BK	NUM	ANS	QUESTION	ANS A	ANS B	ANS C	ANS D	ILLUS
							repair the leak before	
			If you find the pressure of an R-12 refrigeration		only recover the	recover liquid and	being able to pull a	
			system to be worked on is 0 psig, you will need to	only recover the	liquid refrigerant in	vapor refrigerant and	vacuum on the	
11	4508	D		vapor refrigerant	the system	have it reclaimed	system	
				compression and				
				collapse of vapor	pitting of the pump	pitting of the pump		
				bubbles on the pump	internals due to	internals due to		
11	4557	Α	Cavitation in a hydraulic pump is the	internals	galvanic action	acidic oil	none of the above	
			The component shown in the illustration is a	two-stage hydraulic		bi-directional flow	single stage constant	
11	4558	Α	graphic representation of a	• •	double pump unit	pump	flow pump	GS-0096
			If a hydraulic pump sounds like it is pumping		·			
			rocks when in operation, the problem is most					
11	4559	Α	likely	cavitation	galvanic action	slippage	None of the above	
			•	Noticable				
			Which of the following conditions would indicate	temperature drop				
			that the liquid line strainer in a refrigeration	between the strainer				
			system has become excessively restricted and	inlet and the outlet	Frosting at the outlet	Frosting at the inlet	Excessively high	
11	4611	Α	requires cleaning or replacement?	tubing.	of the receiver.	of the compressor.	suction pressure.	
			According to 46 CFR Part 113, what would be the	·			'	
			maximum time delay period allowed for a ships					
			steering system to reach a 15 degree right rudder					
			helm order from midships, before an alarm					
11	4619	В	condition will be indicated?	5 seconds	10 seconds	15 seconds	20 seconds	
				The area labeled "C"	The area labeled "E"		The area labeled "E"	
				and "H" would be	and "H" would be	The area labeled "E"	and "G" would be	
			As shown in the illustration, which of the following	pressurized for a	pressurized for a	and "H" would be	pressurized for a	
			statements is true concerning the hydraulic circuit	•	right rudder	pressurized for a left	right rudder	
11	4626	В	of the vane type steering gear system shown?	command.	command.	rudder command.	command.	GS-0178
			,, ,					
					The spring loaded			
				The area labeled "H"				
				and "E" would be	labeled "F", function	The component		
			As shown in the illustration, which of the following		to provide steering	labeled "D" would be		
			statements is true concerning the hydraulic circuit	•	motor pressure relief			
11	4627	D	of the vane type steering gear system shown?	_	•	rudder stock.	all of the above	GS-0178
			,, , , , , , , , , , , , , , , , , , , ,			The function of the	The function of the	
				The function of	The function of	spring loaded valves	spring loaded valves	
				component "K" is to	component "K" is to	in area "F" is to	in area "F" is to	
			As shown in the illustration, which of the following		prevent over-travel	prevent over-travel	prevent over-travel	
			statements is true concerning the hydraulic circuit	•	l'	for a right rudder	for a left rudder	
11	4628	Α	of the vane type steering gear system shown?	•	command.	command.		GS-0178

				•	•	in area "F" is to	The function of the spring loaded valves in area "F" is to	
			As shown in the illustration, which of the following		prevent over-travel	prevent over-travel	prevent over-travel	
.	4000	_	statements is true concerning the hydraulic circuit			for a right rudder	for a left rudder	00.0470
11	4629	Α	of the vane type steering gear system shown?	operation.	command.	command.	command.	GS-0178
			If the numerical designation indicated on the					
			outside of a hydraulic hose is BXP-10, the "dash size" 10 indicates that the inside diameter of the					
144	1055	_	hose is	5/8 inch	3/4 inch	7/8 inch	1 inch	
11	4655	Α	If the recommended cutting speed for bronze is	5/6 INCH	3/4 Inch	7/6 Inch	1 Inch	
			110 FPM, what should be the approximate lathe					
			RPM when reconditioning the outside					
			circumference of an 8 inch bronze centrifugal					
11	4657	Α	pump impeller?	53 RPM	106 RPM	212 RPM	636 RPM	
-	4037	^	Which of the following figures is INCORRECT	33 KFIVI	TOO KEIVI	ZIZKFIVI	030 KFW	
			regarding the direction of flow and shaft rotation					
11	4668	В	for the lobe type pump shown?	A	В	С	D	GS-0179
	4000			Λ	В			00-0179
			According to the illustration, which of the following conditions would most likely cause Pump "A" to	insufficient air	The hydro-pneumatic tank is operating with	exists in the potable	Pump "A" wearing rings have excessive	
11	4669	Α	short cycle?	charge.	a low water level.	water storage tank.	clearance.	GS-0173
11	4670	A	Copper tubing is manufactured and classified as type K, L, and M. Which type would offer the greatest wall thickness for a given nominal size?	Туре К	Type L	Туре М	Type L and M have identical wall thicknesses	
11	4689	С	A hydraulic system gear pump being fed from a reservoir frequently indicates signs of excessive pitting after two months of service. Which of the following would most likely contribute to this condition?	occurring in the	A partial restriction in the return line has developed.	A vacuum condition has developed in the reservoir.	Operating oil temperature is determined to be below normal.	
