

기 관 영 어

001 다음 일지 기재문의 밑줄 친 부분의 뜻은?

Found No.1 plummer block working hot.

- | | |
|-------------------------------|-------------------------|
| 가. intermediate shaft bearing | 나. thrust shaft bearing |
| 사. propeller shaft bearing | 아. stern tube bearing |

002 “공기 송출을 하기 전에 밸브를 잠그지 마시오.”를 영문으로 표시할 때 () 안에 알맞은 것은?

“Never () your valve before air blowing”

- | | | | |
|---------|---------|-----------|------------|
| 가. lock | 나. open | 사. switch | 아. restart |
|---------|---------|-----------|------------|

003 () the joint surface of No.1 cylinder cover on M/E.

- | | | | |
|-------------|--------------|---------------|-----------|
| 가. Faced up | 나. Regulated | 사. Screwed up | 아. Tapped |
|-------------|--------------|---------------|-----------|

·해설·

■ face up : 표면을 매끄럽게 하다

004 S/B Eng. () leaving port of Pusan.

- | | | | |
|-------|--------|-------|-------|
| 가. to | 나. for | 사. of | 아. on |
|-------|--------|-------|-------|

005 Fuel oil tank vents are fitted with flame screens to prevent ().

- | | |
|-------------------------------|----------------------------------|
| 가. escape of flammable vapors | 나. flames entering the tank vent |
| 사. corrosion in the tank vent | 아. damage to the ball check |

006 One of the important functions of lubricating oil circulation is ().

- | |
|--|
| 가. to cool the bearing caps by carrying away heat generated by friction. |
| 나. to cool the bearing surfaces by carrying away heat generated by friction. |
| 사. to increase the friction loss resulting from oil film. |
| 아. to increase the revolution of shaft by lubrication. |

·해설·

■ carry away : ~을 가져가버리다, 운반해가다, 빼앗다

007 Most propellers on merchant vessels are made of ().

- 가. manganese bronze. 나. cast iron.
사. mild steel. 아. forged steel.

·해설·

■ manganese : 망간 / forged steel : 대장간 쇠, 제철소

008 Calipers are instruments that can be used to gauge the distance between two surfaces. 밑줄 친 부분과 뜻이 같은 것은?

- 가. create 나. enclose 사. fill 아. measure

009 Which of the following is a spark ignition engine?

- 가. gasoline engine 나. diesel engine 사. rocket engine 아. turbo-jet engine

010 Honing is ().

- 가. cutting process 나. grinding process 사. welding process 아. ~~remating~~ process

011 Renewed () of clutch for No.2 F.O. purifier.

- 가. friction linings 나. spiral gear 사. gravity 아. separation disc

012 When the ship is at sea, the principal particulars to be entered in the log book are as follows :
The () of arrival and departure of the ship, the () and details of the starting and stopping of the engines, and the () and reason for reducing the speed.

- 가. time 나. place 사. condition 아. reason

013 When received fuel oil, which of the following specifications does not need to entry on engine log book?

- 가. price 나. specific gravity 사. date, time 아. quantity

·해설·

■ specifications : 명세, 내역, 상기

014 On the first page of the Log book, type of the () and boiler other particulars are to be entered.

- 가. engine 나. pump 사. steering gear 아. capstan

가. Chief steward 나. 2nd engineer 사. 3rd engineer 아. Assistant engineer

·해설·

■ designate : ~을 나타내다, 지시하다, 명시하다 / convention : 협정, 집회, 협의회 / assistant engineer : 실기사

023 All personnel on board should be fully () of the precautions necessary for the () of fire.

가. ignorant, prevention

나. aware, occurrence

사. ignorant, occurrence

아. aware, prevention

·해설·

■ ignorant : 무식한, 무지의 / prevention : 예방 / aware : 알고 있는, 감시한, 알아차린

024 Steering gear control must be provided both on the () and in the steering gear room for the main steering gear.

가. bridge

나. engine room

사. master's room

아. chief engineer's room

025 () 100 tons of F.O. into No. 2 F.O.T.

가. Advanced

나. Renewed

사. Loaded

아. Worked

026 “출입금지”에 해당하는 용어는?

가. Way out

나. Not in use

사. Off limits

아. Entrance

·해설·

■ way out : 출구(exit)

027 When selecting the size of wire to be used in a circuit, the most important item to consider is the ().

가. size of the circuit

나. density of the circuit

사. amperage of the circuit

아. amount of wire to be used

028 If a boiler is allowed to run short of water, what action should be taken first?

가. close the uptake dampers

나. put out the fires

사. shut down the main stop valve

아. regulate the steam pressure by the hand lifting lever on the safety valve

029 The greatest care should be taken to guard against () in steam piping by carefully draining

all sections and other spaces where water might accumulate before () is admitted.

가. steam leakage, drain

나. steam expansion, hot water

사. water hammer, steam

아. steam pressure, feed water

·해설·

■ guard : 보호하다 / water hammer : 수격작용

030 The solenoid valve can be typed as a ().

가. bellows valve

나. thermal valve

사. bimetallic valve

아. magnetic stop valve

031 The () ships transport persons mainly.

가. merchant

나. passenger

사. cargo

아. time charter

·해설·

■ merchant : 상선

032 Which of the following is a compression ignition engine?

가. hot bulb engine

나. gasoline engine

사. diesel engine

아. steam turbine

033 When there is a Freon leak, the halide torch will burn ().

가. orange

나. blue

사. white

아. green

·해설·

■ halide torch : 할랄라이드 토치 / 녹색 : 소량누설, / 진한 청색 : 다량 누설

034 The purpose of () rings are : to maintain a pressure tight seal between the piston and cylinder wall ; to aid in controlling oil ; to permit proper lubrication of the cylinders and to assist in cooling the piston.

가. oil

나. lantern

사. mouth

아. piston

035 S/B Eng. for arriving () Busan.

가. on

나. at

사. with

아. to

036 다음 문장 중 ETD의 뜻은?

How many days do you need for landing permit and what's your ETD?

가. estimated time of disembark

나. estimated time of departure

사. examine time of dock

아. examine time of document

·해설·

■ estimate : 추측의 예상의

037 Stopped cargo work () to winch trouble.

- 가. in 나. up 사. due 아. back

·해설·

■ due to : ~ 때문에

038 The density of sea water depends on ().

- 가. temperature, pressure and salt content 나. temperature and surface tension
사. salt content, cohesion and viscosity 아. electrolytic content

039 If carbon dioxide has been discharged to extinguish or prevent a fire, the () content will be reduced in the affected space.

- 가. hydrocarbon 나. hydrogen 사. carbon dioxide 아. oxygen

·해설·

■ carbon dioxide : 이산화탄소(CO₂) / affected space : 재난지역, 화재현장 / hydrocarbon : 탄화수소 / hydrogen : 수소 / oxygen : 산소

040 When you enter the pump room to rescue an unconscious person, which equipment must you have?

- 가. Protective clothing and explosion-proof flash light
나. Flame safety lamp and resuscitation equipment
사. Combustible gas indicator and cannister gas mask
아. Self-contained breathing apparatus and lifelines

·해설·

■ unconscious : 의식불명의 / resuscitation : 소생, 의식회복 / breathing apparatus : 호흡구

041 The () is usually fitted on the suction side of a pump and must be cleaned regularly.

- 가. air chamber 나. strainer 사. coupling 아. gear

042 The engineer of the watch is never to absent himself from the () during his watch on any account.

- 가. engine room 나. steering 사. bridge 아. control room

043 The combustible gas indicator(or explosimeter) detects the presence and proportion of () vapour in air.

- 가. nitrogen 나. oxygen 사. hydrocarbon 아. hydrogen sulfide

·해설·

■ nitrogen : 질소 / hydrocarbon : 탄화수소 / hydrogen sulfide : 수소황화물

044 No person should enter boiler until it has () sufficiently to make work safely in such place.

- 가. warmed up 나. choked 사. illuminated 아. cooled

·해설·

■ choke : 질식하다, 숨이 막히다 / illuminate : 비추다, 밝게 하다

045 Each person's duties at fire drills and emergency drills are ().

- 가. in the engine room log book 나. on the station bill
사. in the deck log book 아. on the certificate of inspection

046 Before anyone is allowed to enter the main engine crankcase, the () should be engaged.

- 가. starting gear 나. turning gear 사. cut-off servo 아. governor

047 "Overhauled and cleaned separation disc in L.O. ()."

- 가. cooler 나. purifier 사. tank 아. heater

048 Engine horse power results from the engine's ().

- 가. speed and displacement 나. torque and speed
사. torque and compression ratio 아. compression ratio and displacement

049 The part of the crankshaft to which the connecting rod is attached is called the ().

- 가. journal 나. throw 사. crank arm 아. crank pin

050 (Pumped sufficient water) in No.4(P) tank to make the ship upright. What does (Pumped sufficient water) mean?

- 가. Filled up with water 나. Ran down
사. Pumped out 아. Loaded

051 In a refrigerating system, the purpose of the expansion valve by-pass is to ().

- 가. increase the efficiency of the plant
- 나. increase the capacity of the evaporator
- 사. control the refrigerant to the evaporator in case the automatic valves fail
- 아. by-pass the compressor

052 The sea water pump draws water from the () through a strainer and delivers it through the engine fresh water cooler.

- 가. sea chest 나. hull 사. filter 아. ballast tank

053 The condensate water from coils in the fuel oil heaters goes to the ().

- 가. observation tank 나. feed water heater
- 사. bilges 아. auxiliary exhaust system

·해설·
■ condensate water : 응축수

054 The device used for the retention or quenching of sparks in exhaust pipes of internal combustion engines is called a ().

- 가. loop seal 나. carburetor drip pan
- 사. spark arrester 아. silencer

·해설·
■ retention : 포집, 보유, 보존, 억류 / quenching : 억누르다, 억제하다, (불을)끄다 / spark arrester : 그을음 제거기

055 The bulb for the thermal expansion valve in the refrigerating system is located ().

- 가. near the evaporator coil outlet 나. in the middle of evaporator coils
- 사. near the evaporator coil inlet 아. on the bottom row of evaporator coils

056 The tool used to cut threads in a hole is called a ().

- 가. top 나. reamer 사. tap 아. bit

057 Maintaining the atmosphere in any part of any cargo tank for tanker with an oxygen content not exceeding () by volume.

- 가. 2[%] 나. 5[%] 사. 8[%] 아. 10[%]

058 Hydraulic test of piston to be () after repair.

- 가. applied 나. recoiled 사. started 아. overhauled

059 (The engineer of the watch) is never to absent himself from the engine room.에서 () 부분에 속하지 않는 사람은?

- 가. 1st engineer 나. 2nd engineer 사. 3rd engineer 아. oiler

060 The Log Book is to be () in a convenient place in the engine room.

- 가. equalized 나. kept 사. healed 아. penetrated

·해설·

■ equalize : ~을 똑같게하다, 평등하게 하다 / penetrate : ~을 관통하다, 꿰뚫다, ~을 파악하다

061 Some pistons are tapered with () dia meter at the crown end.

- 가. the same 나. the richer 사. the smaller 아. the more

062 () 안의 내용과 동일한 의미를 나타내는 것은?

By removing one or more of these factors the fire will be (put out).

- 가. detected 나. fired 사. extinguished 아. postponed

·해설·

■ detect : 발견하다

063 Compound gauge is necessary to read ().

- 가. both pressure and vacuum 나. both pressure and temperature
사. only pressure 아. only vacuum

064 All the occurrences arising during the watch are to be entered in the Log Book by ().

- 가. the engineer on watch 나. third engineer
사. 1st engineer 아. chief engineer

065 There are increased risks of electric shock to the welder if welding is done in hot or () conditions.

- 가. dry 나. warm 사. cold 아. humid

·해설·

■ humid : 습기

066 The main causes of () injury are infra-red rays, ultra-violet rays, exposure to chemicals, etc.

가. lung 나. kidney 사. eye 아. ear

·해설·

■ infra-red rays : 적외선 / ultra-violet rays : 자외선 / exposure : 노출 / lung : 폐, 허파 / kidney : 신장, 콩팥

067 Pointed out () by PSC officer as follows;

1. Annual survey not conducted for safety construction cert.
2. The incinerator not working.

가. the efficiency 나. the flaw 사. the results 아. the deficiency

·해설·

■ point out : 지적하다 / PSC (port State Control) : 항만국통제 / Annual survey : 연차검사 /
incinerator : 소각기(로) / efficiency : 효율, 능률 / flaw : 흠, 결점(도덕, 윤리상) / deficiency : 부족, 결핍, 결함

068 Fill blank(s) with suitable word(s).

“() up B.W.T. with sea water.”

가. Started 나. Filled 사. Full 아. Discharged

·해설·

■ fill up : ~을 채우다

069 보조 보일러의 검사를 받기 위한 준비를 했다.

Made () for () of auxiliary boiler.

가. preparations, survey 나. prepare, survey
사. preparations, dosing 아. prepare, dosing

·해설·

■ preparation : 준비 / prepare : 준비하다 / survey : 검사 / dosing : 양을 복용하다

070 In a single stage impulse turbine the expansion of the steam takes place in ().

가. moving blade 나. fixed blade 사. nozzle 아. casing

071 The purpose of a () is to keep the engine running at a desired speed regardless of the changes in the load carried by the engine.

