ФЕДЕРАЛЬНОЕ АГЕНТСТВО МОРСКОГО И РЕЧНОГО ТРАНСПОРТА
Федеральное государственное бюджетное образовательное учреждение высшего образования
«Государственный университет морского и речного флота имени адмирала С.О. Макарова»
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Является приложением к рабочей программе

ФОНД ОЦЕНОЧНЫХ СРЕДСТВ
для проведения текущего контроля знаний и промежуточной аттестации
по учебной дисциплине
ОГСЭ.03 ИНОСТРАННЫЙ ЯЗЫК
общего гуманитарного и социально-экономического учебного цикла
программы подготовки специалистов среднего звена
по специальности
26.02.05 Эксплуатация судовых энергетических установок
базовой подготовки

Архангельск
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СОДЕРЖАНИЕ

1. Общие положения

1.1. Паспорт фонда оценочных средств

Назначение:

Фонд оценочных средств предназначен для контроля и оценки результатов освоения учебной дисциплины ОГСЭ.03 Иностранный язык, сформированности профессиональных (далее – ПК) и общих (далее – ОК) компетенций.

Предметы оценивания	Объекты оценивания	Показатели оценки
ОК 1. Понимать сущность и социальную значимость своей будущей профессии, проявлять к ней устойчивый интерес	Умение раскрыть сущность и социальную значимость своей будущей профессии средствами иностранного языка, понимать значение иностранного языка для будущей профессии; умение демонстрировать устойчивый интерес к изучению иностранного языка как одного из основных факторов, влияющих на безопасность осуществления профессиональной деятельности	Демонстрация умения раскрыть сущность и социальную значимость своей будущей профессии средствами иностранного языка, понимать значение иностранного языка для будущей профессии, демонстрировать устойчивый интерес к изучению иностранного языка как одного из основных факторов, влияющих на безопасность осуществления профессиональной деятельности
ОК 2. Организовывать собственную деятельность, выбирать типовые методы и способы выполнения профессиональных задач, оценивать их эффективность и качество	Умение организовывать собственную деятельность, выбирать типовые методы и способы выполнения профессиональных задач, связанных с использованием иностранного языка, оценивать их эффективность и качество	Демонстрация умения организовывать собственную деятельность, выбирать типовые методы и способы выполнения профессиональных задач, связанных с использованием иностранного языка, оценивать их эффективность и качество
ОК 3. Принимать решения в стандартных и нестандартных ситуациях и нести за них ответственность	Умение принимать решения в стандартных и нестандартных ситуациях общения на иностранном языке и нести за них ответственность	Демонстрация умения принимать решения в стандартных и нестандартных ситуациях общения на иностранном языке и нести за них ответственность
ОК 4. Осуществлять поиск и использование	Умение осуществлять поиск и использование	Демонстрация умения осуществлять поиск и

Предметы оценивания	Объекты оценивания	Показатели оценки
информации, необходимой для эффективного выполнения профессиональных задач, профессионального и личностного развития	информации, необходимой для эффективного выполнения профессиональных задач, связанных с использованием иностранного языка, своего профессионального и личностного развития	использование информации, необходимой для эффективного выполнения профессиональных задач, связанных с использованием иностранного языка, своего профессионального и личностного развития
ОК 5. Использовать информационно-коммуникационные технологии в профессиональной деятельности	Умение использовать информационно-коммуникационные технологии в профессиональной деятельности для постоянного развития способности общаться на иностранном языке	Демонстрация умения использовать информационно-коммуникационные технологии в профессиональной деятельности для постоянного развития способности общаться на иностранном языке
ОК 6. Работать в коллективе и в команде, эффективно общаться с коллегами, руководством, потребителями	Умение работать в команде, эффективно общаться с коллегами, руководством, потребителями	Демонстрация умения работать в команде (в учебной группе), эффективно общаться с коллегами по работе/учебе, руководством, потребителями
ОК 7. Брать на себя ответственность за работу членов команды (подчиненных), результат выполнения заданий	Умение брать ответственность за работу членов команды (подчиненных), результат выполнения заданий	Демонстрация умения брать ответственность за работу членов команды (подчиненных), результат выполнения заданий
ОК 8. Самостоятельно определять задачи профессионального и личностного развития, заниматься самообразованием, осознанно планировать повышение квалификации	Умение самостоятельно определять задачи профессионального и личностного развития, заниматься самообразованием, осознанно планировать повышение квалификации	Демонстрация умения самостоятельно определять задачи профессионального и личностного развития, заниматься самообразованием, осознанно планировать повышение квалификации
ОК 9. Ориентироваться в условиях частой смены технологий в профессиональной деятельности	Умение ориентироваться в условиях частой смены технологий в профессиональной деятельности	Демонстрация умения ориентироваться в условиях частой смены технологий в профессиональной деятельности

Предметы оценивания	Объекты оценивания	Показатели оценки
ОК 10. Владеть письменной и устной коммуникацией на государственном и иностранном языке	У1:Умение общаться (устно и письменно) на иностранном языке на профессиональные и повседневные темы	Демонстрация умения общаться (устно и письменно) на иностранном языке на профессиональные и повседневные темы
Профессиональная компетентность МК ПДНВ: ПК 1.17 (К 2). Использование английского языка в письменной и устной форме	У1: Умение общаться (устно и письменно) на иностранном языке на профессиональные и повседневные темы	Демонстрация умения общаться (устно и письменно) на иностранном языке на профессиональные и повседневные темы
	У2: Умение переводить (со словарем) иностранные тексты профессиональной направленности	Демонстрация умения переводить (со словарем) иностранные тексты профессиональной направленности
	У3: Умение самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас	Демонстрация умения самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас
	У4: Умение демонстрировать способность говорить на языке, используемом в радиотелефонной связи и понимать его на требуемом рабочем уровне	Демонстрация умения говорить на языке, используемом в радиотелефонной связи и понимать его на требуемом рабочем уровне
	У5: Умение использовать Стандартный морской навигационный словарь-разговорник и словарь Стандартных фраз Международной морской организации общения на море	Демонстрация умения использовать Стандартный морской навигационный словарь-разговорник и словарь Стандартных фраз Международной морской организации общения на море
	З1: Знание лексического (1200 - 1400 лексических единиц) и грамматического минимума, необходимого для чтения и перевода (со словарем) иностранных текстов профессиональной направленности	Демонстрация знания лексического и грамматического минимума, необходимого для чтения и перевода (со словарем) иностранных текстов профессиональной направленности
	З2: Знание Стандартного морского навигационного словаря-разговорника в полном объеме и словаря	Демонстрация знания Стандартного морского навигационного словаря-разговорника в полном объеме и

Предметы оценивания	Объекты оценивания	Показатели оценки
	Стандартных фраз Международной морской организации общения на море	словаря Стандартных фраз Международной морской организации общения на море

2. Результаты освоения дисциплины, подлежащие проверке

Результатом освоения учебной дисциплины ОГСЭ.03 Иностранный язык является приобретение обучающимися знаний и умений, сформированность профессиональных и общих компетенций в соответствии с ФГОС СПО по специальности 26.02.03 Судовождение.

№ п/п	Контролируемые разделы (темы) учебной дисциплины	Код контролируемой компетенции (или ее части)	Наименование оценочного средства
1	Тема 1.1 Английский язык в профессии судомеханика	У1, У3, З1 ОК 1 - 10, ПК 1.7 (К 2)	Устный опрос, письменный опрос по теме, задания дифференцированного зачета
2	Тема 1.2. Предоставление и получение моряком личной информации		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
3	Тема 1.3 Экипаж, его обязанности		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
4	Тема 1.4 Типы судов		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
5	Тема 1.5 Работа на борту. Передвижение по судн		Устный опрос, письменный опрос по теме
6	Тема 1.6 Обсуждение прошедших событий		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
7	Тема 1.7 Обсуждение планов на будущее		Устный опрос, письменный опрос по теме
8	Тема 2.1 Фразы для поддержания беседы. Погода		Устный опрос, письменный опрос по теме, задания дифференцированного

№ п/п	Контролируемые разделы (темы) учебной дисциплины	Код контролируемой компетенции (или ее части)	Наименование оценочного средства
			зачета
9	Тема 2.2 Семья, дом		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
10	Тема 2.3 Свободное время		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
11	Тема 2.4 Здоровый образ жизни		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
12	Тема 2.5 Родной город, страна		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
13	Тема 2.6 В кают-компании		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
14	Тема 2.7 Обсуждение экологических проблем	У1, У2, У3, З1 ОК 1 – 10, ПК 1.7 (К 2)	Устный опрос, письменный опрос по теме, задания дифференцированного зачета
15	Тема 3.1 В аэропорту	ПК 1.7 (К 2), ОК 1 - 10 У1, У2, У3, У4, У5, З1, З2	Устный опрос, письменный опрос по теме, задания дифференцированного зачета
16	Тема 3.2 Передвижение по городу		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
17	Тема 4.1 Обсуждение пройденной практики. Обязанности вахтенного механика		Устный опрос, письменный опрос по теме, задания экзамена

№ п/п	Контролируемые разделы (темы) учебной дисциплины	Код контролируемой компетенции (или ее части)	Наименование оценочного средства
		ПК 1.7 (К 2), ОК 1 - 10 У1, У3, У4, У5, З1, З2	
18	Тема 4.2 Оборудование машинного отделения		Устный опрос, письменный опрос по теме, задания экзамена
19	Тема 4.3 Обсуждение производственной практики. Деловое письмо		Устный опрос, письменный опрос по теме, задания экзамена
20	Тема 4.4 Морская безопасность		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
21	Тема 4.5 Бункеровочные операции		Устный опрос, письменный опрос по теме, задания дифференцированного зачета
22	Тема 4.6 Ремонтные работы. Повторение изученных тем		Устный опрос, письменный опрос по теме, задания дифференцированного зачета

3. Фонд оценочных средств

Контроль качества освоения учебной дисциплины включает текущий контроль и промежуточную аттестацию.