11	4690	А	A hydraulic system gear pump being fed from a reservoir indicates signs of excessive pitting after two months of service. Which of the following would most likely contribute to this condition?	clogged the reservoir	A partial restriction in the return line has developed.	Abnormal pressurization is occurring in the reservoir.	Operating oil temperature is determined to be below normal.	

	1	T	T		Т	Γ		1
11	4720	В	In the hydraulic crane circuit illustrated, which would be the correct hydraulic configuration required to raise the boom?	Activate directional valve 9 and shift spool valve to area 3.	Activate directional valve 9 and shift spool valve to area 1.	Activate directional valve 8 and shift spool valve to area 3.	Activate directional valve 8 and shift spool valve to area 1.	GS-0161
11	4721	A	In the hydraulic crane circuit illustrated, what is the function of the component labeled #18?	Provide additional control when lowering the boom.	Provide additional control when swiveling the platform.	Control the lowering speed of the winch cable.	Provide a pressure relief if the boom becomes overloaded.	GS-0161
12	1768		Some electrical schematics use "binary values" (Base 2), to represent and identify automation alarm addresses. Which of the following represents the "binary value" for the decimal number 7 (Base 10)?	0110	1110	O111	1001	
12		D	Some electrical schematics use "binary values" (Base 2), to represent and identify automation alarm addresses. Which of the following represents the "binary value" for the decimal number 9 (Base 10)?	0110	1110	O111	1001	
			What would be the terminal voltage and amp-hour capacity at terminals A and B if each battery was	6 volts and 50 amp-	12 volts and 150	24 volts and 200	36 volts and 300	
12		B D	rated at 50 amp-hours and 6 volts? What would be the terminal voltage and amp-hour capacity at terminals A and B if each battery was rated at 50 amp-hours and 12 volts?	hours 12 volts and 50 amphours	amp-hours 12 volts and 150 amp-hours	amp-hours 24 volts and 50 amp-hours	24 volts and 150	EL-0107 EL-0107
12	1780	А	What would be the terminal voltage and amp-hour capacity at terminals A and B if each battery was rated at 200 amp-hours and 6 volts?	12 volts and 600 amp-hours	12 volts and 1200 amp-hours	36 volts and 600 amp-hours	36 volts and 1200 amp-hours	EL-0107
12	1787	D	Power conversion for use in AC propulsion drive motors can be accomplished by	cycloconverters	pulse width modulated inverters	load commutated inverters	All of the above	
12	1789	В	Which of the following is a disadvantage of electric drive propulsion systems?	and direction of rotation are easily controllable.	Propulsion motors are required along with electrical power generation machinery.	Location of electric power generation machinery is flexible.	Main propulsion power may also be directed to ships electrical service distribution.	