가. governor 나. overspeed trip 사. regulator 아. flywheel

·해설·

■ regardless of : ~에도 불구하고, 개의치 않는

072 The mechanical efficiency of an engine is the ratio of the power actually delivered to the crankshaft called (①) to the power developed inside the cylinders called (②)

가. ① I.H.P, ② B.H.P.

나. ① B.H.P, ② T.H.P.

사. ① B.H.P, ② S.H.P.

아. ① B.H.P, ② I.H.P.

·해설·

■ mechanical efficiency : 기계효율

073 A synchroscope is used to ().

가. parallel AC generators

나. charge battery

사. synchronize propulsion motor and generator

아. connect breaker

·해설·

■ synchroscope : 동기검정기 / propulsion : 추진, 추진력

074 Nearly all fires can be easily controlled by one man with a portable ().

가. fire extinguisher

나. water tight door

사. look

아. fire detection

·해설·

■ nearly : 거의, 열추

075 The pilot valve in a hydraulic governor ().

가. controls the oil pressure in the governor

나. controls the rate of injection of pilot oil where the governor is used on dual-fuel engines

사. controls the flow of oil both to and fro the power piston

아. controls only the flow of oil under pressure to the power piston

·해설·

■ to and fro : 앞뒤로 움직이는, 왕복의

076 When the ship is at sea, the principal particulars to be entered in the log book are as follows :

The () of water at the time of arrival and departure, weather, the direction and force of wind.

가. ton

나. quality

사. draft

아. ballast

·해설·

■ particular : 사항, 조목 / draft : 흘수

083 Every lifebuoy shall be capable of supporting not less than 14.5[kgf] of iron in fresh water for a period of () hours.

- 가. 12 나. 24 사. 48 아. 72

·해설·

■ not less than : 적어도

084 괄호의 단어와 같은 뜻의 단어는?

(Gauged) crank arm deflection of M/E.

- 가. Adjusted 나. Measured 사. Inspected 아. Charged

085 On a three-phase three-lamp ground detector, what would be the indication if one phase was grounded?

- 가. one lamp dark and the others bright. 나. one lamp bright and the others dark.
사. all the lamps would be dark. 아. all the lamps would be bright.

·해설·

■ ground detector : 접지검지기

086 “Measured air gap of induction motor for cooling pump.”에서 밑줄 친 부분의 뜻은?

- 가. 공극 나. 공기벨트 사. 공기실 아. 진공실

·해설·

■ induction motor : 유도 모터

087 Discharged () from main air tanks. Choose the most suitable one for the parenthesis.

- 가. air 나. oil 사. carbon residue 아. drain

·해설·

■ residue : 나머지, 찌꺼기

088 The original (①) ratio of an engine is the volume of space when the piston is at BDC divided by the volume of combustion space when the piston is at TDC.

Carbon deposits, which are incompressible solids, can accumulate in the combustion chamber and (②) the volume of combustion space, thereby increasing the ratio.

- 가. ① compression, ② reduce 나. ① expansion, ② gain

사. ① explosion, ② increase

아. ① specific heat, ② maintain

·해설·

■ thereby : 그것 때문에, 그것에 의하여

089 If two AC generators are to be operated in parallel, the load is distributed evenly by ().

가. a rheostat

나. a balance coil

사. adjusting the governor settings

아. changing excitation

·해설·

■ evenly : 균등히, 공평하게 / rheostat : 가감저항기 / excitation : (전기)여자

090 During engine design the firing order is determined by the ().

가. cylinder arrangement

나. camshaft position

사. valve placement

아. crankshaft design

·해설·

■ firing order : 폭발순서

091 The time which it takes to heat the fuel particles, turn into vapor, and start combustion is called ignition ().

가. advance

나. time

사. lag

아. period

·해설·

■ lag : 지연, 지체

092 The vertical distance that the piston travels between T.D.C. and B.D.C. is called the ().

가. bore

나. stroke

사. cylinder

아. cycle

093 () is the play between the teeth of two gears which are engaged.

가. Gap

나. Back lash

사. Gear clearance

아. Chink

094 All liferafts to be opened and inspected, and replace the items whose term of validity are ().

가. begun

나. reserved

사. exploded

아. expired

095 () is a cargo ship constructed or adapted for the carriage in bulk of liquid cargoes of an inflammable nature.

가. A bulk carrier

나. A tanker

사. A General cargo ship

아. A container

096 () shall be completed on each occasion, on a tank-to-tank basis, whenever ballasting or cleaning of fuel oil tanks takes place in the ship.

- 가. Oil record book 나. Docking indent 사. Bell book 아. Abstract log

097 In accordance with the SOLAS 74/78 Convention as amended, the () shall be capable of inerting empty cargo tanks by reducing the oxygen content of the atmosphere in each tank to a level at which combustion cannot be supported.

- 가. flame detector 나. oxygen analyzer
사. combustible gas detector 아. inert gas system

·해설·

■ amend : ~을 고치다, 변경하다

098 All details of fuel bunkering, fuel oil tank cleaning or sludge disposal must be entered in the ().

- 가. rough log 나. engine room log 사. oil record book 아. abstract log

·해설·

■ disposal : 처리, 처분

099 We look forward () hearing from you at your earliest convenience.

- 가. with 나. by 사. of 아. to

·해설·

■ at your earliest convenience : 형편대로, 되도록 일찍

100 The oil record book shall be preserved for a period of three years after the () entry has been made.

- 가. first 나. last 사. beginning 아. start

101 A fire in its first few minutes can usually be readily ().

- 가. acceptable 나. distinguish 사. lighted up 아. extinguished

·해설·

■ readily : 즉시, 쉽사리

102 () should enter a refrigerated compartment without first informing a responsible officer.

- 가. Every seaman 나. Anyone 사. No one 아. Chief steward

103 The watch from 0800 hours to noon is the ().

가. midnight watch 나. morning watch 사. forenoon watch 아. evening watch

·해설·

■ 00~04 : midnight watch / 04~08 : morning watch / 08~12 : forenoon watch /
12~16 : afternoon watch / 16~20 : evening watch / 20~24 : first night watch

104 Under the MARPOL 73 Convention as amended every () of 150 gross tonnage and above shall be provided with an ().

가. passenger ship, oil record book 나. oil tanker, oil record book
사. passenger ship, engine log book 아. oil tanker, engine log book

·해설·

■ amended : 수정하다, 변경하다

105 All life rafts to be opened and inspected, and replace the items whose term of validity are ().

가. begun 나. reserved 사. exploded 아. expired

·해설·

■ term of validity : 유효기간 / reserved : 예약하다 / exploded : 폭발하다 / expired : 만료되다, 끝나다

106 Renewed 4 worn-out () plates on condenser cover.

가. zinc 나. stainless steel 사. asbestos 아. canvas

·해설·

■ worn-out : 닳아 해진, 써서 낡은

107 “발전기 엔진이 300[rpm] 되도록 조속기 스프링을 조정했다.”를 영문으로 표기할 때 ()에 알맞은 것은?

Adjusted () spring of D/E to keep RPM 300.

가. fuel valve 나. governor 사. plunger 아. tappet

108 Changed Fuel oil for M/E () MDO () HFO

가. to, with 나. from, to 사. from, by 아. to, of

109 If the discharge side of the thermal expansion valve is warmer than the inlet side, the ().

가. expansion valve is working normally 나. expansion valve is not working
사. solenoid valve is not working normally 아. scale trap is dirty

110 The sequence of an order in which power impulses occur in an engine is called the ().

- 가. expansion order 나. crank angle 사. ignition point 아. firing order

·해설·

■ firing order : 폭발순서

111 To ascertain the exact pressure of stroke of the piston is ().

- 가. spring 나. indicator 사. tachometer 아. manometer

·해설·

■ ascertain : ~을 확인하다, 규명하다

112 If a boiler is found to run short of water, what action should be taken first?

- 가. close the uptake dampers.
나. put out the fires.
사. shut down the main stop valve.
아. regulate the steam pressure by the hand lifting lever on the safety valve.

·해설·

■ put out : 끄다

113 In accordance with the SOLAS 74/78 Convention as amended, every steam boiler shall be provided with not less than two () valves of adequate capacity.

- 가. safety 나. stop 사. air vent 아. check

·해설·

■ not less than : 적어도 / adequate : 충분한, 적절한

114 The disposal into the sea of food wastes is prohibited from the nearest land is less than ().

- 가. 3 nautical miles 나. 12 nautical miles 사. 15 nautical miles 아. 25 nautical miles

·해설·

■ nautical miles : 해리(1해리=1852[m])

115 Ships are less stable when water or fuel tanks are partially filled because of the ().

- 가. free-surface effect 나. permeant sea water
사. increase in buoyancy 아. leakage of liquid

·해설·

■ permeant : 침투하는, 스며드는

- 116 The difference between the pitch of the propeller and the actual advance of the ship in one revolution is called (). If the pitch is greater than the actual advance per revolution, this is positive ; if the pitch is less than the actual advance of the ship, this is said to be negative.

가. slip 나. cavitation 사. gain 아. speed

·해설·

■ gain : 이득

- 117 “기관사 호출장치는 적절하게 작동될 수 있도록 기관제어실 또는 기관 조종대 부근에 설치되어야 하며, 기관사 거주구역내에서 명확히 청취 가능해야 한다.”를 영문으로 옮길 때 () 속에 적합한 것은?

An engineer's alarm shall be provided to () from the engine control room or at the maneuvering platform as appropriate, and shall be clearly () in the engineer's accommodation.

가. operate, audible 나. operate, visible
사. be operated, audible 아. be operated, visible

- 118 Overhaul lubricating oil pump for survey. 의 문장을 옳게 해석한 것은 어느 것인가?

가. 윤활유를 펴내고 펌프를 검사하십시오.
나. 펌프를 분해하고 윤활유를 검사하십시오.
사. 수검을 위하여 윤활유 펌프를 개방 검사하십시오.
아. 수검을 위하여 연료유 펌프를 개방 검사하십시오.

- 119 No () should be stored in the battery room.

가. hydrometer 나. flammable material
사. hygrometer 아. thermometer

·해설·

■ hydrometer : 비중계 / hygrometer : 습도계 / thermometer : 온도계

- 120 Which of the following is found on the surface of the plates when a lead-acid battery is discharged?

가. spongy lead 나. lead sulphate 사. irons 아. NaCl

·해설·

■ lead sulphate : 황산염

121 () 20 tons of F.O from No. 2 tank to No. 3 tank.

- 가. Loaded 나. Supplied 사. Shifted 아. Received

122 Overhauled G.S. pump and renewed impeller shaft and ().

- 가. mouth ring 나. oil ring 사. dam ring 아. piston ring

123 Faced up () valves of No.1 fuel pump on main engine.

- 가. suction and delivery 나. main and auxiliary feed check
사. surface and bottom blow 아. salinometer

·해설·

■ faced up : 연마하다

124 Ventilation of the crankcase is provided in order to ().

- 가. aid in purifying the oil
나. maintain an uniform oil pressure
사. prevent the accumulation of combustible gases in the crank case
아. prevent the oil from becoming emulsified

·해설·

■ in order to : ~하기 위하여

125 In referring to threads, pitch is ().

- 가. the distance of the full length of the thread
나. the distance from a point on one thread to a corresponding point on the next thread
measured parallel to the axis
사. the distance from the top of one thread to the bottom of the next thread
아. the distance from the bottom of a head on a bolt to the first thread

·해설·

■ refer : 언급하다, 알아보다, 참조하다

126 The time between fuel injection and ignition in a diesel engine is known as ().

- 가. injection lag 나. ignition lag 사. detonation lag 아. precombustion lag

127 Which of the following is not ordinarily used for determining power factor?

- 가. voltmeter 나. tachometer 사. ammeter 아. wattmeter

128 Most coolers used on board ship transfer () from a hot fluid to sea water.
가. pressure 나. heat 사. weight 아. load

129 A cofferdam is ().
가. an empty space between tank tops and bilges
나. a tank for storing chemicals
사. a cement dam in a fresh-water tank to prevent “sloshing”
아. an empty space separating compartments to prevent the contents of one compartment from entering another in case of leakage

·해설·
■ sloshing : ~(액체)가 출렁거리다

130 After passing through the bearings and gears, the L.O. in a turbine installation goes to the ().
가. settling tank 나. sump tank 사. daily tank 아. storage tank

·해설·
■ installation : 설비, 장치

131 Clearance between () and tail shaft to be measured.
가. trust bearing 나. main bearing 사. stern tube 아. connecting rod

·해설·
■ tail shaft : 선미축

132 Before reaching a home port should be ready a list of stores on hand. What is the meaning of underline?
가. remaining 나. in hand 사. consumed 아. within reach

133 While on the voyage, the engine must never be () without timely warning to the captain or officer of watch, () in cases of the most urgent necessity.
가. started, if 나. started, unless 사. stopped, if 아. stopped, unless

·해설·
■ timely : 때맞춘, 적시의 / in cases of : ~의 경우 / urgent : 긴박한, 급박한

134 All engineer officers and engine room ratings shall take () to prevent such a pollution, particularly within framework of relevant international and port regulations.