Видами текущего контроля являются: устный опрос, письменный опрос.

Формой промежуточной аттестации по учебной дисциплине являются экзамен, дифференцированный зачет.

3.1. Задания для проведения текущего контроля

3.1.1 Задания для устного опроса

Тема 1.1 Английский язык в профессии судомеханика

1. Назовите буквы Международного морского алфавита.
2. Как образуется повелительное наклонение?
3. Как образуются повествовательные, отрицательные, вопросительные предложения в настоящем простом времени?
4. Что такое артикль?
5. Какие бывают артикли?
6. Как употребляются артикли?
7. Как образуется множественное число существительных?
8. Какие есть исключения в образовании множественного числа существительных?
9. Каково значение английского языка для судомехаников?
10. Перечислите требования МК ПДНВ к знанию иностранного языка судомехаником.

Тема 1.2 Предоставление и получение моряком личной информации

1. Как образуются повествовательные, отрицательные, вопросительные предложения с глаголами ” to be”, “to have” в настоящем простом времени?
2. Как образуются порядковые и количественные числительные?
3. Как образуются даты в английском языке?
4. Как читается год в английском языке?

Тема 1.3 Экипаж, его обязанности

1. Назовите экипаж судна.
2. Каковы обязанности членов экипажа?
3. Как спросить время и дать ответ?
4. Каковы особенности образования 3 лица единственного числа в настоящем простом времени?
5. Что такое модальный глагол?
6. Назовите модальные глаголы и их значение.

Тема 1.4 Типы судов

1. Назовите типы судов.
2. Назовите части судна.
3. Назовите судовые помещения и оборудование судна.
4. Где на судне содержится спасательное оборудование?
5. Какие существуют виды грузов?
6. Как образуется притяжательный падеж существительных?
7. Назовите исчисляемые и неисчисляемые существительные.

Тема 1.5 Работа на борту. Передвижение по судну

1. Какие существуют глаголы для описания профессиональной деятельности моряка?
2. Какие команды вы знаете?
3. Как образуется и употребляется настоящее длительное время?
4. В чём разница между простым и длительным настоящим временами?

Тема 1.6 Обсуждение прошедших событий

1. Как образуется прошедшее простое время?
2. Какие бывают чрезвычайные ситуации?
3. Ваши действия при чрезвычайных ситуациях?

Тема 1.7 Обсуждение планов на будущее

1. Как образуется будущее простое время?
2. Как заполнить анкету?
3. Каковы основные виды деятельности обучающихся во время практики?

Тема 2.1 Фразы для поддержания беседы. Погода

1. Какие разговорные фразы вы знаете?
2. Какие существуют времена группы Simple?
3. Как они образуются и используются?

4. Назовите показатели времён группы Simple?
5. Как образуется настоящее совершенное время?

Тема 2.2 Семья, дом

1. Как образуется прошедшее совершенное время?
2. Какие фразы используются для общения в иностранном экипаже?
3. Какая лексика используется в рассказе о семье?

Тема 2.3 Свободное время

1. Как вы проводите ваше свободное время?
2. Какое у вас хобби?
3. Как образуется прошедшее длительное время?

Тема 2.4 Здоровый образ жизни

1. Какой у вас режим дня?
2. Ваш любимый вид спорта?
3. Что такое «здоровый образ жизни» и как вы его реализуете?
4. Как обратиться за медицинской помощью?

Тема 2.5 Родной город, страна

1. Расскажите о вашей стране, родном городе.
2. Что вы знаете о политической системе России?
3. Как образуется пассивный залог?

Тема 2.6 В кают-компании

1. Какие продукты питания, блюда, столовые принадлежности вы знаете?
2. Какие фразы этикета за столом вы знаете?
3. Каковы отличия активного и пассивного залогов?

Тема 2.7 Обсуждение экологических проблем

1. Какие экологические проблемы существуют?
2. Каковы экологические проблемы в Архангельском регионе?

3. Есть ли связь экологии с вашей будущей профессией?
4. Какие типы условных предложений вы знаете?

Тема 3.1 В аэропорту

1. Какие фразы используются для общения в аэропорту?
2. Как образуются предложения в активном, пассивном залогах?

Тема 3.2 Передвижение по городу

1. Какие фразы по теме «Город» вы знаете?
2. Как спросить дорогу?
3. Как вести беседу в магазине, отеле?
4. Как образуется активный и пассивный залоги в различных временах?

Тема 4.1 Обсуждение пройденной практики. Обязанности вахтенного механика

1. Расскажите о своей практике.
2. Каковы были Ваши обязанности на борту? Каковы были обязанности других членов экипажа?
3. Как образуется прошедшее простое время?

Тема 4.2 Оборудование машинного отделения

1. Опишите оборудование машинного отделения.
2. Какое оборудование Вы обслуживали во время практики?
3. Как образуются предложения в активном и пассивном залогах в различных временах?

Тема 4.3 Обсуждение производственной практики. Деловое письмо

1. Какие новые знания, навыки Вы приобрели во время практики?
2. Кто помогал Вам на практике?
3. Расскажите об экипаже Вашего судна, его обязанностях.
4. В какие страны Вы заходили?

5. Расскажите о правилах написания письма.

6. Перевести деловое письмо.

Тема 4.4 Морская безопасность

1. Какие средства спасания и спасения вы знаете?
2. Какие средства пожаротушения вы знаете?
3. Ваши действия по тревогам?

Тема 4.5 Бункеровочные операции

1. Какие фразы употребляются при проведении бункеровки?
2. Какие правила безопасности применяются при бункеровке?

3. Расскажите о том как процесс бункеровки проходил на Вашем судне.

Тема 4.6 Ремонтные работы. Повторение изученных тем

1. Какие наиболее употребимые при организации ремонта фразы Вы знаете?
2. Разыграйте диалог на основе предложенной ситуации.

3. Поддержите беседу на одну из предложенных преподавателем тем: Практика, Действия по тревогам, Спасательное оборудование, Оборудование машинного отделения, Обязанности механиков, мотористов.

Критерии оценивания устных заданий:

– полнота и правильность ответа;

– степень осознанности, понимания изученного;

– языковое оформление ответа;

– использование профессиональной терминологии при ответе.

Показатели и шкала оценивания:

Шкала оценивания	Показатели

отлично	обучающийся в полном объёме, правильно, осознанно ответил на все вопросы, показал умение работать с источниками, с повседневной/профессиональной терминологией, грамотное языковое оформление ответа
хорошо	обучающийся достаточно полно правильно, осознанно ответил на все вопросы, допустив некоторые недочёты или одну негрубую ошибку, показал достаточно развитое умение работать с источниками, с повседневной/профессиональной терминологией, грамотное языковое оформление ответа
удовлетворительно	обучающийся раскрыл более 50% содержания вопросов, показал сравнительно развитое умение работать с повседневной/профессиональной терминологией и грамотное языковое оформление ответа, допустив некоторые недочёты и/или 2-3 негрубые ошибки, пользовался помощью преподавателя в виде наводящих
неудовлетворительно	обучающийся раскрыл менее 50% содержания вопросов, показал недостаточно развитое умение работать с повседневной/профессиональной терминологией, неграмотное языковое оформление ответа, допустив недочёты и грубые ошибки, в значительной мере пользовался помощью преподавателя

3.1.2 Задания для письменного опроса

Время проведения опроса: 10-20 минут

Тема 1.1 Английский язык в профессии судомеханика

Вариант 1

Составить вопросы.

The ship is at sea.

Общий.

Альтернативный.

К подлежащему.

Специальный.

Разделительный.

Вставить артикли, где необходимо.

I have … day off today, so I have … time to have … rest.

He has got … sister. Her … name … Susan.

There is … captain on … deck.

Образовать множественное число существительных.

A plan, an apple, a box, a seaman, a bridge, a foot, a lady, a boy, a potato.

Перевести на английский язык.

a) Положи карту на стол.

b) Помоги ему.

c) Не читай этот текст.

Вариант 2

1. *Составить вопросы.*

The sailors are on the deck.

Общий.

Альтернативный.

К подлежащему.

Специальный.

Разделительный.

2. *Вставить артикли, где необходимо.*

a) He is … cadet of … maritime college.

b) There ate … 30 days in … September.

c) He is … captain. He works on … tanker.

3. *Образовать множественное число существительных.*

A table, a plate, echo, a hero, a child, a tooth, a body, a policeman, a tomato.

4. *Перевести на английский язык.*

a) Познакомьтесь с Борисом.

b) Дайте мне план погрузки.

c) Не садитесь за стол.

Тема 1.2 Предоставление и получение моряком личной информации

1 *Ответить на вопросы.*

What is your name?

How old are you?

Where are you from?

What is your native place?

What is your nationality?

When were you born?

Where were you born?

What is the date of your birth?

When were you born?

Who are you?

What are you?

What is your religion?

What is your maritime status?

What is your citizenship?

Who is your next of kin?

What is your address?

What is your telephone number?

Тема 1.3 Экипаж, его обязанности

1 Составить рассказ «Экипаж судна», употребив лексику по теме:

Chart, Captain, engineer, plot course, take bearings, department, consist of, to be responsible for, navigation instrument, include, repair, engine, define ship's position, Boatswain, relieve, tackle, keep watch, operate, maintain, skilled, well-qualified.

1. There are 2…….on board the ship.
2. They are the Deck …….. and the…… department.
3. The Deck department ……navigators, radio officers, ……, sailors.
4. …….. is the head of the Deck department.
5. The Master……. …… for the safety of the ship.
6. The Second Mate is responsible for ……. and……. .
7. …….. keeps hull, holds and …… . In good order.
8. Navigators …….. ……. on the navigating bridge.
9. They …… each other of watch every 4 hours.
10. Navigators ….. the ship's position, take ……, plot the …… .
11. ……. keep watch in the engine room.
12. They ……. equipment, …… machinery, ……. the engine in the engine room.
13. The crew of modern ship must be skilled and well-qualified.

