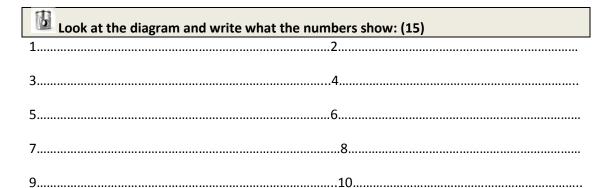
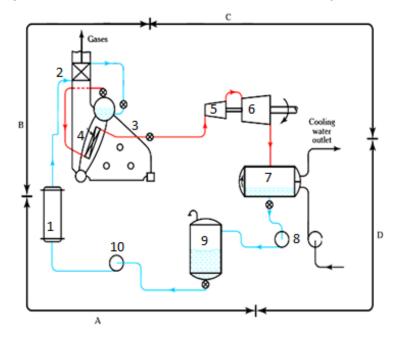
Merchant marine academy of Macedonia- School of Engineers						
Course: Maritime English Academic year:2018-19 Exam period: Febru						
Semester: B Date:	Instructors: A. Birbili, E. Xe	nitidou, M. Tsompanoglou				
Student's name:						
Student's number:						
Exam paper grade:	Instructor's signature					

Fill in the gaps with a word from the list below. There are two (2) extra words. (15)						
	rotary	volute	diffusion	impulse	vanes	displacement
	regenerative	impeller	discharge	reciprocating	suction	diffuser
	casing	multistage	reaction	screws	centrifugal	
The	re are two ma	in groups of pu	mps: the	թւ	umps and the _	
pur	nps. The 1 st gro	up is subdivided	l into	pumps	in which a piste	on moves up an
do	vn, and	pur	ps in which the	e moving part ro	otates. The rota	ting parts can b
gea	rs,	, lobes,		_, etc. The centi	rifugal pump, or	the other hand
cor	sists of an/a		which rotates a	t high speed ins	ide the pump	
The	most commor	type of centri	fugal pump is tl	he	which ha	s taken its nam
after the spiral case which surrounds the impeller. In the pump the impeller is						
sur	rounded by		vanes which are	e stationary. Bed	cause of this slig	sht similarity to
turbine, it is often called turbine pump. The pump is a						
cor	nbination of the	e other two type	es. With centrifu	ugal	pumps v	we can have hig
capacities and high pressure which is needed in cases such as boiler feeding.						
Describe the third and fourth stroke of the diesel engine.(10)						

.....





Which auxiliary machinery is used for ...(15)

۶	Burning the garbage? I
\triangleright	Increasing the temperature of fuel and improving its viscosity?
	Н
\triangleright	Operating the rudder for manoeuvring? S
	G
\triangleright	Lowering lifeboats to sea? LGGGG
	D)
\succ	Supplying the ship with electrical power and lighting? D
	G
\succ	Reducing the rolling of the ship? F S
\succ	Providing forced ventilation to holds? V(F(F
	В)
\triangleright	Having distilled water ? E
\triangleright	Lifting heavy objects, containers, etc? C
\triangleright	Removing water and dirty particles from fuel? O W S
	or P)

STUDENT'S NAME.....

$\dot{\Psi}$ Choose one of the following words to fill in the correct synonym or explanation.								
There is an extra word. (10)								
malfunctio	n attemperator	gauge	combustion	inject	stationary			
evaporate	fireproof	ignition	emission	saturated				
*	Turn from liquid ir							
 Irregular or abnormal function 								
*	Force liquid into							
 Measuring instrument 								
*	Apparatus which c							
 Discharge of gas, heat, radiation 								
*	Not affected by fire							
*	 Filled with moisture 							
*	Surning							

Underline the correct word. (10)

Fixed, not in motion

The economizer/ atomizer/ attemperator is part of the oil burner which sprays the fuel.

- Water changes into steam in the **generating/ circulating/ downcomer** tubes.
- A vessel in which boiler feed water is heated under reduced pressure in order to remove dissolved air is economizer/condenser/deaerator.
- In a 4 stroke Diesel Engine the piston is connected to the connecting rod with the gudgeon/ crosshead/ crank pin.
- The camshaft opens the valve with the help of the connecting/ push/ tie rod.
- The turbine bearings require special attention. They support the weight of the rotor and are adjusted to maintain a close clearance/ principle/ separation between the blades.
- The steam comes out of the nozzles/ ports/ exhausts at a high pressure.
- The piston rod reciprocates into and out of the cylinder liner/ scavenge box/ stuffing box.
- The walls and floor of the furnace have an isolation/ insulation/ insurance of brick walls.
- The cylinder block, the frame of the engine and the bedplate are connected together with the frame rods/ connecting rods/ tie rods.

Fill in the gaps with the appropriate words. There are two extra words. (15)						
silencer	impulse	stator	rim	blades	crown	
converted	inlet	compression	seat	stem	mounted	
expanded	saturated	astern	consumption	skirt		
The votex of the LD turning has additionally the higher for						

- The rotor of the L.P. turbine has additionally theblades for backing down.
- The upper part of the piston is calledand the lower
- The 4-stroke D.E. has lower fuelthan the 2- stroke one.
- The rotor ison the shaft.
- The low pressure turbine usually consists of a combination ofand reaction elements.
- The 2 stroke DE does not have a/an valve
- On theof the rotor there are curved
- Theabsorbs the noise of the vibration of the running components of the turbocharger.
- The valve consists of the, the head and the
- The steam which is collected in the steam drum of the boiler is
- The turbine assembly has a, that is stationary vanes which direct the exhaust gases to the rotor.
- The three upper rings of the piston of a 4-stroke diesel engine arerings.

Fill in the gaps to make a phrase with the following words. There are two extra words. (10)						
tight	check	treatment	wall	gland	port	
pin	marine	chamber	burner	valve	feed	
			Air			
Sewageplant		Scotchboiler				
Combustion			Oil			
Feedvalve			Waterheader			
Deaeratingtank			Throttle			



Good Luck