12	1799	D	Speed control of a DC propulsion motor is accomplished by	adjusting the output frequency of the power source	the use of a load- commutated inverter	the use of static power converters	adjusting the input voltage to the motor	

						electronically		
						changing the phase		
				changing the		sequence of the		
			The rotation of the main propulsion motor in a	direction of current	reversing the	voltages generated		
			modern AC propulsion drive system is reversed	flow in the motor's	direction of current	by the power	power directional	
12	1815	С	by	field winding	flow in the armature	converter	relays	
							·	
						electric drive system		
						where the propulsion	electric drive system	
					electric drive system	motor is installed in a	in which the motor	
				electric drive system	that incorporates a	submerged housing	drives a controllable	
12	1817	С	The Azipod propulsion system is a	using water jets	DC motor	capable of swiveling	pitch propeller (CPP)	
						The system	The system requires	
				The pod assembly	The system allows	eliminates the need	the use of a	
			Which of the following statement is FALSE	swivels on a vertical	full turns at high	for a separate	controllable pitch	
12	1818	D	concerning Azipod propulsion systems?	axis.	speed.	rudder.	propeller.	
			An electric propulsion drive system in which the					
			propulsion generator only supplies power to the					
12	1819	В	propulsion motor is referred to as a	integrated system	dedicated system	composite system	multi-purpose system	
					nioton "F" moneco	mieten "F" meeuee	niatan "F" masusa	
				piston "F" moves	piston "F" moves	piston "F" moves downward to close	piston "F" moves	
				upward to open the	upward to close the		downward to open	
			In the expent of failure of the hellows "II" above in	exhaust valve and	exhaust valve and	the exhaust valve	the exhaust valve	
42	2050		In the event of failure of the bellows "I" shown in	close the makeup	open the makeup	and open the steam	and close the steam	CE 0040
13	2050	U	the illustration (SE-0019),	steam valve.	steam valve the manual	makeup valve	makeup valve	SE-0019
				precise control of the		precise control of the	nrecise control of the	
				gland steam	gland seal steam	gland steam	gland steam	
			The purpose of the manual control handwheel	10	makeup valve "B'	pressure to the	pressure to the	
			shown in the illustration (SE-0019) is to provide		and exhaust valve	turbine glands at full	turbine glands when	
13	2052	R	for	maneuvering	"E"	lload	_	SE-0019
13	2002		During maneuvering, a vessel has just proceeded	manouvering	<u> </u>	load	manouvering	OL-0019
			from full ahead to a dead slow condition. Which of					
			the following actions reflects the first response of			Bellows and		
			the gland seal regulator shown in the illustration	Pilot valve "J" would	Valve "D" would	connecting link would	Valve "C" would	
13	2053	В	SE-0004?	l .	open.	move upward.		SE-0004
_,,	2000	<u> </u>	102 000 1.	moro apmara.	1000	moro apmara.	10p0	OL 0007

		I					1	
				piston "F" moving	piston 'F" moving	piston 'F" moving	piston "F" moving	
				downward to shut the		downward to open	upward to open the	
			For the gland seal regulator shown in the			the makeup steam	makeup steam valve	
			illustration (SE-0019), an increase in gland seal	"B" and open the	"B" and open the	valve "B" and close	"B" and close the	
13	2054		pressure will result in	exhaust valve "E"	exhaust valve "E"	the exhaust valve "E"	exhaust valve "E"	SE-0019
1		_	From the data shown in the illustration, what					02 00 10
			would be the speed of the L.P. turbine rotor if the					
13	2058	В	propeller shaft was turning at 90 RPM?	1,545 RPM	2,794 RPM	3,947 RPM	4,316 RPM	SE-0022
				Indicated head	•	,		
				pressure does not				
			What condition listed below would specifically	change when	Observed	Excessive noise	Excessive noise	
			indicate that a pump overhaul was necessary for a	discharge valve is	operational speed	coming from drive	coming from pump	
14	2130	Α	centrifugal saltwater service pump.	closed.	has decreased	motor	coupling	
				Indicated head		Shaft packing gland		
				pressure does not		requires constant		