Тема 1.4 Типы судов

Вариант 1

1. Образовать притяжательный падеж существительных.

The book of my friend, the pen of my teacher, the cabin of the Second Mate, the family of my friend, the bag of that man.

2. Поставить прилагательное в нужную степень сравнения.

a) Oil is (light) than water.

b) He is (good) student in our group.

c) My cabin is (comfortable) than this one.

d) I make (good) coffee than Mike does.

e) Winter is (cold) season in a year.

3. Составить предложения с конструкцией «There is(are)…».

a) В порту много судов.

b) На стенах картины.

c) В бутылке нет молока.

d) На палубе нет матросов.

e) Судно в море.

4. Соотнесите существительные в правой и левой колонках.

Galley	трюм
Left side	левый борт
Starboard side	мидель
Midships	камбуз
Bow	трюм
Deck	нос
Hold	корма
Stern	правый борт

Вариант 2

1. Образовать притяжательный падеж существительных.

The map of a motor-man, the room of my parents, the work of my father, the documents of the captain, the room of a sailor.

2. Поставить прилагательное в нужную степень сравнения.

a) The Baikal is (deep) lake in the world.

b) This picture is (beautiful) than that one.

c) He is (lazy) people in our class.

d) Our Captain is (experiences) than the Chief Mate.

e) Thank you for (wonderful) evening in my life!

3. Составить предложения с конструкцией «There is(are)…».

a) На судне 4 штурмана.

b) В порту нет судов.

c) На столе моя тетрадь.

d) В училище много групп.

e) В каюте нет матросов.

4. Соотнесите существительные в правой и левой колонках.

Forecastle	ют
Poop	машинное отделение
sick bay	корпус
hull	бак, полубак
hatch	надстройка
gangway	лазарет
engine room	люк
superstructure	трап

Тема 1.5 Работа на борту. Передвижение по судну

Вариант 1

1. Составить отрицательные предложения.

a) Cadets are reading now.

b) Look! He is playing football.

2. Составить вопросы.

She is knocking at the door now.

a) Общий

b) Альтернативный

c) К подлежащему

d) Специальный

e) Разделительный

3. Употребить глаголы в нужном времени.

a) He (to study) at the Maritime College.

b) They (to learn) new rules every lesson.

c) Now they (to learn) a new rule.

d) He (to wait for) her every evening.

e) Look! The ship (to call) at the port.

Вариант 2

1. Составить отрицательные предложения.

a) She is playing the piano now.

b) The teacher is entering the class room at this moment.

2. Составить вопросы.

Our liner is putting to sea now.

a) Общий

b) Альтернативный

c) К подлежащему

d) Специальный

e) Разделительный

3. Употребить глаголы в нужном времени.

a) Nick is busy. He (to repair) his car.

b) He (to have) English lessons every day.

c) The Second Mate (to finish) to make the cargo plan at this moment.

d) He (to have) English lesson now.

e) We often (to repair) the car.

Тема 1.6 Обсуждение прошедших событий

Вариант 1

1. Раскройте скобки, употребив глаголы в прошедшем простом времени.

a) He (to sail) on this ship many years ago.

b) When I (to be) a child, I (to go) to the kindergarten.

c) He (to make) a lot of mistakes in his test.

d) They (to transmit) telegram yesterday.

e) I (to go) to the college yesterday.

2. Образуйте 2 форму глагола.

to stand, to know, to order, to see, to write, to navigate, to like, to read, to call, to be, to listen, to do.

3. Образуйте отрицательные предложения.

a) We finished our work some minutes ago.

b) He repaired engine yesterday.

c) I followed my father’s advice.

4. Задайте общий вопрос.

a) We sailed on board a passenger liner.

b) He told us about his voyage.

Вариант 2

1. Раскройте скобки, употребив глаголы в прошедшем простом времени.

a) My family (to leave) Moscow 3 days ago.

b) Last year we (to live) in Paris.

c) She (to celebrate) her birthday yesterday.

d) The ship (to put) to sea an hour ago.

e) I (to be) a cadet last year.

2. Образуйте 2 форму глагола.

To look, to go, to sail, to keep, to talk, to sit, to wash, to drink, to stay, to have, to come, to visit.

3. Образуйте отрицательные предложения.

a) They received a telegram.

b) Yesterday the sea was calm.

c) He became a motorman last year.

4. Задайте общий вопрос.

a) They stopped talking.

b) The seaman cleaned the deck.

Тема 1.7 Обсуждение планов на будущее

Вариант 1

1. Раскройте скобки, употребив глаголы в будущем простом времени.

a) The dockers (to unload) the cargo soon.

b) Our ship (to put) to sea tomorrow.

c) He (to plot) the course in 2 hours.

2. Составить вопросы.

Our ship will make voyage to London.

a) Общий.

b) Альтернативный.

c) К подлежащему.

d) Специальный.

e) Разделительный.

3. Переведите на английский язык.

a) Он был занят.

b) Вчера мы учились определять местоположение судна.

c) Механики не чинили двигатель на прошлой неделе.

Вариант 2

1. Раскройте скобки, употребив глаголы в будущем простом времени.

a) The radio-officer (to transmit) a radiogram in some minutes.

b) The ship (to leave) the port nest Sunday.

c) He (to enter) the wheelhouse in some minutes.

2. Составить вопросы.

We will call at this port tomorrow.

a) Общий.

b) Альтернативный.

c) К подлежащему.

d) Специальный.

e) Разделительный.

3. Переведите на английский язык.

a) Второй механик нёс вахту с 4 до 8.

b) Докеры не разгружали судно вчера.

c) Курсанты работали в порту на прошлой неделе.

Тема 2.1 Фразы для поддержания беседы. Погода

Вариант 1

1. Раскройте скобки, употребив в нужном времени.

a) We usually (to have) our shipboard training on board the ship.

b) They (to learn) how to stow cargo now.

c) We (to launch) the life-boat yesterday.

d) He (to use) a finder and satellite navigation system in an hour.

2. Употребить глагол в скобах в настоящем совершенном времени.

a) The shin (just/to enter) the port.

b) They (already/to put) to sea.

c) He (never/to sail) on board bulkers.

d) He (to visit) St. Petersburg lately.

3. Перевод на английский язык.

a) Докеры уже погрузили ящики.

b) Я только что получил телеграмму.

c) Они уде спустили на воду новое судно.

Вариант 2

1. Раскройте скобки, употребив в нужном времени.

a) He often (to check) machinery in the engine room.

b) If the weather is terrible, he (to receive) a navigational warning.

c) We (to launch) the life-boat now.

d) Cadets (to have) shipboard training last year.

2. Употребить глагол в скобах в настоящем совершенном времени.

a) I (never/to be) to London.

b) Tom (just/to phone) you.

c) The ship (never/to call) to this port.

d) Our officer (to instruct) the cadets how to use echo sounder.

3. Перевод на английский язык.

a) Мы только что сменили друг друга на вахте.

b) Судно только что покинуло порт.

c) Вы когда-нибудь были в Лондоне?

Тема 2.2 Семья, дом

Вариант 1

1. Раскрыть скобки, употребив глаголы в Past Perfect.

a) We (to leave) the port by 10 p.m. yesterday.

b) The doctor (to render) the first aid before the ambulance came.

c) Our ship (to moor) in the port by yesterday evening.

2. Задать вопросы.

I had already returned to the college by the end of August.

a) Общий.

b) Альтернативный.

c) К подлежащему.

d) Специальный.

e) Разделительный.

Вариант 2

1. Раскрыть скобки, употребив глаголы в Past Perfect.

a) They (to translate) the text by the end of the lesson.

b) We (to arrive) at the port by 5 h/m/ yesterday.

c) They launched the life-boat after the Master (to order).

2. Задать вопросы.

They had completed the work by the end of the week.

a) Общий.

b) Альтернативный.

c) К подлежащему.

d) Специальный.

e) Разделительный.

Тема 2.3 Свободное время

Вариант 1

1 Текст для аудирования

Different people like doing different things because their tastes differ. So people have different hobbies. “A hobby” is something that people usually do to get pleasure or to relax and to spend free time.

Usually people choose as a hobby something that they really like doing, something for their character and their taste. You will never do something as a hobby if you don’t like it. If you have an interesting hobby your life becomes more interesting, of course.

Most people chose something “to do” as a hobby - doing means something active from traveling to taking pictures, from table tennis to football. Others choose something “to make”. Making things includes knitting, sewing, handicrafts, painting, drawing.

“Collecting things” is another popular pastime. People collect different things like books, toys, car models, plane models, coins, CD’s. There are more serious collectors of expensive paintings, rare things or art objects. Such hobbies are for rich people. We can often see such private collections in museums, art galleries or libraries.

Those people who live in big cities and towns are fond of gardening, growing flowers and vegetables. This gives them a sense of being close to nature.

Very often a hobby helps people to choose their future occupation. A person is lucky, I guess, if he or she can find a job similar to his or her hobby and get money for this.

Nowadays playing different computer games has become a popular pastime for both children and grown-ups.

a) What is “A hobby”?
b) How do people choose their hobby?
c) What kind of hobbies do you know?

d) What do people collect?

e) What are people fond of in cities and towns?

f) How do hobbies help people?

2. Выбрать правильный вариант.

a) They ... the TV when I came in.

watched;

were watching;

have watched.

b) What ... last Saturday?

were they buying;

they bought;

did they buy.

c) I remember he ... when I ... him.

was crying, was seeing;

cried, saw;

was crying, saw.

d) How many chairs ... to the room?

you have brought;

you did bring;

did you bring.

Тема 2.4 Здоровый образ жизни

Вариант 1

1. Измените форму глагола в зависимости от показателей времени.

