Transport Canada Transports Canada

TP 14754E
(07/2007)

SMALL VESSEL MACHINERY OPERATOR

SET OF SPECIMEN EXAMINATION QUESTIONS

1st EDITION

JULY 2007

TC-1002541

Canada

Responsible Authority	Approval
The Director, Marine Personnel Standards and Pilotage is responsible for this document, including any change, correction, or update.	Capt. Naim Nazha Director, Marine Personnel Standards and Pilotage Marine Safety

Original Date Issued: July 2007

© Her Majesty the Queen in Right of Canada, as represented by the Minister of Transport, 2007.

Permission is granted, by Transport Canada, to copy this TP 14754E as required. While use of this material has been authorized, Transport Canada shall not be responsible for the manner in which the information is presented, nor for any interpretations thereof. This TP 14754E may not be updated to reflect amendments made to the original content. For up-to-date information, contact Transport Canada.

TP 14754E
(07/2007)

TC-1002541

DOCUMENT INFORMATION

Title	**SMALL VESSEL MACHINERY OPERATOR – SET OF SPECIMEN EXAMINATION QUESTIONS**		
TP No.	**14754E**	**Edition**	**1st**
Originator	Amir Maan Marine Personnel Standards and Pilotage Tower B, Place de Ville 112 Kent Street, 4th Floor Ottawa, Ontario K1A 0N8	**Telephone** **Fax** **E-mail** **URL**	(613) 990-2075 (613) 990-1538 MarineSafety@tc.gc.ca http://www.tc.gc.ca/MarineSafety

REVISIONS

Last Review

Next Review

Revision No.	Date of Issue	Affected Pages	Author(s)	Brief Description of Change

TABLE OF CONTENTS

1. SCOPE AND APPLICATION

1.1 PURPOSE:

(1) To provide information to seafarers and marine training institutions with respect to the examinations required for obtaining the small vessel machinery operator certificate.

1.2 SCOPE:

(1) Recommended reference for all seafarers who intend to write examinations for the Small Vessel Machinery Operator certificate.

1.3 EFFECTIVE DATE:

(1) This document enters into force on July 1st, 2007.

1.4 AUTHORITY:

(1) The *Marine Personnel Regulations* (SOR/2007-115), made pursuant to the *Canada Shipping Act, 2001* (2001, c.26).

2. GENERAL INFORMATION

This guide is intended to provide information to the candidates for the Small Vessel Machinery Operator certificate.

(1) You must pass a multiple choice written examination in General Engineering Knowledge of small vessels.

(2) Questions may refer to any of the areas of knowledge mentioned in the syllabus.

(3) You will be given a booklet 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 examination, you must also pass an oral examination to test your engineering knowledge of small vessels if applying for an “Unrestricted certificate” as a Small Vessel Machinery Operator and if applying for a “Restricted certificate” as a Small Vessel Machinery Operator, you must pass a practical examination on board the vessel in respect of which the certificate is sought, this examination may take into account your response in the written examination.

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 small vessel machinery operator,
http://www.tc.gc.ca/marinesafety/TP/TP2293/2293-section-3/section3-chapter33.htm

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

3. SPECIMEN QUESTIONS

(1) Dirty waste, cleaning rags, and other rubbish contaminated with oil, if lying around, is likely to:

(a) choke fuel tank filters.

(b) be thrown overboard.

(c) ignite spontaneously.

(d) create an electrical hazard.

(2) Fire doors onboard a ship:

(a) keep extinguishers safe.

(b) make fire detection possible.

(c) prevent theft of fire hoses.

(d) prevent fires from spreading.

(3) The purpose of using distilled water for boilers is to:

(a) reduce the heat transfer properties in the furnace.

(b) extend the working life of exhaust chimney.

(c) reduce corrosion in the water tubes.

(d) allow lower operating pressure in the boiler.

(4) The engine fuel settling tanks have their vents located:

(a) in the engine room.

(b) inside the bunker tanks.

(c) inside double-bottom tanks.

(d) on the upper deck.

(5) If the bilge pump is unable to pump out the engine room bilges, the LEAST likely cause will be:

(a) dirt under suction valve.

(b) damaged pump elements.

(c) suction valve strainer clogged.

(d) air leaking into system.

(6) An ammeter is a device for measuring:

(a) voltage.

(b) frequency.

(c) current.

(d) resistance.

(7) The letters A, B, C, and D displayed in symbols on portable fire extinguishers, indicate the:

(a) class of fires on which they are effective.

(b) type of liquid propellant used.

(c) deck levels where they are located.

(d) relative cost of the extinguishers.

(8) A copper-based alloy such as bronze, which has anti-corrosive property used for valve bodies, can most likely be found onboard ships in:

(a) sea water circulating systems.

(b) boiler feed circulating systems.

(c) air starting systems.

(d) lubricating systems.

(9) The PRIMARY concern before entering an enclosed or confined space is to ensure:

(a) there is enough room to work.

(b) that tools are not left behind.

(c) the atmosphere is life supporting.

(d) that “SAFETY FIRST” notice is posted.

(10) Upon startup of a diesel engine, the most important point to verify is:

(a) engine cooling water pressure.

(b) engine lubricating oil pressure.

(c) engine fuel oil pressure.

(d) engine vibrations.

(11) In a routine inspection of the steering gear, which one of the following conditions requires your immediate attention:

(a) low illumination due to defective lights.

(b) jerky movement of rudder.

(c) slight drop in level of hydraulic oil reservoir.

(d) slight oil leakage from the rudder actuator.

(12) Starting air compressors are arranged to start-up with:

(a) compressor drains open only.

(b) compressor unloaded, receiver drains open.

(c) receiver drains open only.

(d) compressor unloaded, cooler drains open.

(13) When you begin duties in the engine room of your vessel for the first time, two of the FIRST things you should do are:

(a) learn the machinery systems.

(b) locate the position of overboard discharges.

(c) locate the engine room escape routes.

(d) use the communication system:

(i) c & d,

(ii) b & d,

(iii) a & d,

(iv) d & a.

(14) If your ship's service generator gets overloaded, which of the following is likely to occur:

(a) all emergency lights come on.

(b) the main breaker resets.

(c) the bridge lights will flash.

(d) the non-essential disconnect.

(15) If you need to dispose of a large amount of degraded lubrication oil, you should:

(a) order an incinerator.

(b) arrange shore reception.

(c) store in settling tank.

(d) pump to a ballast tank.

4. ANSWER SHEET

Question #	Answer
1	c
2	d
3	c
4	d
5	b
6	c
7	a
8	a
9	c
10	b
11	b
12	d
13	i = c & d
14	d
15	b