

MARINE SAFETY

SÉCURITÉ MARITIME

WATCHKEEPING ENGINEER, MOTOR-DRIVEN FISHING VESSEL

SET OF SPECIMEN EXAMINATION QUESTIONS

Volume :

Part :

Section :

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1. Scope and Application

1.1 Purpose:

(1) To provide information to seafarers and marine training institutions by outlining the guidance on the examination for obtaining the certificate of competency as Watchkeeping Engineer, Motor-Driven Fishing Vessel.

1.2 Scope:

(1) Recommended for all those seafarers who intend to write examinations for the certificate of competency as Watchkeeping Engineer, Motor-Driven Fishing Vessel.

1.3 Effective Date:

(1) This document enters into force on December 16, 2005.

1.4 Authority:

(1) The Marine Certification Regulations (SOR/2002/150) and the Crewing Regulations (SOR/2002/151), made pursuant to the Canada Shipping Act (R.S.C. 1985, c.s-9), as amended.



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2. General Information

This guide is intended to provide information to the candidates for the Watchkeeping Engineer, Motor-Driven Fishing Vessel certificate.

- 1. You must pass a multiple choice examination in each of the following subjects:
 - Engineering Knowledge, General
 - Engineering Knowledge, Motor
- 2. Questions may refer to any of the areas of knowledge mentioned in the syllabus.
- 3. For each subject, you will be given one examination question book that contains a total of 60 questions. All questions should be answered.
- 4. Below each question, you will find four possible answers. Read each possible answer carefully and select the one which you consider to be the correct one. This guide contains some specimen questions. Attempt to answer them and check your answers with the correct ones marked on the answer sheet on the last page.
- 5. On completion of the written examinations, you must also pass an oral examination to test your practical knowledge, this examination may include references to the answers given in the written examinations.

Before beginning the written examinations, read carefully the Rules on the first page of the Answer Booklet. Any question should be addressed to the Examiner before beginning the examination.

Please visit the following Transport Canada Web sites:

For more information on the general requirements, qualifying service, validity and examination syllabus of the watchkeeping engineer certificate, http://www.tc.gc.ca/MarineSafety/TP/TP2293/PDF/CHAPTER-35.pdf

For any other question about the Examination and Certification of Seafarers, http://www.tc.gc.ca/marinesafety/TP/TP2293/menu.htm



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3. SPECIMEN QUESTIONS

1. A rectangular plate measures 500 mm by 250 mm. The area is M^2 .

- (1) 12.5
- (2) 125
- (3) 0.125
- (4) 0.00125
- 2. The work done in moving an object through a certain distance is the product of this distance by the:
 - (1) torque
 - (2) moment
 - (3) couple
 - (4) force
- 3. The purpose of the intercooler in an air compressor is to:
 - (1) condense the oil and water vapours from the air
 - (2) reduce the temperature of the air between stages
 - (3) increase the air pressure at the compressor outlet
 - (4) obtain the results mentioned in (1) and (2)
- 4. Cocks rather than valves are usually fitted for boiler water gauge glass mountings because:
 - (1) they can be shut off more quickly should the gauge glass break
 - (2) they are easier to make and hence cheaper
 - (3) they are easier to maintain and repair
 - (4) they are required by Transport Canada Regulations
- 5. The anchor chain is lifted by the:
 - (1) capstan
 - (2) mooring winch
 - (3) windlass
 - (4) cargo winch
- 6. A breaker is installed in an electric circuit to:
 - (1) protect the generator in case of reverse power
 - (2) allow the fuses to safely carry a higher current
 - (3) ensure reliability in case the fuse does not melt
 - (4) protect the circuit from damage should it become overloaded



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- 7. When topping-off the tanks whilst loading fuel oil, you should:
 - (1) check the working pressure on the flexible transfer hose
 - (2) have the mooring lines tended to prevent stress on the transfer hose
 - (3) reduce the rate of flow to the tanks
 - (4) fit blank flanges on the unused manifold connections
- 8. Smoke coming from the crankcase breather of a Diesel engine usually indicates
 - (1) that there is too much lubricating oil in the engine base
 - (2) an overheated bearing
 - (3) worn or seized piston rings
 - (4) carbon dioxide discharge valve to the crankcase has been left open
- 9. A thermostat is installed in the cooling water system of a Diesel engine to control the ______ of the coolant.
 - (1) temperature
 - (2) density
 - (3) velocity
 - (4) all of (1), (2) and (3)
- 10. The purpose of the flywheel mounted on the end of an internal combustion engine is to:
 - (1) provide for the fitting of the starter ring gear
 - (2) absorb energy from the power stroke and return some of it on the other strokes
 - (3) prevent the crankshaft from turning too fast on the exhaust stroke
 - (4) balance the load between each cylinder