W A L K

a) by 3 tomorrow g) now

b) for 3 hours
c) for 2 hours yesterday
d) tomorrow
e) every week
f) since 3 o'clock tomorrow
h) just
i) yesterday
j) by 4 yesterday
k) when he came
1) at 6 tomorrow

2. Из английских грамматических форм выберите ту, которую вы употребили бы при переводе следующих предложений.

1) На уроках английского языка мы часто учим диалоги.

a) learn b) am learning c) have learned

2) Сейчас я пишу тест.

a) write b) am writing c) have been writing

3) Вчера в 6 часов вечера я учила правила.

a) learn b) had learnt c) was learning

4) Я уже сделала одно задание в тесте.

a) do b) have done c) am doing

3. Переведите на английский язык.

a) Я играю в футбол каждую неделю.
b) Что ты сейчас делаешь?
c) Я не буду читать завтра.
d) Ты писал тест вчера в 7 часов?

Вариант 2

1. Измените форму глагола в зависимости от показателей времени.

R E A D

a) by 3 tomorrow
g) now

b)	for 3 hours	h)	just
c)	for 2 hours yesterday	i)	yesterday
d)	tomorrow	j)	by 4 yesterday
e)	every week	k)	when he came
f)	since 3 o'clock tomorrow	1)	at 6 tomorrow

2. Из английских грамматических форм выберите ту, которую вы употребили бы при переводе следующих предложений.

1) На уроках мы часто обсуждаем различные проблемы.

a) discuss b) are discussing c) have discussed

2) Сейчас я пишу тест.

a) write b) am writing c) have been writing

3) Вчера в 6 часов вечера я учила стихотворение.

a) study b) had studied c) was studying

4) Я уже сделала одно упражнение.

a) do b) have done c) am doing

3. Переведите на английский язык.

a) Я играю в теннис каждую неделю.

b) Что ты читаешь/делаешь?

c) Я не буду делать уроки завтра.

d) Ты смотрел телевизор вчера в 7 часов?

Тема 2.5 Родной город, страна

Вариант 1

1. Выбрать правильную форму глагола.

a) We … to be polite and friendly to other people.

have taught;

are taught;

may taught;

be taught.

b) The exhibition … to visitors tomorrow morning.

will be opened;

open;

will open;

is opened;

c) My best friend … me about his wedding.

is being informed;

has been informing;

was informed;

informed;

2. Написать предложения в пассивном залоге.

a) The doctor had already told him to go on a diet.

b) The author is writing a new book.

c) Has Simon sent the invitations yet?

3. Перевести на английский язык.

a) Это судно было построено в прошлом году.

b) Радиограмма была отправлена час назад.

c) Нас отвели в радиорубку.

d) Груз размещается в трюме.

Вариант 2

1. Выбрать правильную форму глагола.

a) The official report … by the end of this week.

will be written;

is being written;

will have been written;

is written.

b) The number of the Internet users … every day.

is grown;

grows;

are grown;

grow.

c) This test … by a great number of students, so you can do it as well.

has passed;

has been passed;

have passed;

passes.

2. Написать предложения в пассивном залоге.

d) You must tidy your bedroom.

e) She brought me some oranges.

f) Do they produce oil in Spain?

3. Перевести на английский язык.

a) Двигатель судна обслуживается мотористами.

b) Нам рассказали о плавательной практике.

c) Документы будут подписаны вскоре.

d) Спасательное оборудование проверяется регулярно.

Тема 2.6 В кают-компании

Вариант 1

1. Выбрать правильный вариант.

Lemons taste ___.

a) salty;

b) sour;

c) bitter;

d) crunchy;

e) bland.

In a restaurant, we normally eat an appetizer ___.

a) after the entrée;

b) just before dessert;

c) first;

d) last;

e) only if we are not very hungry.

Spicy food includes ___.

a) milk;

b) lemons;

c) chili peppers;

d) bananas;

e) hamburgers.

If milk is sour it is ___.

a) delicious;

b) too old;

c) too fresh;

d) from a goat;

e) from a coconut.

All of these are bitter except ___.

a) black coffee;

b) strong tea without sugar or milk;

c) unsweetened baking chocolate;

d) pizza;

e) a and c.

Sweet foods don’t include ___.

a) cake;

b) pickles;

c) ice cream;

d) candy;

e) strawberries.

2. Прочитать текст. Задать 5 вопросов.

Traditionally English people have three meals a day: breakfast, lunch and dinner. Breakfast is served in the morning. It used to be a large meal with cereal, eggs and bacon, sausages, tomatoes. But such a large breakfast takes a long time to prepare and is not very healthy. Nowadays, Britain's most popular breakfast consists of cereal, toast with marmalade, juice and yogurt with a cup of tea or coffee.

Lunch is a light meal. Most people have no time to go back home for lunch so they eat at school, cafes, pubs or restaurants.

The main meal is dinner, which is usually between 6 and 7 p.m. A typical evening meal is a meat dish with vegetables and dessert.

The most important meal of the week is the Sunday dinner, which is usually eaten at 1 p.m. The traditional Sunday dish used to be roast beef, but nowadays pork, chicken or lamb are more common.

On Sunday evenings people have supper or high tea. The famous British afternoon tea is becoming rare, except at weekends.

3. Перевести на английский язык.

- Я голодный. Давай сходим в кафе.
- Хорошо, но я закажу только овощной салат и чашечку кофе.
- Почему?
- Я сижу на строгой диете.

- Я обожаю сладкое. Я люблю шоколад, печенье и мороженое. А ты? Ты любишь сладости?
- Я люблю тортики без шоколада.
- Без шоколада? Почему?
- У меня аллергия на шоколад.

- Что Вы бы хотели заказать?
- Можно мне говядину с рисом и бокал вина?
- Хорошо. А что на десерт?
- Ежевичный пирог.

- Джек, ты пойдёшь в магазин?
- Да.
- Мог бы ты купить сахар, фрукты, телятину, сыр и масло?
- Хорошо, что-нибудь ещё?
- Нет, спасибо.

Тема 2.7 Обсуждение экологических проблем

Вариант 1

1. Выберите правильный вариант.

a) If the temperature falls below 00 C, water ... into ice.

turns;

turned;

turn;

will turn.

b) If he ... the fine, he will go to the prison.

doesn’t pay;

wouldn’t pay;

won’t pay;

hadn’t paid.

c) If I ... time, I’d take up sport.

have;

had had;

had;

am having.

d) If she had studied harder, she … the test.

would pass;

passed;

would passed;

would have passed.

e) If you need help, ... to me.

would come;

comes;

will come;

come.

f) If I hadn’t been rude to her, she ... upset now.

would not have been;

wouldn’t be;

will not be;

isn’t.

g) If I were you, I ... to your mother.

listen;

will listen;

had listened;

would listen.

h) She will join us later unless she ... a lot of work to do.

won’t have;

isn’t have;

doesn’t have;

has.

i) If nobody paid the bill, the electricity ... .

will be cut off;

will cut off;

would be cut off;

would have been cut off.

j) If he knew her, he ... to her.

would have spoken;

will speak;

would spoke;

spoke.

2. Перевести на русский язык.

a) If I am late for work, my chief is angry.

b) A person doesn't eat meat if he/she is a vegetarian.

c) If he should come I shall I be glad.

d) If I had seen him yesterday, I should have asked him about it.

Вариант 2

1. Выберите правильный вариант.

a) If you ... your work, we can have a rest.

had finished;

have finished;

will finish;

finished.

b) If the weather ... tomorrow, we'll go for a walk.

is fine;

was fine;

fine;

will be fine.

c) If I ... up earlier, I wouldn't be late now.

got up;

had got up;

did get up;

were got up.

d) If I do my homework, the teacher ... happy.

were;

was;

is;

will be.

e) If you heat water up to 1000 C, it ... .

had boiled;

boiled;

boils;

will boil.

f) If he had had money, he ... her a gift.

would buy;

would have bought;

would not have bought;

will buy.

g) If I ... work late, I will call you.

had to;

would have to;

will have to;

have to.

h) If you ... that plate, you'll burn your fingers.

touched;

had touched;

will touch;

touch.

i) If I ... the bus, I wouldn't have been late for my job interview.

would not missed;

didn't miss;

hadn't missed;

would not have missed.

j) They would have helped us if we ... them.

would asked;

had asked;

asked;

hadn't asked.

2. Перевести на русский язык.

a) If I get up early, my father drives me to the college.

b) Everything is wet if it rains.

c) If the weather is fine tomorrow, we shall go to the country

d) If my brother had time now, he would help them.

Тема 3.1 В аэропорту

Вариант 1

1. Перевести слова и выражения.

arrivals are on schedule -

baggage (AE) / luggage (BE) -

baggage allowance -

boarding pass –

customs -

customs official –

delayed -

departure lounge –

duty free -

emergency exit –

emergency landing -

excess baggage –

excess baggage charge -

passengers lounge [laʊ ndʒ] –

restroom/lavatory -

round trip –

scales -

seat belt -

actual time of arrival (ATA) -

time of departure -

actual time of departure (ATD) -

to search -

to put your hand luggage through the x-ray machine -

2. Перевести на английский язык диалог.

- Я хочу лететь в Женеву первого числа.
- Сейчас я взгляну, что у нас есть.
- Я хочу эконом класс, и предпочел бы утренний рейс.
- Рейс авиакомпании Люфтганза LH 203 с вылетом 09:20.
- К которому времени я должен быть здесь.
- Автобус отправляется в аэропорт в 08:15.

3. Таблички в аэропорту. Найти русский эквивалент.