			What condition listed below would indicate that a	change when the		repacking due to an		
			pump overhaul was necessary for a centrifugal	discharge valve is	Pump vibration has	excessively worn		
14	2133	D	saltwater service pump.	closed	increased	sleeve	All of the above	
			What indications would you use to determine that					
			a pump overhaul was necessary for a salt water	Shutoff head		Pump coupling		
			service centrifugal pump assuming normal salt	pressure had	Noticeable decrease	requires constant		
14	2136	Α	water supply conditions?	dropped by 20%	in operational speed	maintenance	All of the above	
			According to 33 CFR's, the approval period for a					
			shipboard oil pollution emergency plan expires					
15	524	D	after	one year	two years	four years	five years	
			With regards to a ship's Oil Record Book, an oil					
1	2010		tanker of 150 gross tons and above must maintain	D (1)	D (II I	Both Part I and Part	D (III	
15	2319	С	entries in	Part I only	Part II only	II	Part III	
						should not be used	is required to have	
					ia ta ha kantin the	to record the	entries recorded	
				io the property of the	is to be kept in the	accidental discharge	within 48 hours of	
4.5	2002	_	The Oil Depart Deak for all LLC abins	is the property of the		of oily or oily	completion of the	
15	3003	Α	The Oil Record Book for all U.S. ships	U.S. government	of the Master A non-tanker that	mixtures	particular operation	
				A object 150 gross			A phin of 200 grass	
			Which ship must maintain Part II (Cargo/Ballast	A ship of 150 gross tons or above, other	carries more than 200 cubic meters of	An oil tanker of 100	A ship of 200 gross tons or above, other	
15	3006		Operations) of the Oil Record Book?	than an oil tanker.	oil in bulk.	gross tons or above.	than an oil tanker.	
15	3006	D	Each operation involving the transfer of oil or oily	within 24 hours of	within 48 hours of	gross toris or above.	within 12 hours of	
			mixture that requires an entry in the OIL Record	completion of the	completion of the		completion of the	
15	3007	С	Book shall be fully recorded	project	operation	without delay		
13	3007	U	DOOK SHAII DE IUIIY LECOIDED	project	operation	without delay	operation	

					discharging at an		is within "Special
			Among other restrictions, an oil tanker may not		instantaneous rate of		Areas" defined in
			discharge an oily mixture into the sea from a	more than 12	oil content not		Regulation 1 (10) of
			cargo tank, slop tank, or cargo pump room bilge	nautical miles from	exceeding 30 liters		Annex I to MARPOL
15	3009	В	unless the vessel is .		per nautical mile	at anchor or stopped	
				An injury to a crew			
				member which			
				renders that person			
				unfit to perform		A discharge of	
				routine vessel duties		10,000 gallons or	
			According to 46 CFR's, what accident situation on	and requires	Damage to property	more of oil into	
			a vessel would be considered by the Coast Guard			navigable waters of	
15	3016	D	as a "Serious Marine Incident"?	1 -		the U.S.	All of the above.
			According to 46 CFR's, all mariners directly				
			involved in a "Serious Marine Incident" are				
			required to submit a urine speciment for screening				
15	3017	D	of dangerous drug use within	2 hours	12 hours	24 hours	32 hours
			According to 46 CFR's, all mariners directly				
			involved in a "Serious Marine Incident" are				
			required to submit to alcohol testing within	2 hours following the	12 hours following	24 hours following	32 hours following
15	3019	Α		incident	the incident	the incident	the incident
			According to 46 CFR's, all mariners directly				
			involved in a "Serious Marine Incident" are				
			l'	2 hours following the	4 hours following the	6 hours following the	8 hours following the
15	3020	D	testing has been performed or	incident	incident	incident	incident
			According to 46 CFR's, besides analysing a				
			mariner's breath for alcohol, what other specimen				
			would be acceptable for alcohol level testing				
15	3022	Α		Saliva	Skin	Hair	Cuticle
			The overall responsibility in maintaining the Oil				
15	3036	С	Record Book is given to	Chief Mate	Chief Engineer	Master	Cargo Engineer
			Jul-07				