- 가. appropriate precautions 나. all possible precautions
 사. cleaning 아. appropriate effort

·해설·

■ rating : 부원 / framework : 구조물 / relevant : ~관련된

135 The basic requirement of deck machinery is to control ().

- 가. loads 나. height 사. size 아. width

136 The engine drives () at the stern of a ship.

- 가. the rudder 나. the propeller 사. the generator 아. the motor

137 Petty officer in charge of the engine department is ().

- 가. No.1 oiler 나. engineer officer 사. rating 아. sailor

·해설·

■ Petty officer : 하급선원, (해군)하사관

138 Which of the following need not to be recorded in oil record book?

- 가. Date 나. Port charge
 사. Record of operations 아. Signature of officer in charge

139 An “exciting current” is one that is required to ().

- 가. build up a dead circuit 나. create a magnetic field
 사. excite a induction motor 아. build up the voltage in a battery

·해설·

■ exciting current : 여자전류 / magnetic field : 자장 / induction motor : 유도 모터

140 A steam pressure gauge is usually connected to a steam source by means of “a pig tail” or loop in order to ().

- 가. prevent steam from entering the gauge
 나. prevent water from entering the gauge
 사. provide for temperature compensation
 아. provide for pipe expansion

·해설·

■ prevent : 예방하다 / provide : 제공하다 / compensation : 보상

141 The fuel ignites and burns during the first part of the working stroke, thus raising the pressure in the cylinder. During this stroke, called working or (①), the hot gases push the (②) downward.

가. ① explosion, ② cylinder

나. ① impulse, ② crankshaft

사. ① power, ② piston

아. ① expansion, ② crankshaft

142 An insulator is a ().

가. substance that offers a high resistance to current flow

나. substance that offers a low resistance to current flow

사. substance that absorbs electricity

아. form of a condenser

·해설·

■ insulator : 절연체, 절연물 / absorb : 흡수하다

143 A heat engine is a machine for the conversion of heat energy into (), and its function must be to make the conversion as efficiently as possible.

가. reciprocating motion

나. centrifugal force

사. mechanical energy

아. resistance

144 The function of fuel oil () is to prevent foreign matter from passing with oil to the burners.

가. stopper

나. cock

사. valve

아. strainer

·해설·

■ foreign matter : 이물질

145 Before synchronizing alternators, they must have ().

가. the load equalized

나. the same voltage

사. the same horse power

아. the same ampere

·해설·

■ synchronizing alternator : 동기발전기

146 An instrument used to measure high temperature is ().

가. manometer

나. pyrometer

사. hydrometer

아. thermometer

·해설·

■ manometer : 마노미터(유체압력계) / pyrometer : 고온계 / hydrometer : 비중계 / thermometer : 온도계

147 “한국선급의 검사원 J씨의 입회하에서 안전밸브의 자물쇠를 채웠다.”를 영문으로 옮길 때 ()에 알맞은 것은?

() the safety valve () Mr.J, K.R. surveyor.

- 가. Closed up, at the presence of 나. Locked up, in the presence of
 사. Closed up, with the presence of 아. Locked up, with the presence of

·해설·

■ in the presence of : ~의 면전에서

148 “The engineer is never to give over the charge of engine to any oiler.”의 영문이 뜻하는 것은?

- 가. 당직기관사는 자유롭게 기관실을 비울 수 있다.
 나. 당직기관사의 책임을 부원에게 맡겨서는 안 된다.
 사. 기관장은 당직을 당직부원에게 맡길 수 없다.
 아. 당직기관사의 책임을 기관장에게 위임할 수 있다.

149 An electric tachometer receives the engine speed signal from a/an ().

- 가. small generator mounted on the engine 나. bimetalic sensing device
 사. stroboscopic sensing device 아. vibration sensing device

150 Which of the following instruments is not needed in the operation of 2 DC generators operating in parallel?

- 가. voltmeter 나. ammeter 사. synchroscope 아. over current relay

·해설·

■ synchroscope : 동기검정기

151 Steering gear control must be provided both on () and in the steering gear room for the main steering gear.

- 가. the engine room 나. the bridge 사. the deck 아. the stern of ship

152 The oil record book shall be kept in such a place as to be readily available for ().

- 가. modification 나. copying 사. inspection 아. detection

·해설·

■ modification : 수정 / inspection : 검사 / detection : 발견

153 “(Took out) No. 2 cylinder liner and repaired crack parts.” What does (took out) mean?

가. Checked out 나. Draw out 사. Tightened up 아. Skimmed up

·해설·

■ draw out : 뽑아내다, 제거하다 / skimmed : ~을 걷어내다, 떠내다

154 () F.O. from port tank to starboard tank.

가. Shifted 나. Replaced 사. Filled 아. Drained

155 The () point of an oil is the temperature at which inflammable vapours are given off in sufficient quantity to flash when brought into contact with a flame.

가. fire 나. ignition 사. flash 아. pour

156 Inspected all working parts in () of M/E, found 1 crank pin bolt loosened, and retightened it up.

가. cylinder liner 나. crankcase 사. cylinder head 아. camshaft

157 Engine displacement can not be found unless the () is known.

가. power ratio 나. compression ratio
사. bore and stroke 아. compression space

·해설·

■ engine displacement : 배제용적

158 The purpose of the flywheel is to ().

가. prevent overspeeding of the engine
나. drive accessories
사. reduce the variations in crankshaft speed between power strokes
아. counter balance the crank throws on the crankshaft

·해설·

■ throws : ~을 던지다, ~을 움직이다

159 The cetane number of a fuel sample is determined by testing it in a single cylinder test engine with ().

가. compression ignition 나. spark ignition
사. variable compression ratio 아. fixed compression ratio

160 The turning effort produced by the engine is called a ().

가. torque 나. power ratio 사. twist 아. axial force

161 () is a property of fluids and is a measure of resistance to flow. It is determined in a practical sense by measuring the time it takes a given quantity acted on by gravity to pass through an orifice.

가. Specific gravity

나. Pour point

사. Viscosity

아. Heating value

·해설·

■ gravity : 중력 / specific gravity : 비중 / pour point : 유동점 / viscosity : 점도

162 Static electricity is most often produced by ().

가. pressure

나. friction

사. magnetism

아. heat

·해설·

■ static electricity : 정전기 / magnetism : 자기, 자력

163 A ring which keeps a person afloat in the water is ().

가. lifebuoy

나. lifeboat

사. life jacket

아. liferaft

164 () Osaka for Busan.

가. Came

나. Left

사. Went

아. Arrived

165 The engineer of the () is never to absent himself from the engine room.

가. oiler

나. first

사. watch

아. electrician

166 If you notice oil in the vicinity of the vessel while bunkering, you should ().

가. notify the master

나. stop bunkering

사. ascertain if oil is coming from your vessel

아. notify terminal superintendent

·해설·

■ vicinity : 근처 / ascertain : ~을 확인하다, 규정하다 / superintendent : 감독(자), 관리자

167 Before repair work is started on a dynamo engine, it should be () and the starting air valve should be secured so that it cannot be operated.

가. slow-down

나. run idle

사. stopped

아. turned

·해설·

■ secured : ~을 안전하게 하다

168 A person who is in command and charge of a whole ship is ().

- 가. the master 나. the chief officer 사. the oiler 아. the chief engineer

169 Air starting systems for two-stroke cycle engine require a minimum of () cylinders in the engine. This is because the cycle is 360° rather than the 720° of the four-stroke cycle.

- 가. two 나. three 사. four 아. six

·해설·

■ rather than : ~보다 오히려

170 “다시 죄도록 하시오.”를 영문으로 옮길 때 ()속에 적합한 용어는?

() it again.

- 가. Fasten 나. Unite 사. Feed 아. Unbind

·해설·

■ fasten : ~을 단단히 고정시키다, 잠그다, 죄다 / unite : ~을 하나로 하다, 결합하다

171 Choose the most suitable one for the blanks.

Measured top clearance of all pistons with ().

- 가. steel 나. copper 사. lead 아. iron

172 Instantaneous rate of discharge of oil content means the rate of discharge of oil in () per () at any instant divided by the speed of the ship in () at the same instant.

- 가. liters, hour, knots 나. liters, minute, knots
사. cubic meters, hour, knots 아. cubic meters, minute, knots

·해설·

■ Instantaneous : 즉시의, 순간의 / Instantaneous rate of discharge : 순간배출율 / instant : 잠깐, 즉시, 순간

173 Choose the most suitable one for the blanks.

S/B Eng. () leaving port of Busan.

- 가. to 나. for 사. of 아. on

174 Choose the most suitable one for the blanks.

The total resistance of a parallel circuit is always ().

- 가. larger than that of the branch with greatest resistance
- 나. smaller than that of the branch with the lowest resistance
- 사. equal to the sum of the individual branch resistance
- 아. equal to the reciprocal of the sum of the individual branch resistance

175 Choose the most suitable one for the blanks.

In six cylinder and four stroke cycle engine, there are six power strokes for every () revolution of the crank shaft.

- 가. three
- 나. two
- 사. six
- 아. four

176 Choose the most suitable one for the blanks.

The entrainment of a considerable portion of moisture by the steam leaving the boiler is called ().

- 가. steam bubble
- 나. priming
- 사. foaming
- 아. saturated steam

·해설·

■ entrainment : 함유되는, 포함되는 / moisture : 수분

177 Shims are used to ().

- 가. replace fuses
- 나. separate fresh and sea water lines
- 사. adjust cylinder liners
- 아. adjust bearing clearances

178 In two stroke diesel engine most efficient cylinder lubrication is obtained by injecting the oil into the piston, at the beginning of the ().

- 가. compression stroke
- 나. suction stroke
- 사. working stroke
- 아. exhaust stroke

179 Measured clearance between stern tube bearing and ().

- 가. propeller shaft
- 나. crank shaft
- 사. intermediate shaft
- 아. impeller shaft

180 “Winch to be opened up for survey.”에서 opened up의 뜻은?

- 가. 개방하다. 나. 폐쇄하다. 사. 수리하다. 아. 연기하다

181 The engine log book is to be kept in a convenient place in ().

- 가. engine room 나. galley 사. bridge 아. cargo control room

·해설·

■ galley : 요리실, 취사장

182 Officers in charge of an engineering watch shall keep the main propulsion plant and auxiliary system under constant supervision until properly (), and shall periodically () the machinery in their charge.

- 가. common, survey 나. relevant, inspect 사. relieved, inspect 아. watch, survey

·해설·

■ supervision : 감독, 관리 / periodically : 주기적으로 / charge : 임무

183 This is rule for dealing with and writing up the engine room log book, that is, when a () has been made in the Log Book, two black lines shall be drawn through that part.

- 가. particulars 나. watch 사. misentry 아. Chief Engineer

184 The () shall be preserved for a period of three years after the last entry has been made.

- 가. engine maintenance log 나. oil record book
사. bell book 아. abstract log

·해설·

■ preserved : ~을 보존하다, 보관하다

185 Officers in charge of an engineering watch, as defined in the STCW Code and under the direction of the chief engineer officer, shall be immediately available and on call to () the machinery spaces.

- 가. attend 나. absent 사. stand 아. keep

·해설·

■ in charge of : ~을 맡아서, 담당해서

186 Which of the following would not cause a centrifugal type pump to fail to discharge liquid?

- 가. pump not primed 나. insufficient speed
사. impeller plugged or broken 아. suction lift too low

·해설·

■ suction lift : 흡입양정

- 187 “알파라발 유청정기에 관한 최신 정보가 게재된 회보를 보내 주시기 바랍니다.”를 영문으로 옮길 때 ()에 알맞은 것은?

Please send () containing () information concerning the Alfa Laval Oil Purifier.

가. bulletins, the latest

나. bulletins, the last

사. labels, the latest

아. labels, the last

·해설·

■ bulletins : 편람

- 188 Fill in the blank with suitable words or phrases.

Filled up () with sea water.

가. settling tank

나. air tank

사. ballast water tank

아. sump tank

- 189 A relief valve can be loaded with a spring so that it may open automatically when () is too high.

가. gas

나. temperature

사. pressure

아. electricity

- 190 The intake and exhaust valves are closed and the air in the cylinder is compressed in the () resulting in high temperature.

가. suction stroke

나. expansion stroke

사. compression stroke

아. exhaust stroke

- 191 If an engine could convert all the heat developed by burning of the fuel into useful work, its () would be 100%.

가. heat ratio

나. thermal efficiency

사. mechanical efficiency

아. thermal ratio

- 192 Took () all accessories of No.4 cylinder cover for M/E.

가. in

나. out

사. of

아. up

·해설·

■ take in : ~을 받아들이다, 마시다 / take out : ~을 꺼내다 / take up : ~을 들어 올리다

193 If the safety valve starts to whistle on an oxygen-breathing apparatus(OBA), the person wearing the OBA should ().

- 가. go out into the fresh air
나. open the by-pass valve wide
사. close the by-pass valve until the whistling stops
아. reset the timer for an additional 10 minutes

·해설·

■ oxygen-breathing apparatus : 산소구명장치

194 The watch engineer should not leave the watch () until properly relieved.

- 가. time 나. position 사. during 아. engine

195 All air receivers and other pressure vessels for essential services together with their mountings and safety devices are to be opened up and examined internally and externally. If internal examination of them is not practicable, they are to be tested hydraulically to () the working pressure in accordance with the KR class rules.

- 가. 1.1 times 나. 1.2 times 사. 1.25 times 아. 1.5 times

196 Batteries should always be transported in the () position to avoid spillage of electrolyte.

- 가. reverse 나. upside down 사. upright 아. declined

·해설·

■ declined : ~을 거절하다, 사절하다

197 “어느 구역의 침수율이라 함은 그 구역에 있어서 물이 차지할 수 있는 용적과 그 구역의 전용적과의 비율을 말한다.”를 영문으로 옮길 때 ()에 알맞은 것은?