Departures -	Таможня - Возврат НДС
Car park pay machines -	Полиция
Car parking -	Туалеты
Disabled Parking -	Права пассажиров
Car Rental -	Обмен валюты, Банки
Bus -	Автобус
Currency Exchange/Banks -	Прокат автомобилей
Passenger Rights -	Парковка для инвалидов
Toilets -	Автостоянка
Police -	Платная стоянка для машин
Customs/VAT Refund -	Отправление (вылет)

Вариант 2

1. Перевести слова и выражения

air hostess -	airline counter -
arrivals are delayed -	bumpy flight -
carry-on luggage/hand luggage -	checked luggage -
check-in desk -	connecting flight -
departure is delayed -	departures are on schedule-
direct flight/non-stop flight -	domestic flight -
final destination -	landing -
life vest -	luggage allowance -
meeting point -	overbooking -
oxygen-mask -	stopover -
suitcase -	timetable -

time of arrival -

to check in -

to check in one’s luggage -

to fasten the seat belt -

2. Перевести на английский язык диалог.

- Какие есть рейсы на завтра из Лондона в Вену?
- Я пока посмотрю, а вы присядьте.
- Я бы хотел путешествовать первым классом.
- Прямой рейс авиакомпании BEA BE 502 вылетает из аэропорта Хитроу в 09:25.
- К какому времени мне необходимо прибыть в аэропорт?
- Вам нужно быть у терминала Вест Лондон к 08:10 самое позднее.

3. Таблички в аэропорту. Найти русский эквивалент.

Customs/Arrivals -	Зал прибытия
Departure Gate Number -	Выход
Baggage Claim Area -	почтовое отделение
Baggage Information -	Представительства авиакомпаний
Shops -	Продажа билетов
Passport Control -	Паспортный контроль
Ticket Sales -	Магазины
Airline Offices -	Информация о багаже
Post Office -	Зона выдачи багажа
Exit -	Выход для вылета номер …
Arrivals Hall -	Таможня – Прибытие

Тема 3.2 Передвижение по городу

Вариант 1

1. Перевести диалоги на русский язык.

- Excuse me, can you tell me where Bogdanovich Street is, please?
- Take the second turn on the left, and then ask again.
- Is it far?
- No, it’s only about 5 minutes walk.
- Thanks a lot.
- Not at all.

- Excuse me, I’m afraid I’m lost. Can you help me?
- Where do you want to go?
- I am to be Independence Square at 3 o’clock. I’m short of time.
- Oh, yes. The quickest way to get there is by metro.
- Is there a metro station here?
- Yes, go straight as far as the park and there you’ll see the metro station.
- Thanks a lot.

- Excuse me, please, can you tell me the way to the Central Post Office?
- I’m sorry, I can’t. I’m a stranger here too. You’d better ask that policeman over there.
- Thanks just the same.

- Excuse me, how can I get to the University?
- You’d better go by metro there.
- And where is the metro station?
- Go down the street two blocks straight ahead and you’ll see the station.
- Thank you very much.
- Not at all.

- Is it your first visit to New York?
- Yes, and unfortunately I haven't got much time.
- So what are you going to do while you are here?
- Well, I don't know much about New York, you see. Just the Empire State Building and the Statue of Liberty.
- You've just got two days, haven't you? You are going to be pretty busy if you want to see all the sights.
- I'm planning to start early tomorrow morning. What should do first?
- I think you should start with the Empire State Building. It's not the highest building now, but the view is just beautiful in the morning, when it's clear and fresh. You have to do that.
- It sounds great. I'll definitely do that. Tell me, which is the highest building now?
- The World Trade Center building. But you should go there at night for the view – there's a bar up there and you can relax and look at the lights of the city. It's wonderful.
- Right.

- What else do you recommend?
- Well, it depends what you like – art, shopping, theatre?
- Well, not shopping particularly. But I'd like to see an art gallery or tow.
- Oh, then you must go to the Met – the Metropolitan Museum of Art, which is just enormous. You could spend two days there. That's by Central Park, so you can take a walk through central Park at the same time.
- Right.
- And if you like art galleries, there's the Guggenheim, the Museum of Modern Art.

2. Перевод на английский язык.

а) - Извините, где ваш персонал?

- Персонал есть в отеле.
- А где горничная?
- Я позову её. Что-нибудь ещё?
- У вас есть сейф?
- Вы хотели что-то положить туда?
- Да, возьмите это. Дайте, пожалуйста, ключ от номера.
- Вот он.
- Вы не подскажите, где обменный пункт?
- Когда вы выйдете из отеля, повернёте налево и увидите его.
- Спасибо.
- Извините, принесите одно одеяло, 2 свежих полотенца и подушку.
- Я принесу через несколько минут.
- Что-нибудь ещё?
- Принесите пожалуйста холодные напитки. Кондиционер работает?
- Да, я включу его сейчас.

в) Джейн: Доброе утро! Это отель «Савой»?

Портье: Да, это отель. Чем могу быть Вам полезен?

Джейн: Я хотела бы забронировать двухместный номер с кондиционером, ванной и телефоном.

Портье: На какое время Вам требуется данное размещение?

Джейн: Мне нужен гостиничный номер на четыре ночи.

Портье: Когда Вы прибудете сюда?

Джейн: Я прибуду послезавтра рано утром. Думаю, я буду в гостинице около шести утра.

Портье: Хорошо. А на каком этаже Вы хотели бы зарезервировать номер?

Джейн: Я всегда предпочитаю второй этаж.

Портье: Хорошо. Я зарезервирую для Вас номер на втором этаже.

Джейн: Большое Вам спасибо. А какова будет его стоимость?

Портье: Стоимость составит девяносто фунтов за сутки.

Джейн: Отлично, спасибо.

3. Вставьте ответные реплики.

a) – Hello! What would you like? _____

b) – Do you like Russian food? Why? _____

c) – How much do these flowers cost? _____

d) – Thank you for the advice! _____

e) – What kind of souvenirs do you want? _____

f) – Tell me, please, do you have an Italian-Russian dictionary? _____

g) – You need to go by metro to station “Kutuzovskaya”, and then about 5–7 minutes on foot. _____

h) – What Russian souvenirs do you know of? _____

i) – I would like to buy some postcards. Can you show me that one? _____

j) – Tell me, please, where can I buy Russian souvenirs? _____

a) _____ – Give me 2 kilograms.

b) _____ – You owe 560 rubles.

c) _____ – No, I don’t like this suit.

d) _____ – Thank you for the advice!

e) _____ – It’s called GUM.

f) _____ – This coat costs $500.

g) _____ – I would like to buy some souvenirs.

h) _____ – Because I like Russian ice cream.

i) _____ – Palekh is a village where they make lacquer boxes.

j) _____ – You’re welcome!

Тема 4.1 Обсуждение пройденной практики. Обязанности вахтенного механика

Вариант 1

1. Перевести на английский язык.

a) В прошлом году курсанты второго курса судомеханического отделения проходили практику на торговых судах.

b) Во время морского путешествия курсанты посетили много стран.

c) Курсанты разговаривали с иностранными моряками на английском языке.

d) Мой друг окончил морское училище 2 года назад.

e) Это судно прибыло в Архангельск в прошлое воскресенье.

f) Когда у вас была практика?

2. Чтение и перевод текста.

My Shipboard Training

I had my shipboard training from July till February on board motor vessel “Leiro”. I work form the “Wilson” company, which is situated in Bergen, Norway. The home port of my ship is Bridgetown. She is a cargo ship. The ship was built in 1980 in Poland.

Her Main Characteristics: the length is 98 m, the breadth is 11 m, the depth is 6 m. The speed of my ship is 12 kn. The ship has 2 cargo holds. The crew consists of 8 seamen: a Master, the Chief Mate, the Chief Engineer, the Second Mate, the Third mate, a Motorman, a Boatswain, an Electric Engineer, a Cook. I worked as an

engine cadet. My duties were to assist a motorman and the Chief Engineer. From day to day I repaired, maintained, lubricated the main engine and auxiliary machinery in the engine room. I had excellent relationship with the crew. We went ashore together many times. Our ports of call are Amsterdam, Rotterdam, Bergen, Ardalstangen, Hoyanger, Forsunt, Marburg and others. We visited many countries, such as Norway, Germany, England, Holland, Poland, Sweden, Belgian. We sailed at the Baltic, Norway and Northern seas.

3. Составить рассказ о практике по образцу (задание 2).

Вариант 2

1. Перевести на английский язык.

a) Это судно вчера вернулось из Лондона.

b) Они были в порту несколько минут назад.

c) Когда пришел капитан, все были на палубе.

d) Наше судно пересекло Тихий океан в прошлом году.

e) Курсанты несли вахту на мостике.

f) Он учились пользоваться спасательным оборудованием.

2. Чтение и перевод текста.

My Shipboard Training

My shipboard training from August till January on board motor vessel “Sea Challenger”. I work form the company “Dolaro”. It is situated in Sweden. My ship was built in 1998 in Malta. The home port of my ship is Limassol, Cyprus.

Her length is 130 m, her breadth is 19 m, her depth is 9 m. She is a container timber carrier. My crew consists of 13 men: a Master, the Chief Mate, the Chief Engineer, the Second Engineer, the Third Engineer, the Second Mate, the Third Mate, three Seamen, a Boatswain, an Oiler, a Fitter, an Electric Engineer, a Cook and two cadets. I started my work with a motorman, then watch with the Third Engineer. My watch was from 4 o'clock till 8 o'clock. I repaired? Maintained, overhauled the main engines and auxiliary machinery in the engine room every day. Our ports of call were Ventspils, Djen-Djen, Bejnia, Amsterdam, Rotterdam, Bergen, Sousse and ports of Sweden.

We were in Norway, Sweden, Latvia, Spain and some other countries. The area of operation of the ship: The North Baltic, The Mediterranean sea, the Atlantic ocean, the Bay of Bissau.

In conclusion I would like to say that during my shipboard training I visited many foreign countries and new practical knowledge.

Тема 4.2 Оборудование машинного отделения

Составьте рассказ об оборудовании Вашего машинного отделения (письменно).