4. ANSWER SHEET

	Transports Canada			DATE	-
	TION ANSWER SHEET -	- FEUILLE DE RÉPO	NSE D'EXAMEN GÉNÉ	RAL	
FAMILY NAME — NOM DE FAI	MILLE		. GIVEN NAME(S) — PRÉNOM(S)	
SUBJECT - SUJET	0.040			5	
	SPECIMEN	WKEMD			
ERASE COMPLETEL	PENCIL ONLY. FILL THE CIRCLE. "O" Y ANY ANSWER YOU WISH ARE NUMBERED ACROSS	TO CHANGE.	N'EMPLOYEZ QU'UN CE QUE CHACUN DES CE SI VOUS CHANGEZ UNE DÉJÀ INSCRITE. NOTA : LES RÉPONSE	RCLES EST ENTIÈRE RÉPONSE, EFFACEZ C	MENT NOIRCI. "O"
1. 0 0 0 0 0	2. 0 0 0 0	3. 0 0 0 0	4.	5. 0 0 0 0	6. 0 0 0 0
7. 0 0 0 0	8. 0 0 0 0	9.	10. 0 0 0 0		12. 0 0 0 0
13. 0 0 0 0	14. 0 0 0 0	15. 0 0 0 0 0	16. ¹ ² ³ ⁴	17. 0 0 0 0	
19. 0 0 0 0	$20. \bigcirc 1 \bigcirc 2 \bigcirc 3 4 \bigcirc 1 \bigcirc$	21. $\overset{1}{\bigcirc} \overset{2}{\bigcirc} \overset{3}{\bigcirc} \overset{4}{\bigcirc}$	22. 0 0 0 0	23. $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$	$24. \overset{1}{\bigcirc} \overset{2}{\bigcirc} \overset{3}{\bigcirc} \overset{4}{\bigcirc}$
25. 0 0 0 0	$26. \stackrel{1}{\bigcirc} \stackrel{2}{\bigcirc} \stackrel{3}{\bigcirc} \stackrel{4}{\bigcirc}$	27. 0 0 0 0	$28. \stackrel{1}{\bigcirc} \stackrel{2}{\bigcirc} \stackrel{3}{\bigcirc} \stackrel{4}{\bigcirc}$	29. $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$	30. 0 0 0 0
31. 0 0 0 0	32. 0 0 0 0	33. 0 0 0 0	34. 0 0 0 0	35. 0 0 0 0	36. ¹ ² ³ ⁴
37. 0 0 0 0	38. 0 0 0 0	$39. \stackrel{1}{\bigcirc} \stackrel{2}{\bigcirc} \stackrel{3}{\bigcirc} \stackrel{4}{\bigcirc}$	40. 0 0 0 0	41. 0 0 0 0	42. $\overset{1}{\bigcirc} \overset{2}{\bigcirc} \overset{3}{\bigcirc} \overset{4}{\bigcirc}$
43. 0 0 0 0	44. 0 0 0 0	45. $\overset{1}{\bigcirc} \overset{2}{\bigcirc} \overset{3}{\bigcirc} \overset{4}{\bigcirc}$	46. $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$	47. 0 0 0 0	48. 0 0 0 0 0
49. 0 0 0 0	50. $\bigcirc \bigcirc \bigcirc$	51. 0 0 0 0	52. 0 0 0 0 0	53. 0 0 0 0	54. 0 0 0 0
55. 0 0 0 0 0	56. 0 0 0 0	57. 0 0 0 0	58. 0 0 0 0	59. $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$	60. 0 0 0 0 0
61. 0 0 0 0	62. ¹ ² ³ ⁴	63. 0 0 0 0	$64. \stackrel{1}{\bigcirc} \stackrel{2}{\bigcirc} \stackrel{3}{\bigcirc} \stackrel{4}{\bigcirc}$	65. ¹ ² ³ ⁴	
67. 0 0 0 0 0	$68. \stackrel{1}{\bigcirc} \stackrel{2}{\bigcirc} \stackrel{3}{\bigcirc} \stackrel{4}{\bigcirc}$	69. 0 0 0 0	70. 0 0 0 0	71. 0 0 0 0	72. $\overset{1}{\bigcirc} \overset{2}{\bigcirc} \overset{3}{\bigcirc} \overset{4}{\bigcirc}$
73. 0 0 0 0	74. 0 0 0 0	75. 0 0 0 0	76. O O O O	77. 0 0 0 0	78. 0 0 0 0
79. 0 0 0 0	80. 0 0 0 0	81. 0 0 0 0	82. 0 0 0 0	83. 0 0 0 0	84. 0 0 0 0
85. 0 0 0 0	86. 0 0 0 0	87. 0 0 0 0	$\begin{array}{c}1\\88.\end{array} \bigcirc \begin{array}{c}2\\0\\0\end{array} \bigcirc \begin{array}{c}3\\0\\0\end{array} \bigcirc \begin{array}{c}4\\0\\0\end{array}$	89. 0 0 0 0	90. $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$
91. 0 0 0 0	92. 0 0 0 0	93. 0 0 0 0	94. 0 0 0 0	95. 0 0 0 0 0	96. $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$
97. 0 0 0 0	98. 0 0 0 0	99. 0 0 0 0	100. 0 0 0 0	101. 0 0 0 0	102. $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$
	104. $\overset{1}{\bigcirc} \overset{2}{\bigcirc} \overset{3}{\bigcirc} \overset{4}{\bigcirc}$	105. 0 0 0 0	106. 0 0 0 0	107. 0 0 0 0	108. $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$
		111. $\overset{1}{\bigcirc} \overset{2}{\bigcirc} \overset{3}{\bigcirc} \overset{4}{\bigcirc}$	112. 0 0 0 0	113. 0 0 0 0	114. O O O O
		117. 0 0 0 0	118. 0 0 0 0	119. 0 0 0 0	120. 0 0 0 0
			124. 0 0 0 0	125. 0 0 0 0	
		129. $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$	130. $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	131. 0 0 0 0	132. $\overset{1}{\bigcirc} \overset{2}{\bigcirc} \overset{3}{\bigcirc} \overset{4}{\bigcirc}$
			136. 0 0 0 0	137. 0 0 0 0	138. 0 0 0 0
		141. $\overset{1}{\bigcirc} \overset{2}{\bigcirc} \overset{3}{\bigcirc} \overset{4}{\bigcirc}$	142. 0 0 0 0	143. 0 0 0 0	144. $\overset{1}{\bigcirc} \overset{2}{\bigcirc} \overset{3}{\bigcirc} \overset{4}{\bigcirc}$
145. 0 0 0 0	146. 0 0 0 0	147. 0 0 0 0		149. 0 0 0 0	150. 0 0 0 0

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