() of a space means the ratio of the volume within that space which assumed to () by water to the total volume of that space.

- 가. Broken space, be occupied 나. Broken space, occupy
사. Permeability, be occupied 아. Permeability, occupy

·해설·

■ permeability : 침투성, 투과성

198 () is a machine for the conversion of heat energy into mechanical energy, and its functions must be to make the conversion as efficiently as possible.

- 가. An electric motor 나. A ref. machine 사. A pump 아. A heat engine

·해설·

■ heat engine : 열기관

199 A “Hydrometer” is used to measure ().

가. pressure 나. pH 사. specific gravity 아. temperature

·해설·

■ hydrometer : 비중계 / specific gravity : 비중

200 A period of duty of a ship's crew is ().

가. watch 나. master 사. sailor 아. first officer

201 The () is responsible for the engine department.

가. master 나. chief engineer 사. boatswain 아. watch officer

202 Adjusted () of No.2 crank pin bearing by putting in 2 sheets of 1 mm copper liner and by taking out 1 sheet of 2 mm brass liner.

가. oil temperature 나. oil pressure 사. oil clearance 아. oil leakage

·해설·

■ putting in : 끼워 넣 / taking out : 빼다

203 “Opened plugs and (blew down) all water of B.W.T.”에서 괄호 부분과 같은 뜻은?

가. charged 나. discharged 사. loaded 아. stopped

·해설·

■ B.W.T. ballast water tank

204 Opened test cocks of all cylinders for M/E and carried () air running.

가. to 나. with 사. out 아. on

·해설·

■ carry with : ~을 휴대하다 / carry out : ~을 수행하다 / carry on : 경영하다, 관리하다

205 Which is an incorrect simpler form?

가. Slow astern : S/A 나. Motor Ship : M/S
사. Fuel Oil Tank : F.O.T. 아. Finished with engine : F.W.E.

·해설·

■ simpler form : 약어

206 The crankshaft is of alloyed steel forging. To give better dynamic balancing, each () is fitted with a counter-weight.

- 가. lever 나. web 사. journal 아. crank pin

·해설·

■ alloyed steel : 합금강 / forging : 쇠를 버려서 만들다 / counter-weight : 평형추 / crank arm = crank web

207 The thermal expansion valve of refrigerator responds to the ().

- 가. amount of superheat in the vapor leaving the coil
나. amount of superheat in the liquid
사. temperature in the evaporator coils
아. pressure in the evaporator coils

·해설·

■ responds : 반응하다

208 Engaged turning gear and turned main engine for 20 minutes after F.W.E.

What does the underlined F.W.E. stand for?

- 가. Finish Within Engine 나. Finish With Engineer
사. Finished With Engineering 아. Finished With Engine

·해설·

■ engage : 작동시키다

209 Choose the most suitable one for the blank.

All crew should be careful to () cigarettes completely in their cabin.

- 가. protect 나. extinguish 사. build up 아. load

210 When received fuel oil, which of the following specifications does not need to entry on engine log book?

- 가. price of fuel oil 나. specific gravity 사. viscosity 아. flash point

·해설·

■ specific gravity : 비중 / viscosity : 점도

211 “Opened both end covers of L.O. cooler for M/E and cleaned sea water side. Plugged 2 pieces of defective tube of jacket F.W. cooler” What is explained to inspection of the auxiliary machine?

가. air conditioner

나. oily water separator

사. fresh water generator

아. heat exchanger

·해설·

■ defective : 결함이 있는

212 ‘조기수 김씨가 오늘 승선했다’를 영문기관일지에 바르게 기입한 것은?

가. Oiler, Kim joined her today.

나. Wiper, Kim joined her today.

사. Oiler, Kim landed her today.

아. Wiper, Kim onboard her today.

213 Emergency generators must be located ().

가. in any dry space

나. above bulkhead or freeboard deck

사. close to the engine room

아. near the bridge

·해설·

■ bulkhead : 격벽 / freeboard 건현

214 When the frequency of the power stroke impulses is the same as the natural rate of torsional vibrations of the crankshaft, the shaft is then said to be rotating at a ().

가. rich over

나. sea speed

사. critical speed

아. normal speed

·해설·

■ natural rate of torsional vibrations : 고유진동수 / critical speed : 위험회전수

215 The engineer officer on watch shall notify () immediately in the event of fire.

가. the fire station

나. administration

사. the bridge

아. chief engineer

·해설·

■ immediately : 즉시 / administration : 관리, 지배

216 A “salinometer” indicates ().

가. vacuum

나. pH

사. density

아. the proportion of salt

·해설·

■ salinometer : 염도계

217 The space between the piston at TDC and the cylinder head is the ().

가. clearance volume

나. combustion volume

사. stroke volume

아. total volume

218 The purpose of () rings are : to maintain a pressure tight seal between the piston and cylinder wall ; to aid in controlling oil ; to permit proper lubrication of the cylinders and to assist in cooling the piston.

- 가. oil 나. lantern 사. mouth 아. piston

·해설·

■ permit : 허락하다

219 The oil record book shall be preserved for a period of () years after the last entry has been made.

- 가. one 나. two 사. three 아. five

220 “부산에 입항하기 위해 기관을 스탠바이 하였다”를 영문 기관일지 기입법으로 맞게 표현한 것은?

- 가. S/B Eng. to arriving Busan. 나. S/B Eng. to arriving at Busan.
사. S/B Eng. for arriving Busan. 아. S/B Eng. for arriving at Busan.

221 The viscosity of diesel fuel ().

- 가. is a measure of its resistance to flow
나. has no affect on the nozzle spray pattern
사. is measured with a hydrometer
아. determines the heating valve of the fuel

·해설·

■ hydrometer : 비중계

222 Before drilling a hole in a piece of metal, it should be ().

- 가. center-punched 나. marked with chalk
사. scribed 아. protracted

·해설·

■ chalk : 분필 / protracted : ~을 연장하다

223 When something goes wrong in an automatic plant.

- 가. an alarm flash
나. a light will sounds
사. the fires will go out
아. an alarm sounds and an indicating light will flash

224 Decreased F.H.N. from 9 to 6 slowly for stormy weather.

What does the underlined F.H.N. stand for?

가. Fuel Hand Number

나. Fuel Handle Notch

사. Fuel Have Number

아. Fuel Have Notch

·해설·

■ stormy : 폭풍우의

225 On receiving the order “Finished With Engine” the main air stop valve should be (); all the air drains should be opened ; the auxiliary scavenge air blower should be ().

가. opened, run

나. opened, stopped

사. closed, run

아. closed, stopped

226 Which one of the following is not one of six basic parts of the business letters?

가. letter head

나. signature

사. salutation

아. remarks

·해설·

■ letter head : 머리말 / salutation : 인사(말)

227 The engineer of the watch is () to absent himself from the engine room, during his watch, on any account.

가. usually

나. sometimes

사. used

아. never

228 () is the vertical distance from the moulded base line amidships to the subdivision load line in question in accordance with the provision of the SOLAS Convention.

가. Freeboard

나. Breadth

사. Draft

아. Length

·해설·

■ amidships : 배의 중앙에서, 배 중앙부에 있는 / draft : 흘수

229 Leakage of the Freon gas may be detected by the use of ().

가. halide torch

나. litmus paper

사. filter

아. alkali

230 Fuel oil tanks to be () and cleaned out for internal inspection by surveyor.

가. faced up

나. freed from gas

사. polished

아. ground off

·해설·

■ cleaned out : 청소하다, 정돈하다 / polished : ~을 닦다, 윤이 나다

231 A life jacket shall have buoyancy which is not reduced by more than 5% after () hours submersion in fresh water.

- 가. 12 나. 24 사. 48 아. 72

·해설·

■ buoyancy : 부력, 부양 / submersion : 침수, 잠수

232 According to the SOLAS Convention as amended, immersion suit is a protective suit which reduces the () of a person wearing it in cold water.

- 가. body humidity 나. mental consciousness
사. brilliance of skin 아. body heat-loss

·해설·

■ immersion suit : 잠수복

233 “검사에 대비하여 선미축을 빼어 낼 것.”을 영문으로 옮길 때 ()에 알맞은 것은?

Tail shaft () for survey.

- 가. to be drew out 나. to draw out
사. to be drawn out 아. to drew out

·해설·

■ draw out : 뽑아내다, 제거하다

234 Cut off No.6 fuel () on main engine.

- 가. injection pump 나. feed pump 사. booster pump 아. transfer pump

·해설·

■ cut off : ~을 잘라내다, 차단하다

235 Generator, electric motors, lighting circuits, etc. to be ().

- 가. megger tested 나. pressure tested 사. running tested 아. on line tested

236 A distiller condenses () produced by the evaporator.

- 가. condensate 나. water 사. vapor 아. drain

·해설·

■ distiller : 증류수(기) / condense : 응축하다

237 A supercharger ().

- 가. is a type of air pump which takes air out of the atmosphere, compresses it, and feeds

- 나. provides a greater volume of air at atmospheric pressure
- 사. is only of a positive displacement type
- 아. is always driven by belt or chain

가. diesel engine 나. gas turbine engine
사. steam turbine engine 아. gasoline engine

· 해설 ·

· 해설 ·

· 해설 ·

가. S/B Eng' in leaving Busan. 나. S/B Eng' in leaving from Busan.
 사. S/B Eng' for leaving Busan. 아. S/B Eng' for leaving from Busan.

244 Inspected and cleaned () of No.1 air cooler for M/E.

가. water and oil side

나. air and oil side

사. oil and chemical side

아. water and air side

245 The packing in the gland must be kept soft and in good condition to prevent the () of air and fresh water.

가. erosion

나. settlement

사. keep

아. escape

·해설·

■ erosion : 부식 / settlement : 정착

246 In motor ships there are two circulating water systems, one sea water, the other () water.

가. salt

나. hot

사. fresh

아. ice

247 The lime in cylinder jackets, if deposited as scale, acts as () of heat.

가. transfer

나. conductor

사. transmission

아. non-conductor

·해설·

■ lime : 석회

248 The auxiliary exhaust steam is used to ().

가. heat the cargo oil

나. heat the feed water

사. drive the feed water pump

아. drive the turbo generator

249 In a diesel engine, blow-by ().

가. increases exhaust back pressure

나. increases liner and piston ring wear

사. decreases fuel consumption

아. increases engine output

250 When a/an () has been made in the log book, a black line shall be drawn through that part.

가. entry

나. misentry

사. record

아. report

251 () means the senior engineer officer responsible for the mechanical propulsion and the operation and maintenance of the mechanical and electrical installations of the ship.

가. Chief engineer

나. 1st engineer

사. 2nd engineer

아. 3rd engineer

252 다음은 무엇을 설명한 것인가?

A strong boat for saving persons after an accident at sea.

- 가. life jacket 나. life boat 사. lift ling 아. soap

253 () of the log book, the type of the engines and boilers and other particulars are to be entered.

- 가. On the last page 나. On the second page
사. On the cover 아. On the first page

254 K사로부터 1,500 톤의 중유를 수급했다.

() from K oil Co., LTD.

- 가. Received light fuel oil of 1,500 M/T 나. Received 1,500 M/T of heavy fuel oil
사. Receipt light fuel oil of 1,500 M/T 아. Receipt 1,500 M/T of heavy fuel oil

255 If the high-pressure switch on the compressor of a refrigerator opens frequently, a possible cause could be ().

- 가. a leak in the evaporator coils
나. not enough cooling water going through the condenser
사. too much cooling water going through the condenser
아. not enough refrigerant in the system

256 Heat added to a substance without causing a change of state will cause a change of temperature. This heat is called a () because its addition is perceptible on the thermometer.

- 가. latent heat 나. radiant heat 사. specific heat 아. sensible heat

·해설·

■ change of state : 상변화 / perceptible : 지각(감지)할 수 있는 / latent heat : 잠열 / radiant heat : 복사열 / specific heat : 비열 / sensible heat : 현열

257 The volume swept by the piston from bottom dead center to top dead center is called ().

- 가. compression ratio 나. power ratio
사. allowable compression ratio 아. piston displacement

258 () the camshaft speed is equal to half that of the main shaft.

가. In 4 stroke engine

나. In the modern rotary engine

사. In 2 stroke engine

아. In the steam reciprocating engine

259 Lignumvitae is a hard, dark-colour () that does not swell, and is a water-lubricated bearing surface because it is always under water.

가. wood

나. plastic

사. rubber

아. synthetic

·해설·

■ swell : 부풀다, 팽창하다 / synthetic : 인조

260 The () point is the temperature at which the oil will continue to burn when ignited.

가. dew

나. explosion

사. fire

아. ignition

·해설·

■ dew point : 이슬점

261 Stopped cargo work () to winch trouble.

가. in

나. up

사. due

아. back

262 What is the temperature at which volatiles will ignite momentarily at the surface on the passing of a small flame.

가. freezing point

나. boiling point

사. fire point

아. flash point

·해설·

■ volatile : 휘발성의, 증발하기 쉬운

263 What does STCW stand for?

가. Suffering of Training, Certification and Working

나. Standards of Training, Certification and Watch keeping

사. Standing of Training, Certification Watch keeping

아. System of Training, Certification and Working

264 “주기판의 회전수를 서서히 증가시켜 10시에 핸들 위치를 80에 설정했다.”를 영문으로 옮길 때 ()에 알맞은 것은?

Increased revolution of main engine () and () handle position to 80 at 10 : 00.