Тема 4.3 Обсуждение производственной практики. Деловое письмо

Написать письмо на основе представленной преподавателем ситуации

Тема 4.4 Морская безопасность

Составить 15 предложений с использованием данных ниже слов.

rescue boat

inflatable lifejacket

open lifeboat

totally enclosed

lifeboat

free-fall lifeboat

immersion suit

rocket parachute

flare

inflatable liferaft

buoyant smoke

signal

life buoy

thermal protective

aid

cork lifejacket

hand flare

rigid liferaft

davit

goggles

helmet

lifeline

torch

gloves

earmuffs

face shield

protective suit

ear plug

apron

boots

overall

safety belt

tiller mask

breathing apparatus

fire extinguisher

sprinkler

hard hat

protective suit

fire bucket

flashlight

smoke detector

fixed fire-fighting

installation

fire axe

fire hose

fire blanket

nozzle

jet

CABA

combustible gas

indicator

Критерии и шкала оценивания выполнения письменных заданий

Если обучающийся правильно выполняет

от 90 до 100% задания - выставляется оценка «отлично»;

от 80 до 89% - оценка «хорошо»,

от 60 до 79% - оценка «удовлетворительно»,

менее 60% - оценка «неудовлетворительно».

3.2 Задания для проведения промежуточной аттестации

3.2.1 Задания для дифференцированного зачета

Форма дифференцированного зачета - устная

Условия выполнения задания

1. Место (время) выполнения задания: учебный кабинет

2. Максимальное время выполнения задания: 30 минут

3. Источники информации, разрешенные к использованию на зачете, оборудование: англо-русские, русско-английские словари, карточки с заданиями

Задания для дифференцированного зачета

4 курс, 8 семестр

Поддержать беседу по теме:

Biography.

Duties of a motorman.

Duties of engineers

Fire-fighting equipment, the fire alarm.

Location of safety equipment on board your vessel.

Principal particulars of the ship, parts of ships.

Responding to alarms “Abandon ship”, situation “Man overboard”.

Responding to ship’s alarms.

Safe working practice.

Safety system on board a ship.

Ship’s crew.

Shipboard training.

Speak about your daily routine.

Types of ships.

My engine room.

Troubles in the Engine room.

2. *Прочесть и перевести.*

1

2.3.1 Entering/Leaving port

Personnel stationed when entering/leaving a port can maintain their motivation and the effective operation of machinery with an excellent teamwork by sharing information relating to their ship’s consequences from the bridge and information the team members have. Particularly, the information from the bridge enables the engine room personnel, for whom it is difficult to know the navigational situation of the ship, to take proactive actions resulting in growing assuredness and swiftness of the machinery operation, preventing faulty operation.

Furthermore, it enables the personnel to be incentivized by their awareness of being one of the ship’s operators. With regard to the information that the team members have, that is information detected by machinery operation and machinery rounds, the engine room personnel should try to share insignificant concerns and notes that they have.

2.3.2 Engineering watch

When operating and maintaining engine room machinery, it is essential for personnel in charge of an engineering watch to try to find any sign of alfunctions that is information from the machinery by personnel using their five senses through engine room rounds. In fact, there are many cases that the information about

running sounds, leaks, vibrations and the like detected through such machinery rounds, can be utilized to prevent incidents. In addition to that, the personnel need to undertake the watch, understanding operation procedures, functions, features and operation data of the machinery by obtaining information from manuals, piping diagrams, status boards and others as well as the information taken over from the previous watch engineer officer.

2

Preparation for entering port

Now, let's watch the scene of a ship entering a port. This ship is a 10,000 gross ton class Ro-Ro ship. When entering and leaving port, main engine maneuvering is carried out from the control room and a direct telephone line is used for communication between the bridge and the control room in addition to the engine telegraph. In order to ensure sharing information, an engine room command communication system is used for communication between the engine control room and the engine room so that personnel in the engine room can listen to information issued from the control room through loudspeakers and personnel in the engine control room can listen to information issued from the engine room through a speaker.

The second engineer who was checking the unmanned machinery in the control room received a phone call from the bridge saying that there was 25 miles left to the pilot station.

The second engineer immediately reported the information from the bridge to the chief engineer and having received the chief engineer's instruction, he informed the first engineer, the third engineer and the engine crew members who should be standing by.

After that, the second engineer changed the control mode from unmanned to manned and the control position of the main engine from the bridge to the

control room and began preparations for entering the port, starting reduction of main engine speed.

3

Preparation for entering port

Preparations for stand-by engine vary according to the systems and dimensions of the propulsion plant, however generally speaking, the following preparations are necessary.

①Reducing engine speed until harbor full speed. (Change fuel oil if necessary)

②stopping auxiliaries

Fresh water generator

Exhaust gas economizer

③Starting auxiliaries

Parallel running of steering motors

Parallel running of main air compressors

Parallel running of generators

Auxiliary boiler

Preparation for thruster

Checking of generator right after start Right after starting generator, running parameters such as LO pressure and revolution speed and existence of abnormal noise, abnormal vibration, water leak, oil leak and gas leak should be checked.

Exhaust gas temperature of generator

Exhaust gas shows variations in temperature right after starting generator and the temperatures of all the cylinders outlet would become stable at almost same temperature as generator begins load running on the condition that injection pressure of each fuel injection valve is properly arranged and atomizing condition of each fuel injection valve is in good order.

Parallel running of generators

Although one generator usually supplies power necessary to maintain navigation, when leaving/entering port, two generators are put into parallel running to prepare for use of thruster and ensuring power.

4

Parallel running of main air compressors

During stand-by engine, main engine would be stopped and started several times and starting main engine needs a large amount of compressed air. Therefore, main air compressors are put into parallel running to prepare for starting main engine prior to stand-by engine. Usually, main air compressors are started and stopped automatically by pressure switch of main air reservoir.

Drain valve of main air compressor

When starting, drain valve of main air compressor usually opens to discharge drain and closes automatically after a lapse of several tens of seconds.

Exhaust gas high temperature alarm of generator

Exhaust gas high temperature alarm of generator is absolute high temperature and deviation high temperature and this case indicates the latter, which means that only temperature of No. 1 cylinder is the highest among all the exhaust gas temperatures. If the running of this generator had been continued, the temperature would reach to the absolute high temperature.

Sensor problem

Sensor problem means that sensor detecting exhaust gas temperature is abnormal and actual temperature is not abnormal. Temperature sensor problem occurs in case that disconnection and short circuit of signal lines rather than sensor element gets worse. In some cases, sensor problem alarm and temperature alarm occur simultaneously.

Judgment of fuel valve

Judgment that the fuel injection valve got worse was made over No.1 cylinder exhaust gas high temperature alarm of No.2 generator. It is an adequate judgment as most likely cause.

A bad fuel injection valve results in bad atomizing of fuel oil and abnormal combustion appears in the cylinder, consequently exhaust gas temperature rises.

5

Every engineer knows that it is impossible to predict ail the possible troubles that may arise in an engine room. Most of the possibilities for derangements of a general nature include the following.

WATER IN FUEL OIL - Water may get into the fuel oil by leakage through defective riveting or welding of tanks, through alternate use of tanks for fuel oil and water ballast, or the fuel oil as delivered into the tanks may contain considerable moisture that will settle out.

The troubles then are cracked heads and pistons, burned out exhaust valves.

IMPROPERLY REFIND OIL - Fuel oil must, during the refining process, be treated with sulphuric acid and this acid must later be neutralized with soda. When the engine is opened up after Fanning on the insufficiently washed oil, the entire surface of the combustion spaces in the cylinders has a coating of gritty material which is mostly sodium sulphate, it causes considerable wear of piston rings and cylinder lines.

LOSS OF POWER OR SLOWING DOWN OF ENGINE - When this occurs the first possibility that should be investigated is hot bearings. Other causes are failure of fuel to one or more cylinders, derangement of valves or valve gear or a fall in cooling water temperature.

6

CRACKED CYLINDERS AND CYLINDER HEADS - Cracks may result from unequal heating due to poor design, bad castings, air pockets in jackets, lack of cooling water and overloading.

Cracking from the first two causes seldom occurs. Troubles arising from air pockets are eliminated by periodical opening of the vent cocks on the cylinder heads. When for any reason the cooling water supply to part or all of cylinders fails, the engine should not be kept in operation long while the trouble is being corrected. Cracks that are due to overloading usually result from local overloading, caused by trouble with the fuel pumps, or some other conditions that cause one or more cylinders to quit firing.

CRACKED CRANKSHAFTS - When a crankshaft does crack the fracture usually occurs in a crank pin or crankweb. If one bearing wears down more than the others the shaft bends, which results in breakage.

VIBRATION.-The amount of vibration of an engine and of the ship's hull in which it is installed depends on how well the reciprocating and rotating masses in the engine are balanced and the position of the engine relative to a nodal point in the hull. Normally Diesel engines run with very little vibration, but it sometimes happens that the engine has a critical speed, at which the twisting impulses, imparted to the crankshaft by the pressure acting on the piston, coincide with the natural period of vibration of the crankshaft. At this speed violent vibration occurs. This critical speed should be passed through as rapidly as possible when maneuvering and the engine should always operate below or above these speeds.

7

MARPOL 73/78 is the International Convention for the Prevention of Pollution from ships. It was adopted in 1973 and modified by its Protocol in 1978.

The Convention established «prohibited zones» where the discharge is forbidden. Today there are 12 mile - 225 mile zones where the discharge of oil or mixtures, containing more than 15 p.pm. is allowed. Today there are also seas which are

considered «prohibited zones» too. They are some inland seas such as the Red Sea, the Black Sea, the Caspian Sea, the Mediterranean Sea, the Persian Gulf, the North Sea and the Arctic Seas.

According to the Convention all the ocean-going ships must be fitted/supplied with filtering and separating equipment, Separator Aquamarine is an example of such facility.

