	Which one of the following cannot be used as fuel for the gas turbine?		M	
A	Naphtha		0	
A	LPG		0	
A	Natural gas		0	

A	Low sulphur heavy stock		1	
Q	Steam turbines are used as prime mover in _____		M	
A	Topping cycle cogeneration system only		0	
A	Bottoming cycle cogeneration system only		0	
A	Combined cycle cogeneration system only		0	
A	Topping cycle, bottoming cycle as well combined cycle cogeneration system		1	
Q	What is the actual steam rate (ASR) required for a steam turbine power plant for which theoretical steam rate (TSR) is 40 kg/kWh and overall efficiency of turbine generator set is 80%?		M	
A	10 kg/kWh		0	
A	50 kg/kWh		1	
A	30 kg/kWh		0	
A	60 kg/kwh		0	
Q	Back pressure turbine, extraction condensing turbine, these are the types of		M	
A	Gas turbine		0	
A	Steam turbine		1	
A	Diesel engine cogeneration system		0	
A	Reciprocating engine system		0	
Q	Otto cycle is _____		M	
A	Two stroke engine		0	
A	Single stroke engine		0	
A	Multi stroke engine		0	
A	Four stroke engine		1	
Q	Which of the following is not the example of Distributed generation cogeneration system?		M	
A	Gas turbine		1	
A	Reciprocating engine system		0	
A	Micro turbines		0	
A	Fuel Cells		0	
Q	In which of the following power generation technology, power is generated through an electrochemical process?		M	
A	Reciprocating engine		0	
A	Micro turbine		0	
A	Gas turbine		0	
A	Fuel cell		1	

Q	In a glass industry, exhaust gas from the glass melting furnace is used for power generation by installing steam boiler and turbine. Then the type of co-generation is called as:		M	
A	Gas turbine		0	
A	Bottom cycle		1	
A	Diesel generator		0	
A	Topping cycle		0	
Q	Which of these is not an application of back pressure turbine?		M	
A	Desalination of sea water		0	
A	Filtration of water		1	
A	Process industries		0	
A	Petrochemical installations		0	
Q	What is an important advantage of closed-cycle gas turbine cogeneration systems?		M	
A	High pressure of produced steam		0	
A	Low capital costs		0	
A	Working fluid remains clean and it does not cause corrosion or erosion		1	
A	High temperature of produced steam		0	
Q	Major advantage of waste heat recovery in industry is:		M	
A	Reduction in pollution		1	
A	Decreases in efficiency		0	
A	Effectiveness is Increased		0	
A	Save Energy from Process		0	
Q	Typical waste gases temperature from glass melting furnace		M	
A	1000-1550 ^{o}C		1	
A	800-950 ^{o}C		0	
A	650–750 ^{o}C		0	
A	760-815 ^{o}C		0	
Q	Recovery of heat from dryer exhaust air is a typical application of:		M	
A	Waste heat recovery boiler		0	
A	Heat pump		0	
A	Heat wheels		1	
A	Economizer		0	
Q	A recuperator counter flow type for preheating air receives flue gases at 816 ^{o}C and exits at 371 ^{o}C. The air enters at 37.8 ^{o}C and is preheated to 260 ^{o}C. The LMTD is _____ ^{o}C		M	

A	604		0	
A	404		0	
A	435		1	
A	224		0	
Q	Which of the following is very low quality waste heat recovery source?		M	
A	Boiler		0	
A	Oven		0	
A	Furnace		0	
A	Pump		1	
Q	In case of Hybrid recuperator, what is the mode of heat transfer?		M	
A	Conduction & Convection		0	
A	Radiation & Convection		1	
A	Conduction & Radiation		0	
A	Conduction, Convection and Radiation		0	
Q	Which waste heat recovery equipment consist of four major parts i.e. evaporator, compressor, condenser and throttling valve?		M	
A	Heat wheel		0	
A	Heat pipe		0	
A	Heat pump		1	
A	Regenerator		0	
Q	For every _____°C reduction in flue gas temperature by passing through an economiser or a pre-heater, there is 1% saving of fuel in the boiler.		M	
A	1		0	
A	22		1	
A	5		0	
A	36		0	
Q	Thermo-compressor is commonly used for _____		M	
A	compressing hot air		0	
A	flash steam recovery		1	
A	distillation		0	
A	reverse compression of CO2		0	
Q	Regenerator is widely used in:		M	
A	Reheating Furnaces		0	
A	Heat treatment furnaces		0	
A	Baking Ovens		0	
A	Glass melting furnaces		1	

Q	The energy sources, that are either found or stored in nature areknown as:		M	
A	Primary energy sources		1	
A	Secondary energy sources		0	
A	Tertiary energy sources		0	
A	Commercial energy sources		0	
Q	The primary energy consumption of India is ____		M	
A	1/29 of the world		1	
A	1/12 of the world		0	
A	1/7 of the world		0	
A	1/3 of the world		0	
Q	If the following countries are arranged in order of the highest to lowest oil resrves found there, which country will be at fourth position?		M	
A	Canada		0	
A	USA		1	
A	Saudi Arabia		0	
A	Venezuela		0	
Q	To measure building and structure tightness, which of the following instrument is available in energy auditor's tool box?		M	
A	Blower ddor attachment		1	
A	Combustion analyzer		0	
A	Foot candle meter		0	
A	Anemometer		0	
Q	What is VSD which is used as energy efficient technique?		M	
A	Variable solid drive		0	
A	Volume specific drive		0	
A	Variable speed drive		1	
A	Velocity speed drive		0	
Q	During heat exchanger networking, capital cost decreases and operating cost increases with _____		M	
A	increase in ΔTmin		1	
A	decrease in ΔTmin		0	
A	increase in ΔTthresh		0	
A	decrease in ΔTthresh		0	
Q	The multiple effect evaporator (MEE), wherein, the feed is admitted individually to every effect and vapor from previous effect is still used to heat the next effect, is		M	
A	Forward feed MEE		0	

A	Backward feed MEE		0	
A	Paralle feed MEE		1	
A	One to one MEE		0	
Q	Combined cycle cogeneration system is the combination of		M	
A	Steam turbine and diesel engine system		0	
A	Gas turbine and diesel engine system		0	
A	Topping and bottoming cycle cogeneration system		1	
A	Steam turbine and Gas turbine system		0	
Q	Ceramic recuperators can withstand temperatures up to:		M	
A	600 ^{o}C		0	
A	1300 ^{o}C		1	
A	2500 ^{o}C		0	
A	900 ^{o}C		0	
Q	Which of the following is not the non-commercial energy source?		M	
A	Biomass waste		0	
A	Coal		1	
A	Firewood		0	
A	Cowdung		0	