가. step in step, set

나. step by step, set

사. step by step, settled

아. step in step, settled

·해설·

■ step by step : 한걸음 한걸음, 점차로, 착실히

265 Refilled No.3 F.W.T. () fresh water.

가. to

나. for

사. with

아. by

266 In its flow path through a diesel engine, which of the following internal parts does the lubricating oil system oil usually reach first?

가. piston pin bearing

나. cam shaft bearing

사. main bearing

아. cylinder walls

267 The purpose of the evaporator in a refrigerating system is to ().

가. absorb latent heat of vaporization

나. absorb latent heat of fusion

사. transfer latent heat of vaporization

아. transfer latent heat of fusion

268 The space between the piston at TDC and the cylinder head is the ().

가. clearance volume

나. combustion volume

사. stroke volume

아. total volume

269 “육안으로 볼 수 있는 범위 내에서는 추진기의 끝 부분이 경미한 손상을 입었음을 알았습니다.”를 영문으로 옮기면 ()에 알맞은 것은?

I found the propeller tip was damaged slightly () my () could reach.

가. so far as, eye sight

나. as good as, eye sight

사. so far as, sightseeing

아. so good as, sightseeing

·해설·

■ so far as : ~하는 한, 거기까지 / as good as : ~과 같은, ~에 충실한 / eye sight : 시력 / sightseeing : 관광구경, 유람

270 Before going off duty, the officer in charge of the engineering watch shall ensure that all events related to the main and auxiliary machinery which have occurred during the engineering watch are suitably ().

가. surveyed

나. recorded

사. relieved

아. seen

271 “Any engine order given should be repeated by the person operating the bridge telegraph”에서 밑줄 친 부분의 뜻은?

가. 확인해야 한다. 나. 복창해야 한다. 사. 점검해야 한다. 아. 금지해야 한다.

272 According to the () convention, every oil tanker of 150 tons gross tonnage and above shall be provided with an oil record book.

가. MARPOL 나. IMO 사. STCW 아. SOLAS

273 Adjusted () of No.2 crank pin bearing by putting in 2 sheets of 1[mm] copper liner and by taking out 1 sheet of 2[mm] brass liner.

가. oil temperature 나. oil pressure 사. oil clearance 아. oil leakage

274 “천천히 최대로 올리시오.”를 영문으로 옮길 때 () 속에 적합한 것은?

“Turn it up to () slowly.”

가. full 나. blank 사. low 아. stop

275 A generator has been exposed to water. Which of the following instruments would be used to determine if it is safe to operate?

가. a megger 나. a voltmeter 사. a hydrometer 아. a wattmeter

276 Seafarers required to work in machinery spaces which have high noise levels should () suitable hearing protection.

가. discard 나. take off 사. wear 아. remove

·해설·

■ seafarers : 선원 / discard : ~을 버리다, 포기하다 / take off : ~을 제거하다, 없애다 / wear : 착용하다

277 The term “engineering watch” means a period of () for an officer during which the physical presence in machinery spaces of that officer may or may not be required.

가. watch 나. operation 사. responsibility 아. voyage

·해설·

■ responsibility : 책임, 의무

278 Before going off duty, the officer in charge of the engineering watch shall ensure that all events related to the main and auxiliary machinery which have occurred during the engineering watch are suitably ().

가. surveyed 나. recorded 사. relieved 아. seen

·해설·

■ in charge of : ~을 맡은 / ensure : ~을 책임지다, 보증하다

279 Who is responsible for the efficient operation of the main engine and all machinery on board?

가. master 나. chief engineer 사. chief officer 아. first engineer

280 The watch engineer is never to absent himself from the engine room () his watch.

가. in 나. on 사. during 아. at

281 () system is used to keep the ship trimmed.

가. The ballast 나. The heating 사. The mooring 아. The sewage

282 Which of the following need not to be recorded in oil record book?

가. Date 나. Sea chest in use
사. Record of operations 아. Signature of officer in charge

283 A () is a speed sensitive device used to control or limit the engine speed.

가. speed log 나. tachometer 사. load limit 아. governor

284 The charging of a storage battery at too high rate causes an excessive formation of gas bubbles which tends to wash away the active material from the () plate.

가. negative 나. positive 사. emergency 아. top

·해설·

■ bubbles : 거품 / wash away : 씻어내리다

285 The lime, if deposited as scale, acts as nonconductor of heat and () considerably the transfer of heat through the walls of the cylinder liner.

가. reduces 나. occurs 사. increases 아. allows

286 All () pipes should be adequately lagged.

가. marine diesel oil 나. fresh water 사. control air 아. steam

287 () means a member of the ship's crew other than the master or an officer.

- 가. Engineer officer 나. Radio officer 사. Navigation officer 아. Rating

288 Before the maintenance of hydraulic equipment is undertaken, all () within the system should be released.

- 가. temperature 나. seals 사. water 아. pressure

·해설·

■ maintenance : 유지 / undertake : ~을 맡다, 책임지다, 착수하다

289 Warmed up M/E () four hours.

- 가. for 나. during 사. with 아. in

290 All electric cables run through water tight bulkheads must be ().

- 가. welded on both sides of the bulkhead
나. installed with water tight packing glands
사. grounded on both sides of the bulkhead
아. fitted with unions on each side of the bulkhead

·해설·

■ bulkhead : 격벽

291 () of a space is the percentage of that space which can be occupied by water in accordance with the provision of the SOLAS '74 convention.

- 가. Permeability 나. Availability 사. Probability 아. Stability

·해설·

■ provision : 조항, 규정 / permeability : 침투성, 투과성 / availability : 유용성 / probability : 가망성, 확률 / stability : 안정성

292 Theoretically, an increase of the compression ratio of an engine raises its () and lowers its (). However, an increase of the compression ratio increases the maximum gas pressure and the combustion temperature.

- 가. mechanical efficiency, fuel consumption
나. thermal efficiency, fuel consumption
사. mechanical efficiency, brake horse power
아. thermal efficiency, brake horse power

293 A heat engine is a machine for the conversion of heat energy into (), and its function must be to make the conversion as efficiently as possible.

가. reciprocating motion

나. centrifugal force

사. mechanical energy

아. resistance

294 The () is a heat exchanger which removes the latent heat from exhaust steam so that it condenses and can be pumped back into the boiler.

가. feed water heater

나. superheater

사. condenser

아. feed water cooler

295 () means a coating, painting, surface treatment, surface, or device that is used on a ship to control or prevent attachment of unwanted organisms.

가. Anti-fouling system

나. Anti-heeling system

사. Anti-surfing system

아. Anti-vibration system

·해설·

■ organisms : 유기체, 생물 / foul : 구역질나는, 구린내 나는

296 Reduced RPM of main engine and slowed down speed according to order from bridge. What does the underlined RPM stand for?

가. Revolutions Per Minute

나. Reverutions Per Minite

사. Revolutions Per Minite

아. Reverutions Per Minute

297 () means a ship whose hull, machinery, equipment, or operational safety is substantially below the standards required by the relevant convention or whose crew is not in conformance with the safety manning document.

가. Substandard ship

나. Designated ship

사. Flag ship

아. Registered ship

298 Propeller blades to be polished and surveyed. Clearance between () and tail shaft to be measured.

가. propeller

나. rudder

사. stern tube

아. intermediate shaft

299 To avoid excessive surge pressure when bunkering, you should ().

가. shut valves before topping off

나. close valves to another tank

사. close valves slowly

아. spill bunker overboard

300 The engineer of the watch is () to absent himself from the engine room, during his watch, on any account.

가. usually

나. sometimes

사. used

아. never

301 In accordance with the SOLAS74/78 Convention as amended, the lifeboat engine shall be capable of operating when the () is flooded up to the centerline of the crankshaft.

가. lifeboat

나. mother ship

사. generating engine

아. main engine

302 According to the MARPOL 73/78 Convention as amended, the () shall be kept in such a place as to be readily available for () at all reasonable times, and except in case of unmanned ships under tow, shall be kept on board the ship.

가. DoC, inspection

나. oil record book, inspection

사. DoC, protection

아. oil record book, protection

·해설·

■ tow : 끌려가는 배 / unmanned : 사람이 없는

303 “수동시동이 유효하다는 것을 입증 할 수 없는 한, 30분 이내에 추가하여 3회의 시동을 하기 위한 제2의 에너지원을 비치하여야 한다.”를 영문으로 옮길 때 ()에 알맞은 것은?

“A second source of energy shall be provided for () within 30 minutes unless manual starting can () to be effective.”

가. an consecutive three starts, demonstrate

나. an consecutive three starts, be demonstrated

사. and additional three starts, demonstrate

아. an additional three starts, be demonstrated

·해설·

■ consecutive : 연속적인, 계속되는

304 다음 문장의 괄호 부분의 우리말 해석은?

Before reaching a home port should be ready a complete (list of new stores) required.

가. 새로운 소모품 일람표

나. 식료품 소모량 일람표

사. 새로운 유류 소비량 일람표

아. 식료품 재고량 일람표

305 All engineer officers and engine room () shall be aware of the serious effects of operational or accidental () of the marine environment.

- 가. ratings, pollution 나. mates, condition
 사. wipers, responsibility 아. oilers, circumstance

· 해설 ·

■ be aware of : 깨닫다, 감지하다, 알아차리다 / accidental : 우발적인, 뜻하지 않은

306 Prior to taking over the engineering watch, relieving officers shall satisfy themselves regarding at least the following, that is the () and special instruction of the chief engineer officer relating to the operation of the ship's system and machinery.

- 가. standing orders 나. operation 사. maintain 아. upkeep

· 해설 ·

■ take over : ~을 이어받다, 인계받다, 접수하다 / instruction : 지시, 명령 / standing orders : 복무규정 / maintain : 계속하다, 유지하다

307 “나머지는 취소할 수 밖에 없습니다.”를 영문으로 옮길 때 ()에 알맞은 것은?

"I () no alternative to cancel the () of our order."

- | | |
|------------------|--------------------|
| 가. have, surplus | 나. have, remainder |
| 사. take, surplus | 아. take, remainder |

· 해설 ·

■ alternative : 양자택일의, 선택의 / surplus : 나머지, 과잉, 필요이상의 잉여 / remainder : 나머지, 잉여, 소비한 나머지

308 A circuit that does not provide a complete path for the flow of current is ().

- 가. a closed circuit 나. a short circuit 사. an open circuit 오. a grounded circuit

309 Fill blank(s) with suitable word(s).

Procedure to be followed to prevent air and water pollution and measures to be taken in the event of spillage, including the need to promptly () shore-based response personnel.

- 가. present 나. notify 사. detect 아. hear

· 해설 ·

■ procedure : 진행, 절차 / spillage : ~을 었지르다, 흘리다 / promptly : 기민하게, 즉시 / response : 응답 / personnel : 전직원, 요원 / notify : 알리다 / detect : 발견하다, 찾아내다

310 Fill blank(s) with suitable word(s).

This paragraph is Special Survey for Machinery. All air receivers and other pressure vessels for essential services together with their mountings and safety devices are to be opened up and examined () and externally. If internal examination of them is not practicable, they are to be tested hydraulically to 1.5 times the () pressure.

가. test hammer, gage

나. eye, absolute

사. internally, working

아. hydraulically, design

·해설·

■ paragraph : 항목 / air receiver : 에어탱크 / externally : 외부

311 Fill blank(s) with suitable word(s).

Prior to taking over the engineering watch, relieving officers shall satisfy themselves regarding at least the following, that is, the nature of all work being performed on machinery and system, the personnel involved and potential ().

가. standing orders

나. hazards

사. ability

아. requirements

·해설·

■ prior to : ~에 앞서, 전에 / take over : 인계받다 / relieving officer : 교대자 / personnel : 직원들 / potential : 가능한, 잠재력이 있는 / hazard : 위험

312 Where main or auxiliary machinery including pressure vessels are subject to internal pressure and may be subject to dangerous (), means shall be provided where practicable to protect against such excessive pressure in accordance with the SOLAS 74/78 Convention.

가. overspeeding

나. overpressure

사. breakdown

아. high temperature

·해설·

■ subject to : 받아야하는, 필요하다 / convention : 협약

313 The jacket cooling water should be heated slowly, by circulating fresh water from the auxiliary generator discharge through M/E system. Where such a connection is not provided, () may be arranged to percolate into the cooling water.

가. hot gas

나. steam

사. hydraulic

아. stream

314 This inspection was not a full survey and deficiencies listed may not be exhaustive. In the event of a detention, it is () that full survey is carried out and all deficiencies are rectified before an application for reinspection is made.

가. contacted 나. helped 사. recommended 아. operated

·해설·

■ survey : 검사 / deficiencies : 부족, 결핍, 결함 / exhaustive : 철저한, 남김없는, 고갈하는 / detention : 억류, 지연, 감금 / rectify : 바로잡다, 고치다

315 Where risk from () of machinery exists, means shall be provided to ensure that the safe speed is not exceeded in accordance with the SOLAS 74/78 Convention.

가. overspeeding 나. overpressure 사. breakdown 아. high temperature

316 () means a voyage by a ship entitled to fly the flag of one State to or from a port, shipyard, or offshore terminal under the jurisdiction of another State.

가. Coastal voyage 나. Domestic voyage
사. International voyage 아. Ocean going voyage

317 If the PSCO from general impressions or observations on board has clear grounds for believing that the ship might be substandard, the PSCO should proceed to a () taking the following considerations into account.