Most of the technical measures are included in the Annexes which show what substances should not be discharged in certain areas.

Every sea-going vessel must have the International Oil Prevention Certificate which is given if she has all the necessary facilities on board. If the vessel's engineers do not follow the regulations, the ship should pay a high penalty or should be fined. The problem of Sea Pollution is the global problem. The main causes are routine ship (ballast water) operations and tanker accidents.

In recent years legislations governing the dumping of wastes at sea has been tightened. Under Annex 5 of MARPOL plastics cannot be dumped, food and glass can be dumped in certain areas if treated first. In such areas, as the Caribbean, Mediterranean and the Antarctic dumping of food is allowed only. The governments should provide reception facilities. Unfortunately shipowners often complain about the lack of such facilities.

A new system will be installed on the Eagle, the largest cruise ship for Royal Caribbean Cruise Line. The vessel will carry about 500 passengers. It will be an incinerator, a food waste treatment system, a recycling and storage system for glass, ash and paper.

Almost all of the wastes fed to the incinerator will bum down. The ash will be collected and bagged, ready to be disposed on land.

8

Before Bunkering

1 The chief engineer should calculate and check which bunker/fuel oil tanks are to be filled after he receives confirmation from the shore office about the amount of fuel to be received.

2 It might be required to empty some tanks and transfer the oil from one tank to other. This is required so as to prevent mixing of two oils and prevent incompatibility between the previous oil and the new oil.

3 A meeting should be held between the members that will take part in the bunkering process and they should be explained about the following:

1 Which tanks are to be filled.

Sequence order of tanks to be filled.

How much bunker is to be taken.

2 Emergency procedure in case oil spill occurs.

3 Responsibilities of each officer are explained.

4 Sounding is taken before bunkering and record is made.

5 A checklist is to be filled so that nothing is missed on.

7 Overflow tank is checked to be empty.

8 Adequate lighting at bunker is to be provided.

9 No smoking notice should be positioned.

10 On board communication between the people involved in bunkering is made.

11 Red flag/light is presented on masthead.

12 Opposite side bunker manifold valves are closed and blanked properly.

13 Vessel draught and trim is recorded before bunkering.

14 All equipments in SOPEP (shipboard oil pollution emergency plan) locker are checked to be in place.

15 When barge is secured to the ship side, the persons Involved on barge are also explained about the bunker plan.

16 Berge paperwork is checked for the oil's grade and the density if they are as per the specification.

17 The pumping rate of bunker is agreed with the barge.

18 The hose is then connected to the manifold.

19 All the valves required are open and checked.

20 Proper communication between the barge and the ship is to be established.

21 Sign and signals are to be fallowed is discussed in case of communication during emergency.

22 After this, the manifold valve is open for bunkering

9

During Bunkering

1 During start of the bunker the pumping rate is kept low, this is done so as to check that the oil is coming to the tank to which the valve is opened.

2 After confirming the oil is coming to the proper tank the pumping rate is increased as agreed before.

3 Generally only one tank filling is preferred because gauging of more than one tank at a time increases the chances of overflow.

4 The max allowable to which tank is filled is 90% and when the tank level reaches about to maximum level the barge is told to pump at low pumping rate so as to top up the tank, and then the valve of other tank is opened.

5 During bunkering, sounding is taken regularly and the frequency of sounding is more when the tank is near to full. Many vessels have tank gauges which show tank level in control room but this is only to be relied If the system is working properly.

6 The temperature of bunker is also to be checked; generally the barge or supplier will provide the bunker temperature.

Temperature above this may lead to shortfall in bunker.

7 A continuous sample is taken during bunkering with the help of sampling cock at the manifold.

10

After Bunkering

1 Draught and trim of the ship is checked.

2 Take sounding of all the tanks bunkered.

3 The volume bunkered should be corrected for trim, heel and temperature correction.

4 In general for each degree of increase in temperature the density should be reduced by 0.64 kg/m^3.

5 Four samples are taken during bunkering. One is kept onboard, one for barge, one for analysis, one for port slate or IMO.

One sample is given to barge.

6 The chief engineer will sign the bunker receipt and the amount of bunker received.

7 If there is any shortfall of bunker received the chief engineer can issue a note of protest against the barge/supplier.

8 After everything is settled the hose connection is removed.

9 The sample is sent for laboratory analysis.

10 The new bunker should not be used until the report from the lab.

11

The term engine is commonly applied to any machine that consumes heat energy and converts it into mechanical work at the shaft coupling. In the marine field of mechanical engineering the internal-combustion engine is largely used.

In the internal-combustion engine, the fuel is delivered to the engine either in a vaporized or a liquid form. If the fuel is liquid, it must be finely atomized as it is introduced into the engine cylinder.

The work is done by introducing oil into a cylinder, burning the oil to form gas and heat it during formation, forcing a piston from one end of the cylinder to the other by the expansive force of the gas, and releasing the expanded gas from the cylinder. Each of these processes is called a phase. Now, if an operation is

performed by causing a fluid to go through a complete set of phases, this set of phases constitutes a cycle. In the oil engine the phases of fuel combustion, expansion of gases, release and expulsion of gases, filling cylinder with air and compression of air, form a complete cycle and the operation of the engine consists of continued repetitions of this cycle. The operation of any kind involves this continued repetition of some sort of cycle, although the phases that make up the cycle differ in various types of engines.

12

A fire-tube or Scotch boiler is a boiler in which the water is outside the tube and the hot gases pass through the tube.

Fire-tube boilers generally consist of a cylindrical shell, they are internally fired, fitted with corrugated furnaces and return-tube fire tubes. These boilers are both single- and double-end type, usually having two or more furnaces in each end, either with one combustion chamber for each furnace, or with a single combustion chamber several furnaces.

Furnaces are cylindrical shells with circumferential corrugations to afford strength against collapse and to provide for expansion. With oil fuel, burners are applied by means of a suitable furnace behind which refractory is placed. If coal fuel is used grates are placed approximately on the horizontal center of the furnace. To direct air through the fuel bed a wall is erected at the rear of the grates.

The purpose of the combustion chamber is to allow combustion to be completed and to distribute the flue gases to the tubes.

The advantages of the fire-tube boiler are: ease of maintenance and repair, ability to use feed water of doubtful quality, and adaptability to practically any fuel.

13

Boilers

To convert water into steam, heat must be added to the water. To obtain heat, some type of combustible fuel is burnt and part of the heat of this combustion is transferred to the water. The installation in which this combustion takes place and in which the heat is utilized to transform the water into steam is called a boiler plant.

If all the water to be heated is placed in a single cylinder in the path of the hot gases of combustion, only a part of the heat will be utilized, because only a relatively small surface can be in contact with water on one side and hot gases on the other. Nevertheless, this was the type of boiler first designed. A boiler of this type cannot produce steam very rapidly; so it was soon found to be impracticable for general use.

In order to increase the steam output of a boiler, various means were devised for increasing the area of surface in contact with both hot gases and water. Of the many methods tried two were found to be satisfactory: (1) that of placing many small tubes all filled with water in such position that the hot gases would circulate around them; (2) that of placing many small tubes in a large cylinder.

14

Reaction and Impulse Turbines

From the preceding paragraph, it is seen that an impulse turbine derives its force from the velocity of the steam jet. Hence, in the impulse turbine, the steam is completely expanded in stationary nozzles and there is no expansion within the moving blades. The blades are revolved by the force of the steam jets directed to them from the stationary nozzles. If the steam is completely expanded to one set of nozzles, the turbine is known as a single-expansion or single-stage impulse turbine. If the steam expanded only partially in the first set of steam nozzles, then directed to a set of moving blades, then expanded still more in another set of stationary nozzles, and so on, the turbine is said to be a multiple-expansion impulse turbine.

In the reaction turbine the steam is only partially expanded in the stationary nozzles and the expansion is completed in the moving blades, these blades obtaining their propelling force from the reaction of the expanding steam. Reaction turbines are sometimes designated as pressure turbines. They may be either single-stage or multi-stage.

15

Construction of the Piston

Pistons for small engines are generally made of cast iron. Forged steel, or cast steel, is more suitable for pistons having a large diameter. There are many different ways of attaching the piston rod to the piston, the principle to be borne in mind being that, owing to the alternate push and pull on the rod when the engine is at work, there is a risk of the piston becoming slack on the rod. A common method is to taper the end of the rod to fit a tapering hole in the piston. The rod is then pulled home by means of a nut fitting a screw on the rod. The nut is prevented from slacking back by means of a split pin passing through both the nut and the rod.

The piston is made steam-tight in the cylinder by means of spring rings fitting into grooves turned in the rim of the piston. There are two rings, usually of cast-iron, of rectangular section or nearly so. These are turned of diameter rather larger than the cylinder, then split at one place and sufficient material removed to allow the rings being sprung into place in the cylinder; their edges will then meet.

16

The Compressor

The three main types of compressor which may be used for gas turbines are the axial-flow, or turbo-compressor, the radial-flow, or centrifugal compressor, and the positive-displacement compressor.

A typical section through an axial compressor is shown in Fig. 1, from which it is seen that the general principle of operation may be described as that of

turbine working “in reverse”. When the rotor and rotor blades are driven round by external power they act somewhat like a number of ordinary desk fans arranged in series; a flow of air is set up, which, by skilful design of moving and fixed blades, can be made to persist even when the air pressure at the delivery end of the machine is several times that at the inlet.

The operation of a centrifugal compressor is easier to understand, as it is in principle analogous to an ordinary centrifugal water pump. Between these two types of compressor, the axial and the centrifugal, a keen rivalry exists. In general, however, it may be said that the axial compressor is more efficient and more compact of the two as far as the overall diameter is concerned.