가. initial inspection 나. periodical inspection
사. safety inspection 아. more detailed inspection

·해설·

■ PSC Port State Control : 외국선박검사 / observations : 관찰 / substandard : 표준이하의, 불충분한 / proceed : 착수하다, 계속하다

318 Electric power is the rate of doing work by electricity. It is the (①) of voltage and current. The unit of power is watt or kilowatt. Kilo is a prefix which stand for (②).

가. ① ratio, ② 1000 나. ① product, ② 100
사. ① sum, ② 100 아. ① product, ② 1000

319 This paragraph is a part of <Request to apply repair>. “Hereby I beg to apply to you that the under-detailed repairs of Engine Dep't on board the above named steamer will be completely () by noon the 22nd instant, next Friday.”

가. finished 나. received 사. rung 아. started

320 According to the SOLAS 74/78 Convention, () of the ship is the length measured between perpendiculars taken at the extremities of the deepest subdivision load line.

가. draught 나. breadth 사. length 아. freeboard

·해설·

■ perpendiculars : 수직의, 직립한 / extremities : 끝, 선단 / subdivision : 세분 / draught : 흘수(=draft) / freeboard : 건현

321 According to the SOLAS 74/78 Convention as amended, float-free launching is that method of launching a () whereby the craft is automatically released from a sinking ship and is ready for use.

가. rescue boat

나. mobile supply vessel

사. survival craft

아. davit

·해설·

■ launching : 발사, 진수

322 These are kind of the procedures before starting diesel engine ;

1. () all valve spindles well and ascertained no slightest leak of air, oil and water.
2. () at least one revolution with the turning gear, ascertained that everything was free.
3. () the fuel pump, and pumped some oil into the fuel valves.

가. Oiled, Cleaned, Renewed

나. Oiled, Turned, Primed

사. Cleaned, Turned, Primed

아. Cleaned, Turned, Renewed

·해설·

■ ascertained : ~을 확인하다, 규명하다 / slightest : (양)얼마 안되는, ~을 경시하다 / at least : 적어도

323 The mechanical efficiency of an engine is the ratio of the power actually delivered to the crank shaft called (①) to the power developed inside the cylinders called (②).

가. ① DHP, ② IHP

나. ① IHP, ② BHP

사. ① BHP, ② IHP

아. ①DHP, ②BHP

324 The life-raft and its fittings shall be so constructed as to enable it to be towed at a speed of () knots in calm water when loaded with its full complement of persons and equipment and with one of its sea-anchors streamed according to SOLAS convention.

가. 1

나. 3

사. 6

아. 10

·해설·

■ enable : ~하는 것을 가능하게하다 / tow : (배)를 밧줄로 끌다

325 What does the following mean? :

A condition found not to be in compliance with the requirements of the relevant convention.

가. clear grounds

나. detention

사. inspection

아. deficiency

·해설·

■ compliance : 응함, 따르기 / relevant : 관련된 convention : 협정, 관례 / detention : 구금, 구류 / inspection : 검사, 점검 / deficiency : 결함, 불충분

326 If there are clear grounds to believe that the ship is in violation of this Convention, a through inspection may be carried out () account guidelines developed by the Organization.

가. taken into

나. put on

사. putting on

아. taking into

·해설·

■ in violation of : ~에 위반해서 / convention : 협약

327 Heat treatment consists of heating a metal alloy to the temperature below its () and then cooling it in a particular manner. The result is some desired change in the material properties.

가. boiling point

나. pour point

사. melting point

아. ignition point

·해설·

■ heat treatment : 열처리 / alloy : 합금, 비금속 / boiling point : 비등점 / pour point : 유출점 / melting point : 용해점 / ignition point : 착화점

328 In a turbine, the steam passes through a series or succession of wheels holding (①). It passes through them one after the other. Each successive row reduces the (②) energy of the steam. The energy of the steam is (③) reduced as it passes through the successive rows.

가. ① stages, ② moving, ③ slowly

나. ① rotor ② stored ③ gradually

사. ① blades, ② kinetic, ③ progressively

아. ① disc, ② potential, ③ greatly

·해설·

■ succession : 연속적으로 / row : 줄, 열

329 We can use grease in low-speed bearings, but grease offers more (①) to the turning movement of the shaft. A lighter oil causes less (②), and so an oily lubricant is better for high-speed bearing.

가. ① viscosity, ② friction
사. ① resistance, ② friction

나. ① power, ② output
아. ① viscosity, ② resistance

330 Choose the most suitable one for the blanks.

() is the control of temperature and humidity in a space together with the circulation, filtering and refreshing of the air. () is the circulation and refreshing of the air in a space without necessarily a change of temperature.

- 가. Ventilation, Air conditioning 나. Refrigeration, Ventilation
사. Air conditioning, Ventilation 아. Ventilation, Refrigeration

331 The ratio between the air-fuel mixture that enters the cylinders and the volume of the same mixture that could enter under standard conditions of temperature and pressure is called the ().

- 가. volumetric efficiency 나. volume ratio
사. volume rating 아. volumetric ratio

332 This paragraph is a part of "Articles Order". Please fill out the blank with suitable words.
I have the pleasure of forwarding you an order of the undermentioned goods and shall be so much obliged if you send them on board M/V ZZZ immediately. You will be paid by our agents, Messrs. Busan & Co., in exchange for () of goods.

- 가. order 나. receipt 사. contain 아. quantity

·해설·

■ paragraph : 단락 / Articles Order : 물품주문, 상품주문 / undermentioned : 하기의, 다음에 말하는 / oblige : ~에게 강요하다, 억지로 시키다 / agent : 대리점 / in exchange for : ~과 교환으로, ~의 대신으로

333 The safety officer should () the master on all matter of safe working practice and assist him in the elimination of () and injuries on board ship.

- 가. order, accidents 나. advise, theft 사. advise, accidents 아. order, theft

·해설·

■ elimination : 제거, 삭제, 배제

334 The contractor shall obtain the () dry docking plan for the vessel's master and/or the owner's representative and () the vessel on the keel and bilge block as to avoid the vessel's landing on previous block locations in so far as possible. Docking or undocking outside normal hours shall be for contractor's convenience and any additional charges shall be for contractor's account.

- 가. previous, position 나. relevant, hold
사. important, inspect 아. good, survey

·해설·

■ contractor : 계약자, 청부인 / representative : 대리인 / keel : 용골 / as to : ~에 관하여 / in so far as : ~하는 한 / convenience : 편리 / account : 보고(서) / previous : 앞의, 이전의 / relevant : 관련된, 관련 있는

335 The reason I pointed out the above deficiency were resulted from the aforementioned principle and also my professional judgements () the SOLAS & TOKYO MOU.

가. of 나. according to 사. on 아. due to

·해설·

■ pointed out : ~을 지적하다 / deficiency : 부족, 결핍 / aforementioned 전술한, 전기한 / according to ~에 따라, ~에 의하면

336 () means an inspection conducted when there are clear grounds for believing that the condition of the ship, its equipment, or its crew does not correspond substantially with particulars of the certificates.

가. Concentrate inspection 나. More detailed inspection
사. Random Inspection 아. Periodical inspection

·해설·

■ conducted : ~을 실시한다, 안내하다 / equipment : 설비 / substantially : 충분히, 대체적으로 / certificates : 증명서 / periodical : 주기

337 Fill blank(s) with suitable word(s).

When megger-testing a new armature coil to ground, the reading under normal conditions should be at least () [$M\Omega$].

가. 1 나. 10 사. 100 아. 1000

338 () provides a reservoir of relatively cool water giving the gravitational head necessary to displace the high temperature mixture of steam and water, with its much smaller density, from the heated tube surfaces.

가. Water drum 나. Scotch boiler 사. Steam drum 아. Evaporating tube

·해설·

■ relatively : 상대적으로, 비교적 / gravitational : 중력의 / density : 밀도

339 () to be removed ashore, tips of two blades to be faired where distorted, and ground smooth. After proper fit of shaft taper in hub is witnessed, () to be replaced in position ready for installation.

가. Propeller 나. Intermediate shaft 사. Side-thruster 아. Stern tube

·해설·

■ faired : ~반반하게 다듬다 / distorted : 일그러지게 하다, 뒤틀다 / witnessed : 입증하다, 보이다, 입회하다

340 Immersion suit can be unpacked and donned without assistance within (), taking into account any associated clothing and a life jacket if the immersion suit is to be worn in conjunction with a life jacket according to SOLAS Convention.

- 가. 30[sec] 나. 2[min] 사. 5[min] 아. 10[min]

·해설·

■ immersion : 침투, 침수 / unpacked : ~의 내용물을 빼내다, 열다 / assistance : 보조 / taking into : ~을 고려하다 / associated : 교제하다, 연합 / conjunction : 결합, 연합, 합동

341 In accordance with the SOLAS Convention, the () shall be capable of putting the rudder over from 35° on one side to 35° on the other side with ship at its deepest sea going draft and running ahead at maximum ahead service speed.

- 가. main and auxiliary steering gears 나. main steering gear
사. auxiliary steering gear 아. gyro system

342 The hand flare shall continue to burn after having been immersed for a period of 10 sec. under () mm of water according to SOLAS Convention.

- 가. 100 나. 500 사. 1000 아. 5000

·해설·

■ flare : (불꽃이)타오르다, 확 타오르다 / immersed : 담그다

343 Choose the most suitable one for the blanks.

This paragraph is a part of "Request to offer Instruction Book." Please send Bulletin containing further information regarding the De Laval Oil Purifier, as () below : # Purification of Diesel Lubricating Oil Name; AAA, Company; BBB, Address; CCC.

- 가. checked 나. made
사. recommended 아. operated

·해설·

■ bulletin : 게시, 고시, 공보, 편람 / purification : 정화, 청정

344 The () battery is made up of a series of cells. One cell consists of a lead peroxide positive plate and a lead negative plate both immersed in a dilute sulfuric acid solution. The sulfuric acid is known as the electrolyte.

- 가. alkaline 나. dry 사. lead 아. Ni-Cd

·해설·

■ peroxide : 과산화물 / immersed : 담그다 / dilute sulfuric acid solution : 황산수용액(희석액)

345 Choose the most suitable one for the blanks.

All waste removed from the ship as a result of this contract shall be disposed by () according to the requirements of local and national laws of the country to which the contract is awarded.

가. captain

나. chief engineer

사. contractor

아. owner's representative

·해설·

■ waste : 쓰레기 / contract : 협정, 협약 / disposed : 처리하다 / award : (상을)주다, ~을 개정하다

346 Choose the most suitable one for the blanks.

() means a vessel capable of engaging in drilling operations for the exploration for or exploitation of resources beneath the sea-bed such as liquid or gaseous hydrocarbons, sulphur or salt.

가. Mobile offshore drilling unit

나. Bulk carrier

사. Oil tanker

아. Chemical tanker

·해설·

■ drilling operations : 시추 / exploration : 실지답사, 탐구 / exploitation : 개발 / sea-bed : 해저

347 Choose the most suitable one for the blanks.

() means a document issued to a Company which complies with the requirements of ISM Code.

가. Safety Management Certificate

나. Document of Compliance

사. Safety Management System

아. ISPS Certificate

·해설·

■ complies : 따르다, 동의하다 / Compliance : 수락, 승낙

348 중요한 보조 기계 1개가 작동불능이 된 경우에도 추진 기관의 정상운전을 유지 또는 회복시킬 수 있는 수단을 강구하여야 한다. 를 영문으로 옮길 때 ()에 알맞은 것은?

() shall be provided whereby normal operation of propulsion machinery can be sustained or restored even though one of the essential auxiliaries becomes ().

가. Methods, inoperative

나. Means, inoperative

사. Methods, operative

아. Means, operative

·해설·

■ even though : 비록 ~일지라도 / Means : 수단

349 Choose the most suitable one for the blanks.

() means the gross tonnage calculated in accordance with the tonnage measurement regulation contained in Annex1 to the International Convention on the Tonnage Measurement of Ships, 1969, or any successor Convention.

가. Net tonnage

나. Gross tonnage

사. Displacement tonnage

아. Dead Weight tonnage

·해설·

■ in accordance with : ~에 따라서, ~과 일치하여 / Annex1 : 부록1

350 Choose the most suitable one for the blanks.

The () is a forum in which Member States can express their views reflecting state or international shipping practice.

가. ILO

나. WHO

사. IMO

아. IOC

·해설·

■ reflecting : 반사하다, 반영하다

351 The ratio between the air-fuel mixture that enters the cylinders and the volume of the same mixture that could enter under standard conditions of temperature and pressure is called the ().

가. volumetric efficiency

나. volume ratio

사. volume rating

아. volumetric ratio

352 () are used to ensure that ships do not discharge oil when pumping out bilges, oil tanks or any oil contaminated space.

International legislation relating to oil pollution is becoming more and more stringent in the limits set for oil discharge.

가. Oil spill removalent

나. Waste oil incinerator

사. Oily water separator

아. Oil pollution simulator

·해설·

■ legislation : 법률제정, 입법, 법규 / stringent : 엄한, 엄격한

■ in accordance with : ~에 따라서 / discharge : 배출

358 Claw couplings or clutch couplings are used for () or () shafts when the change is to be made often.

가. connecting - disconnecting

나. driving - undriving

사. sliding - intersecting

아. connecting - rotating

·해설·

■ claw : 서로 맞물리는 커플링

359 During the period of maneuvering engine, careful attention must continue to be given to the jacket water temperatures, the sea water supply to the fresh water cooler being severely throttled or, completely () for ensuring a satisfactory temperature level.

가. opened

나. increased

사. shut-off

아. repaired

·해설·

■ maneuvering : 수동 / severely : 엄격하게, 심하게 / ensuring : 안전하게하다, 책임지다, 지키다

360 The “officer in charge of the engineering watch” is the chief engineer officer's representative and is responsible for inspection, () and testing, as required, of all machinery and equipment under the responsibility of the engineering watch.

가. maintain

나. operation

사. survey

아. upkeep

·해설·

■ representative : 대리인 / responsible : 책임이 있는 / responsibility : 책임

361 According to the Annex IV of the MARPOL 73/78 Convention as amended, () means drainage and other wastes from any form of toilets, urinals, and WC scuppers.

가. garbage

나. sewage

사. noxious liquid

아. sludge

362 In accordance with the SOLAS 74/78 Convention as amended, remote control of the propulsion machinery shall be possible only from () at a time.

가. one location

나. two locations

사. the engine control room

아. the navigation bridge and engine control room

·해설·

■ in accordance with : ~에 의하면, 따라서 / propulsion machinery : 추진장치 / at a time : 한번에, 동시에

363 Two or more prime movers (diesels) are electrically interconnected and driving a common shaft and load. What is this called?

- 가. Double acting 나. Twin engine 사. Parallel 아. Speed droop

364 The () slip is the ratio of the difference between the speed of the propeller and the speed of the ship over the ground in still water to the speed of the propeller.

- 가. true 나. effective 사. apparent 아. propeller

·해설·

■ apparent slip : 겉보기 슬립

365 When the ship is at sea, the principal particulars to be entered in the log book are as follows :
The () of arrival and departure of the ship, the () and details of the starting and stopping of the engines, and the () and reason for reducing the speed.

- 가. time 나. place 사. condition 아. reason

366 () Code means the International Management Code for the Safe Operation of Ships and for Pollution Prevention adopted by the IMO.

- 가. ISPS 나. STCW 사. LSA 아. ISM

·해설·

■ adopted : 채택된

367 () is the machinery, rudder actuators, steering gear power units, if any, and ancillary equipment and the means of applying torque to the rudder stock necessary for effecting movement of the rudder for the purpose of steering the ship under normal service conditions.

- 가. Main steering gear 나. Steering gear control system
사. Steering gear indicating system 아. Rudder keeping system

·해설·

■ ancillary : 보조적인, 부속적인, 부수적인

368 () are those spaces in which the ship's radio or main navigating equipment or the emergency source of power is located or where the fire recording of fire control equipment is centralized in accordance with the provision of the SOLAS convention.

- 가. Control rooms 나. Bridges 사. Machinery spaces 아. Control stations

·해설·

■ centralize : ~을 집중하다, 중앙화하다 / provision : 조항, 규정

369 When CO₂ is used as the extinguishing medium for spaces containing boilers or internal combustion type machinery the fixed piping system shall be such that () of the gas can be discharged into the space within () according to SOLAS.

- 가. 85% - 3min. 나. 85% - 2min. 사. 90% - 3min. 아. 90% - 2min.

370 The PSCO may ensure that () are exhibited in conspicuous places throughout the ship, including the navigational bridge, the engine room and crew accommodation spaces.

- 가. crew lists 나. muster lists 사. spare lists 아. provision lists

·해설·

■ exhibited : 전시하다 / conspicuous : 잘보이는, 눈에 잘 띄는 / muster : 명부

371 “외부로부터 아무런 도움 없이 데드쉽 상태에서 기관을 작동시킬 수 있는 수단을 강구하여야 한다.”를 영문으로 옮길 때 ()속에 적합한 것은?

Means shall be provided to ensure that the machinery can () from the dead ship condition without ().

- 가. bring into operation, internal aid. 나. be brought into operation, internal aid
사. bring into operation, external aid 아. be brought into operation, external aid

372 Main and emergency switchboards, section panels, and sub-distribution fuse panels are to be examined, and () protective devices and fuses to be inspected to verify that they provide suitable protection for their respective circuits.

- 가. relay 나. switchboard 사. overcurrent 아. circuit

·해설·

■ sub-distribution : 분전반 / verify : ~을 검정하다, 입증하다, 확인하다

373 The temperature to which the fuel must be heated to allow flammable vapors to form on its surface. These vapors can be ignited by an open flame held above the surface. The importance of () is in storage safety, not performance in an engine.

- 가. pour point 나. flash point 사. ignition point 아. combustion point

·해설·

■ performance : 성능 / pour point : 유동점 / flash point : 인화점 / ignition point : 착화점

374 () may be attached at the “free” end of the engine, if necessary, so as to avoid inadmissibly heavy vibrations of the crankshaft when passing through the critical speed ranges.

- 가. A flywheel 나. A thrust bearing 사. A tachometer 아. A vibration damper

· 해설 ·

■ inadmissibly : 허용할 수 없는

375 A tanker of ten years of age and over shall undergo a minimum of () survey during the period of validity of its cargo ship safety construction certificate in accordance with the relevant provisions of the SOLAS '74 convention.

가. one annual 나. one intermediate 사. one unscheduled 아. one special

· 해설 ·

■ intermediate : 임시

376 All of the load developed in the cylinder passes through (). It is the only link between the piston and connecting rod. In larger engines the piston pins are sometimes locked in the piston at both ends.

가. the piston pin 나. the piston crown 사. the crosshead 아. the crankshaft

377 “A급 구획은 1시간의 표준화재 시험이 종료할 때까지 연기 및 화염의 통과를 방지 할 수 있도록 제조되어야 한다.”를 영문으로 옮길 때 () 속에 적합한 것은?

The class A () shall be so constructed as to be capable of () the passage of smoke and flame to the end of the one-hour standard fire test.

가. bulkhead, prevention

나. bulkhead, preventing

사. division, prevention

아. division, preventing

· 해설 ·

■ bulkhead : 격벽

378 It is essential (①) the inlet and exhaust valves to open and close exactly at the appropriate moment in relation to the position of the (②). Therefore they are actuated by a camshaft running in phase with the (③).

가. ① to, ② valve, ③ crankshaft

나. ① in, ② piston, ③ engine

사. ① for, ② piston, ③ crankshaft

아. ① with, ② valve, ③ piston

379 The purpose of () is to scrape off most of the lubricating oil splashed upward by the crank shaft and connecting rod in order to reduce the amount of oil carried upward and burnt in the combustion chamber.

가. top ring

나. compression rings

사. oil rings

아. “O” ring

· 해설 ·

■ splash : ~을 튀기다

380 “본인은 거룻배 및 예인선의 소유자가 본건 피해의 책임을 져야 한다고 믿고 있습니다.”

“I () the owners of the lighter and tug boat () the damage sustained.”

가. exempt, responsible for

나. exempt, responsible of

사. hold, responsible for

아. hold, responsible of

381 “다음 품목의 주문서를 보내오니 3월5일 까지 본선으로 납품하여 주시면 고맙겠습니다.”를 영문으로 옮길 때 ()에 알맞은 것은?

“We () sending you an order of the undermentioned goods, and shall be () you send them on board by March 5th.”

가. are pleased to, glad if

나. are pleased, glad that

사. have the pleasure of, glad if

아. have the pleasure of, glad that

382 Which of the following is correct in docking order?

- ① Arrived at the dry dock entrance and proceeded to haul into the dock.
- ② Commenced to let water into the dry dock and vessel floated.
- ③ A dockmaster came on board and the ship was towed by two tugs toward the dock.
- ④ Commenced to pump out water of the dock.

가. ①-②-③-④

나. ①-③-④-②

사. ①-④-②-③

정답 ②

383 Officers in charge of an engineering watch, as defined in the STCW Code and under the direction of the chief engineer officer, when required, shall be physically () in the machinery space during their periods of responsibility.

가. present

나. watch

사. stand

아. keep

384 Free-fall () is the rate of change of velocity experienced by the occupants during launching of a free-fall lifeboat.

가. height

나. weight

사. acceleration

아. velocity

· 해설 ·

■ free-fall : 자유낙하 / occupants : 거주자 / launching : (보트를)물에 띄우다, 진수시키다 / acceleration : 가속

385 Length of the ship is the length measured between () taken at the extremities of the deepest subdivision load line in accordance with the provision of the SOLAS'74 convention.

- 가. perpendiculars 나. frames 사. draughts 아. freeboard

·해설·

■ extremities : 끝, 선단 / subdivision : 세분 / load line = water line / perpendiculars : 수직의

386 “비상전원은 최상층 전통갑판위 및 충돌격벽의 후방에 위치하여야 한다.”를 영문으로 옮길 때 ()에 알맞은 것은?

“The emergency source of electrical power shall be located above () and backward of ().”

- 가. the uppermost continuous deck, the collision bulkhead
나. the uppermost open deck, the collision bulkhead
사. the uppermost continuous deck, the watertight bulkhead
아. the uppermost open deck, the watertight bulkhead

387 If carbon dioxide has been discharged to extinguish or prevent a fire, the () content will be reduced in the affected space.

- 가. hydrocarbon 나. hydrogen 사. carbon dioxide 아. oxygen

388 Power factor, by definition, is the () of the active power to the apparent power.

- 가. product 나. minus 사. ratio 아. sum

·해설·

■ definition : 정의 / apparent : 눈에 보이는, 분명한 / apparent power : 겉보기 힘

389 According to the MARPOL 73/78 Convention as amended, () of discharge of oil content means the rate of discharge of oil in litres per hour at any instant divided by the speed of the ship in knots at the same instant.

- 가. instantaneous quantity 나. instantaneous rate
사. persistant quantity 아. persistant rate

·해설·

■ instantaneous rate of discharge : 순간배출율

390 Adjusted () of fuel oil valve to 300 [kg/cm²].

- 가. injection pressure 나. atomization 사. viscosity 아. penetration

391 Wiper, Kim () duty, being sick.

- 가. on 나. off 사. out 아. in

392 Every oil tanker of 150 tons gross tonnage and above and every ship of () tons gross tonnage and above other than an oil tanker shall be provided with an oil record book as part of the ship's official logbook according to MARPOL 73/78 Convention.

- 가. 200 나. 300 사. 400 아. 500

393 “해상인명안전협약의 제 II-1장 26규칙에 의거 선박용 기관은 선내 승조원에 대한 위험을 최소한으로 할 수 있도록 설치 되어야 한다.”를 영문으로 옮길 때 ()에 알맞은 것은?

“The machinery on board () be so installed as to reduce to a minimum any danger to persons on board () the regulation 26 of chapter II-1 in the SOLAS Convention.”

- 가. shall, in accordance to 나. shall, in accordance with
사. will, in accordance with 아. will, in accordance to

·해설·

■ in accordance with : ~에 따라서, ~와 일치하여

394 () are used to ensure that ships do not discharge oil when pumping out bilges, oil tanks or any oil contaminated space. International legislation relating to oil pollution is becoming more and more stringent in the limits set for oil discharge.

- 가. Oil spill removalment 나. Waste oil incinerator
사. Bilge separator 아. Oil pollution simulator

·해설·

■ ensure : ~을 책임지다, 보증하다

395 This fresh water generator is a vacuum evaporation distiller, normally using () from the fresh cooling water of a diesel engine as ().

- 가. the waste heat, heating medium 나. the waste heat, cooling medium
사. the latent heat, heating medium 아. the latent heat, cooling medium

396 The Chief Engineer is responsible for the ship's engines. He is () charge of the Engine Department.

- 가. at 나. to 사. off 아. in

■ in charge of : ~을 맡은

- [illegible]

- 398 Reduce the engine load to () of normal. Then, by means of the thermostatic valve in the steam system, or by manual control of the viscosity regulator, the diesel oil is heated to maximum 60~80°C, Regulate the preheating so as to give a temperature rise of about ()°C per minute.
- 가. 1/2, 2 나. 2/3, 5 사. 3/4, 2 아. full, 5

■ so as to ~ : ~하도록

- 399 () is the difference in tonnes between the displacement of a ship in water of a specific gravity of 1.025 at the load waterline corresponding to the assigned summer freeboard and the lightweight of the ship.
- 가. Deadweight 나. Gross tonnage
사. Net tonnage 아. Displacement weight

■ deadweight : 중량 / gross tonnage : 총톤수 / net tonnage : 순톤수

- 400 Use gloves when removing O-rings and other rubber/plastic-based sealing materials which have been subjected to abnormally high temperatures. These materials may have a () effect when being touched directly. The gloves should be made of neoprene or PVC.
- 가. caustic 나. electric 사. clogging 아. side

- 401 “우선 입거기간은 14일 내지 15일 동안으로 예약 하겠습니까.”를 영문으로 옮길 때 ()에 알맞은 것은?

“The dry dock should () initially () 14 to 15 days.”

- | | |
|---------------------------------|----------------------------|
| 가. be booked, for the period of | 나. book, for the period of |
| 사. be booked, by the period of | 아. book, by the period of |

402 With stopped engine, blow-by can be located by inspecting the condition of the piston rings, through the (). Piston and cylinder become black in the area of blow-by.

가. fuel valve hole

나. cylinder lubricator hole

사. scavenge air ports

아. test cock

403 The most important part of the frame of any ship is the bottom centerline, known as the ().

가. rake

나. superstructure

사. hull

아. keel

·해설·

■ rake : 경사 / hull : 선체 / keel : 용골

404 () is inserted in the liquid line between receiver and evaporator for removing moisture in the refrigerant.

가. Dehydrator

나. Trap

사. Condenser

아. Strainer

·해설·

■ Dehydrator : 건조기, 건조제

405 In accordance with the SOLAS 74/78 Convention as amended, () means a plan developed to ensure the application of measures on board the ship designed to protect persons on board, cargo, cargo transport units, ship's stores or the ship from the risks of a security incident.

가. garbage management plan

나. port facility security plan

사. shipboard oil pollution emergency plan

아. ship security plan

406 In accordance with the 1978 STCW 78 Convention as amended, all persons who are assigned duty as officer in charge of a watch or as a rating forming part of a watch shall be provided a minimum of () hours of rest in any () hour period.

가. 10, 24

나. 8, 24

사. 10, 12

아. 8, 12

407 () are those used for public spaces, corridors, cabins, offices, pantries and lockers and similar spaces.

가. Control spaces

나. Accommodation spaces

사. Public spaces

아. Service spaces

·해설·

■ corridors : 복도

408 The () is found in a natural state beneath the earth's surface. It was formed over long periods of time by decayed organic matter, subjected to the high temperatures and pressures found within the earth's crust.

- 가. diesel oil 나. crude oil 사. gasoline 아. kerosene

409 In accordance with the SOLAS 74/78 Convention as amended, () power units shall be arranged to restart automatically when power is restored after a power failure.

- 가. main and auxiliary steering gear 나. main steering gear
사. auxiliary steering gear 아. emergency

410 According to the MARPOL 73/78 Convention as amended, product carrier means an oil tanker engaged in the trade of carrying oil () crude oil.

- 가. including 나. such as
사. for instance 아. other than

·해설·

■ product carrier : 석유제품 / such as : ~과 같은 / for instance : 예를 들어 이럴테면 / other than ~ : ~이외의, ~을 제외한

411 According to the SOLAS 74/78 Convention as amended, non-combustible material is a material which neither burns nor () flammable vapours in sufficient quantity for self-ignition when heated to approximately 750°C.

- 가. gives off 나. gives over 사. puts over 아. puts off

·해설·

■ gives off : 방출하다, 발하다 / gives over : 그만두다 / puts over : 호평을 받게 하다 / puts off : 제거하다, 옷을 벗다

412 “Faced up spare air starting valves for M/E.” 밑줄친 부분과 같은 뜻을 가진 것은?

- 가. Checked 나. Found 사. Lapped 아. Welded

413 Adjusted injection () to 300[kg/cm²].

- 가. temperature 나. liquid 사. pressure 아. level

414 “Adjusted regulating handle of fuel oil to 130(rpm).”의 문장에서 괄호의 “rpm” 약자는?

- 가. revolutions per minute 나. revolutions part minute
사. revolutions per month 아. rotor per month

423 “Stopped cargo work owing to () trouble.”에서 ()속에 적합한 것은?

- 가. crane 나. windlass 사. anchor 아. telegraph

424 The refrigerant passes through the (①) in which the pressure falls at constant enthalpy. As the pressure falls some of the liquid flashes off, taking its (②) from the surrounding liquid, so causing a fall in temperature.

- 가. ① evaporating tube, ② liquid heat of evaporation
나. ① solenoid valve, ② entropy of refrigerant
사. ① condenser, ② sensible heat of refrigerant
아. ① throttling valve, ② enthalpy of evaporation

425 A pipe with a number of inlets or outlets from the several cylinders of an engine is ().

- 가. machinery 나. plant 사. manifold 아. unit

426 The branch of mechanics which treats of the stress and deformation of elastic materials is ().

- 가. thermodynamics 나. hydrodynamics 사. solid mechanics 아. fluid mechanics

427 The defining feature of a/an () is that useful work is performed by the expanding hot gases acting directly to cause movement.

- 가. external combustion engine 나. marine boiler
사. steam turbine engine 아. internal combustion engine

428 During shop trial and sea trial, we recommend using a cylinder oil with a high detergency level. Use a “total base number” (TBN) of 70 as a 70 TBN oil will normally give good results. Use higher TBN oils in the event of high () content in the fuel oil.

- 가. ash 나. salt 사. sulphur 아. water

·해설·

■detergency : 세정력, 정화 / total base number(TBN) : 총알칼리가

429 Before engaging the turning gear, check that the () supply is shut off, and that the () are open.

- 가. lubricating oil, exhaust valves 나. cooling fresh water, fuel valves
사. starting air, indicator cocks 아. fuel oil, intake valves

430 Between the extremes of conductors and insulators are a group of elements known as ().

- 가. semiconductors 나. metals 사. plastics 아. electricity

·해설·

■ semiconductors : 반도체

431 The detector will give alarm and slow-down at a mist () which is only a fraction of the lower explosion limit, LEL, to gain time to stop the engine before ignition of the oil mist can take place.

- 가. combustion 나. concentration 사. evaporation 아. condensation

432 If an empty tank has been left sealed for a long time, the oxygen content of the air in the tank ().

- 가. will be increased 나. will be reduced
사. can not be changed 아. may be increased or reduced

433 There are two types of () in general use; the displacement or reciprocation type, and the centrifugal type.

- 가. pumps 나. motors 사. engine 아. valves

434 Adjusted regulating handle of () to average RPM 150.

- 가. F.O. 나. L.O. 사. F.W. 아. S.W.

435 “선박과 선박의 설비”를 영문으로 표기할 때 ()에 알맞은 것은?

“Ship and () is fittings.”

- 가. my 나. his 사. her 아. she

436 The () is the interval between injector opening and the start of ignition. During this period and the first droplets to enter the cylinder are heated by the surrounding charge of compressed air, begin to vaporize, and finally ignite.

- 가. rapid combustion period 나. steady burning period
사. after burning period 아. ignition delay period

437 If there are () grounds to believe that the ship is in violation of this Convention, a through inspection may be carried out taking into account guidelines developed by the Organization.

가. clear 나. back 사. safe 아. doubtful

438 Every lifebuoy shall have an outer diameter of not more than () mm and an inner diameter of not less than () mm.

가. 600, 200 나. 800, 400 사. 200, 600 아. 400, 800

439 “주기의 연료 펌프를 개방 점검할 것”을 영문으로 옮길 때 ()에 알맞은 것은?

“Fuel pumps of main engine ().”

가. overhauled 나. to overhauled 사. to be overhauled 아. being overhauled

440 Depending upon the viscosity/temperature relationship and the viscosity index of the fuel oil, an outlet temperature of up to 150°C will be necessary. This is illustrated in the diagram which indicates the expected preheating temperature as a function of the fuel oil viscosity. Recommended viscosity meter setting is () cSt.

가. 0 – 5 나. 10 – 15 사. 20 – 30 아. 40 – 50

441 Mr. Han, 2nd engineer was sent to hospital () of appendicitis.

가. due 나. as 사. because 아. owing

442 If the alarm on the fixed CO₂ system sounds in the E/R, you should ().

가. leave the space immediately 나. start the fire pump
사. make sure CO₂ starts flowing 아. close watertight door

443 () means an observed situation where objective evidence indicates the non-fulfilment of a specified requirement.

가. Observation 나. Objective evidence
사. Non-conformity 아. Administration

444 “2등 기관사가 연료유 계량에 종사했다.”를 영문으로 옮길 때 () 속에 적합한 말은?

“2nd engineer engaged in () F.O.”

가. receiving 나. repairing 사. tallying 아. renewing

445 The crankshaft is of alloyed steel forging. To give better dynamic balancing, each () is fitted with a counter-weight.

- 가. lever 나. web 사. journal 아. crank pin

446 Combustion knock in a diesel engine ().

- 가. is not related to ignition delay
나. is not harmful to the engine
사. will take place at the process of uncontrolled combustion period
아. is caused by turbulence and too many lighter molecules in the fuel

447 Every automated system should have a () manually controlled.

- 가. demand display 나. feed back
사. back-up system 아. monitoring system

448 “중요한 보조기계 1개가 작동불능이 된 경우에도 추진기관의 정상운전을 유지 또는 회복시킬 수 있는 수단을 강구하여야 한다.”를 영문으로 옮길 때 ()에 알맞은 것은?

“() shall be provided whereby normal operation of propulsion machinery can be sustained or restored even though one of the essential auxiliaries becomes ().”

- 가. Methods, inoperative 나. Means, inoperative
사. Methods, operative 아. Means, operative

449 “정지! 기름이 조금 새고 있습니다.”를 영문으로 옮길 때 () 속에 적합한 말은?

“Stop! Oil is () a little.”

- 가. resisting 나. entering 사. spilling 아. charging

450 “불연성 재료라 함은 섭씨 750℃ 정도로 가열한 때에 연소하지 않으며, 자연 발화에 충분한 양의 인화성 증기를 발생하지 않는 재료를 말한다.”를 영문으로 옮길 때 ()에 알맞은 것은?

“Non-combustible material is a material which neither burns nor () flammable vapours in sufficient quantity for () when heated to approximately 750℃.”

- 가. gives out, self-ignition 나. gives off, self-ignition
사. gives out, spark-ignition 아. gives off, spark-ignition

1	가	52	가	103	사	154	가	205	가	256	아	307	나	358	가	409	가
2	가	53	가	104	나	155	사	206	나	257	아	308	사	359	사	410	아
3	가	54	사	105	아	156	나	207	가	258	가	309	나	360	나	411	가
4	나	55	가	106	가	157	사	208	아	259	가	310	사	361	나	412	사
5	나	56	사	107	나	158	사	209	나	260	사	311	나	362	가	413	사
6	나	57	사	108	나	159	사	210	가	261	사	312	나	363	사	414	가
7	가	58	가	109	나	160	가	211	아	262	아	313	나	364	사	415	사
8	아	59	아	110	아	161	사	212	가	263	나	314	사	365	가	416	나
9	가	60	나	111	나	162	나	213	나	264	나	315	가	366	아	417	나
10	나	61	사	112	나	163	가	214	사	265	사	316	사	367	가	418	아
11	가	62	사	113	가	164	나	215	사	266	사	317	아	368	아	419	사
12	가	63	가	114	나	165	사	216	아	267	가	318	아	369	나	420	나
13	가	64	가	115	가	166	나	217	가	268	가	319	가	370	나	421	사
14	가	65	아	116	가	167	사	218	아	269	가	320	사	371	아	422	아
15	나	66	사	117	사	168	가	219	사	270	나	321	사	372	사	423	가
16	나	67	아	118	사	169	사	220	아	271	나	322	나	373	나	424	아
17	나	68	나	119	나	170	가	221	가	272	가	323	사	374	아	425	사
18	사	69	가	120	나	171	사	222	가	273	사	324	나	375	나	426	사
19	사	70	사	121	사	172	가	223	아	274	가	325	아	376	가	427	아
20	사	71	가	122	가	173	나	224	나	275	가	326	아	377	아	428	사
21	아	72	아	123	가	174	나	225	아	276	사	327	사	378	사	429	사
22	아	73	가	124	사	175	나	226	아	277	사	328	사	379	사	430	가
23	아	74	가	125	나	176	나	227	아	278	나	329	사	380	사	431	나
24	가	75	사	126	나	177	아	228	사	279	나	330	사	381	사	432	나
25	사	76	사	127	나	178	가	229	가	280	사	331	가	382	나	433	가
26	사	77	사	128	나	179	가	230	나	281	가	332	나	383	가	434	가
27	사	78	사	129	아	180	가	231	나	282	나	333	사	384	사	435	사
28	나	79	가	130	나	181	가	232	아	283	아	334	가	385	가	436	아
29	사	80	나	131	사	182	사	233	사	284	나	335	나	386	가	437	가
30	아	81	가	132	가	183	사	234	가	285	가	336	나	387	아	438	나
31	나	82	아	133	아	184	나	235	가	286	아	337	가	388	사	439	사
32	사	83	나	134	나	185	가	236	사	287	아	338	사	389	나	440	나
33	아	84	나	135	가	186	아	237	가	288	아	339	가	390	가	441	사
34	아	85	가	136	나	187	가	238	사	289	가	340	나	391	나	442	가
35	나	86	가	137	가	188	사	239	아	290	나	341	나	392	사	443	사
36	나	87	아	138	나	189	사	240	가	291	가	342	가	393	나	444	사
37	사	88	가	139	나	190	사	241	사	292	나	343	가	394	사	445	나
38	가	89	사	140	가	191	나	242	가	293	사	344	사	395	가	446	사
39	아	90	아	141	사	192	나	243	사	294	사	345	가	396	아	447	사
40	아	91	사	142	가	193	가	244	아	295	가	346	가	397	가	448	나
41	나	92	나	143	사	194	나	245	아	296	가	347	나	398	사	449	사
42	가	93	나	144	아	195	아	246	사	297	가	348	나	399	가	450	나
43	사	94	아	145	나	196	사	247	아	298	사	349	나	400	가	451	아
44	아	95	나	146	나	197	사	248	나	299	사	350	사	401	가	452	아
45	나	96	가	147	나	198	아	249	나	300	아	351	가	402	사	453	가
46	나	97	아	148	나	199	사	250	나	301	가	352	사	403	아	454	사
47	나	98	사	149	가	200	가	251	가	302	나	353	사	404	가	455	나
48	나	99	아	150	사	201	나	252	나	303	아	354	가	405	아	456	나
49	아	100	나	151	나	202	사	253	아	304	가	355	나	406	가	457	사
50	사	101	아	152	사	203	나	254	나	305	가	356	사	407	나		
51	사	102	사	153	나	204	사	255	나	306	가	357	사	408	나		