17

Regeneration

The gases on being exhaused from the turbine are of high temperature, and since the mass of exhaust gas per hp-hr, is several times as great as in a reciprocating engine, the energy normally lost in the exhaust is relatively high. To recover some of the exhaust heat, use is made of a regenerator. This consists of a heat exchanger, through which the exhaust and the air from the compressor are passed. The air leaving the compressor is at 310°F, while with a turbine inlet temperature of 1,000°F, the exhaust from the turbine is at 520°F, so that there is a temperature difference of more than 200° between them. This difference, moreover, increases with the turbine inlet temperature. The heat exchanger offers some resistance to air flow and causes a pressure drop. This must be made good by the compressor, which must compress to a correspondingly higher pressure and consequently will consume slightly more power. This loss, however, can be minimized by careful design. It has been found that when operating at 1,200°F turbine inlet temperature 75 per cent of the available heat in exhaust is about the most that can be transferred.

18

Speed Control

Turbine governors are used either to maintain constant speed with varying loads or limit the speed for variable speed machines. For marine service, constant speed governors are used with turbogenerators, air compressors, fire pumps and for other constant speed consumers. Speed-limiting governors are used for main propulsion turbines, feed pumps, forced draft blowers, circulating pumps, oil pumps and other variable speed requirements. Governors may be of the direct acting centrifugal actuated relay type or oil actuated relay type. The actual governing or control of steam supply may be accomplished by throttling or by nozzle control.

To prevent dangerous overspeeding of the main turbine due to loss of propeller, breaking of shaft or propeller operating partly out of water during heavy weather, it is necessary to introduce a protective device. For this service the governor is installed. The operating medium is oil from the ship's lubrication system.

The governor is driven by a worm attached to the turbine shaft and operates a pilot valve. At normal operating speed, the pilot valve admits oil to a cylinder surrounding a sylphon bellows which in turn opens the relay valve.

19

Reduction Gears

On practically all the turbine ships, main turbines drive the propellers through mechanical reduction gears or by electrical transmission. When reduction gears are used, flexible couplings are employed between the turbines and the gear sets.

Gears or toothed wheels are used to transmit rotary motion from one shaft to another which may have a different speed or different direction of rotation or both.

Most present-day merchant marine turbines operate at speeds ranging between 3,000 and 6,000 r.p.m. and are connected to large, slow-turning propellers which operate at anywhere from 80 to 100 r.p.m. Consequently, a double reduction main propulsion gear unit is required to provide the necessary speed rotation. Conventional practice employs two compound turbines, high pressure and low pressure, which connected through the gearing drive a single propeller. A main gear unit, therefore, consists of two sets of first reduction gears, H.P. and L.P., each driving a second reduction pinion which meshes with a low-speed gear. The intermediate assemblies composed of a high-speed gear and a low-speed pinion, together with the necessary connections, rotate at about 700 to 1,000 r.p.m.

20

Heat Exchangers

Heat exchangers play an essential part in every gas-turbine cycle designed for high efficiency. They account for substantial proportion of the weight and space in many gas-turbine installations.

The perfomance of any heat exchanger is rated in accordance with its thermal ratio – sometimes known as “thermal effectiveness”. In practical figures the thermal ratio is taken as the temperature difference between the hottest gas and the coldest air (i. e. the difference between the gas inlet temperature and the air inlet temperature). Heat exchangers are made in both tubetype and plate-type alternatives. Two typical tubular designs are shown diagrammatically in Fig. 22. For heat exchangers of low thermal effectiveness the single pass cross-flow system gives the best practical results, taking up less space and using less material than the alternative contra-flow design. For thermal ratios in excess of about 50 per cent, however, a single pass cross-flow unit becomes wasteful of surface area and it is better to use multi-pass arrangements.

21

Steam power plant is an arrangement that converts the energy of fuel into mechanical energy. The design and operation of a steam power plant must take into consideration safety, reliability and economy.

The heat generated in the furnace is transmitted to the boiler, where it is used to change water, pumped by the feed pump into the boiler, into steam. The water-tube boiler consists of a steam drum or heater and several water drums, water heating tubes, furnace, superheater, air heater and economizer.

The heat developed in the furnace is radiated to the boiler tubes. The waterwalls of the screen take much of the furnace heat. The hot gases impart their heat to the boiler tubes. Then they are exposed to the heating surfaces of the economizer and air heater. This heat, along with the heat radiated from the furnace, passes through the walls of the tubes. It is absorbed by the water and steam is formed. To measure heat energy, a British thermal unit (B.t.u.) is used.

22

Before starting the boiler be sure that the boiler is filled with water to the proper level and give the usual inspection.

The valves should be given careful attention. The steam outlet should be closed; the drain valve between the stop and non-return valves open, the boiler vent open; water-column and gauge-glass connections open; water-column blow-off lines closed; the boiler drain closed; and the feed-water valve ready to admit water.

Start the feed pump and regulate the feed valve so as to admit water to the boiler slowly.

The try cocks on the water column should now be used to determine the correct water level. Water-column blow-down valves should likewise be tried to see if they are in working order. The burners and strainers should be inspected and cleaned, if necessary, as irregular feeding results in improper atomization. A draft

at the burner tip and throughout the furnace must be produced by opening the outlet damper to vent the furnace.

23

The Furnace

A furnace provides steady burning of fuel. It is restricted by surfaces forming combustion space.

The chief function of a combustion process is to obtain a through mixture of oil fuel and air and burn it in suspension. Hence, large furnace volumes are required. Furnace walls are lined with refractory fire brick and insulation able to withstand high temperatures.

To provide the efficient combustion process of burning oil fuel, a certain set of conditions is necessary: maintenance of high furnace temperature, provision of continuous oil-fuel and air supply and removing products of combustion.

Different types of burners have been designed for burning liquid fuel. Mechanical oil burners are employed to obtain efficient atomization.

Mechanical atomizing oil burners may be classified according to their method of atomization as centrifugal atomizers and rotary cup atomizers.

24

The units which make up a complete gas turbine power plant are: the compressor, combustion chamber, heat exchanger, intercooler, reheater, gas turbine itself.

The turbine carries the most highly stressed parts, its temperature limitations are usually the criteria which determine the maximum gas temperature of the cycle. Its efficiency (i.e. adiabatic efficiency) is of the greatest significance to the overall thermal efficiency of the assembly. Large gas turbines are almost all of the axial-flow type, with alternate rows of fixed and moving blades. They are similar in general to ordinary steam turbines. But there are many important differencies between steam and gas turbines. Gas turbines need special materials to withstand the high working temperature, special forms of construction to suit the peculiarities

of these materials and to accommodate the thermal expansion which takes place between the cold condition and full load operation. The expansion problems are especially severe after each start, when there is differential expansion between those parts which warm up quickly and those which take linger to reach a steady temperature.

25

Running and Maintenance

Gas turbines are started by motoring the compressor and associated turbine (generally only the H. P. units are motored in the case of complex cycles) up to a speed known as the "minimum self-driving speed". The external power needed for starting depends on the type of cycle, and may vary from about 0.5 per cent to 5 per cent of the full-load rating of the gas turbine; it is usually only needed for the first one or two minutes of operation.

The time required to bring a gas turbine up to full load depends chiefly on its size and on the extent to which it embodies cooling arrangements in its design. Large machines of heavier uncooled construction may need to be warmed up gradually over a period of several hours to ensure that all parts expand uniformly and maintain clearances at reasonable values.

26

Gas Engines

Gas engines are heat engines in which combustible gas, vapour, or vapourized oil burn in a cylinder, forming gases at high pressure and temperature, which expanding, push out a piston, and produce motion in an arrangement of parts so as to perform mechanical work.

As the burning of the fuel takes place inside the cylinder, gas engines are often termed internal combustion engines to distinguish them from such engines as stem engines in which combustion occurs under a boiler outside the cylinder.

Gas engines are ordinarily classified as follows: (a) constant pressure or constant volume cycle, (b) four stroke or two stroke cycle, (c) vertical or horizontal, (d) single acting or double acting.

Gas engines will be classified in all of the above groups as, for example, a constant volume, four-stroke cycle, vertical, single acting engine.

Constant Volume Cycle Engines are those in which the combustion is started by a spark or similar device which occurs when the combustible gases have been compressed to a predetermined volume, the resulting combustion being practically instantaneous and without change of volume being an explosion. This type is usually called the Otto Cycle Engine. The ordinary automobile engine is a common example.

Constant Pressure Cycle Engines are those in which the combustion is started by the heat of compression, the air having been compressed to such a degree as to produce sufficient heat for ignition, when the gaseous fuel is injected into the combustion space.

27

Steam Turbines

Before going into a study of turbine it is well to consider what is meant by an impulse force and a reaction force. If a suspended tank is filled with water, this water leaves the orifice at the bottom of the tank under the influence of its own weight; and the issuing jet will impinge on a block of wood hanging in front of the orifice and turn completely back on itself, but will give the block a tendency to move away from the tank. The force exerted by the water on the block is an impulse force. As the water leaves the tank, its action sets up a force against the tank tending to move the tank away from the block of wood. This force is a reaction force.

Diesel Engine Operation

Preparation for Starting and Starting the Engine.

All marine engines are started with compressed air and it is most important that the supply of starting air and the means for renewing it be ample.

The starting air is stored in tanks which may have a combined capacity of as much as 2,100 cubic feet. A good rule is to supply 35 c.f. of starting air storage for each engine for each c.f. of volume swept through by one piston in one power cylinder. The air is usually carried at 300 to 400 pounds pressure.

Preparations for getting under way are started in the engine-room an hour or more before leaving.

The first step is to turn each engine through a complete revolution with the turning gear to see that everything is free and clear for running, after which the turning gear is disconnected. The lubricating oil circulating pump is then started and an inspection made to see that the oil circulates freely and reaches all of the bearings.

Критерии оценки:

– степень понимания услышанной информации;

– полнота и правильность ответа на поставленные вопросы;

– языковое оформление ответа,

– точность и полнота перевода;

– степень осознанности, понимания изученного;

– степень использования изученной повседневной лексики/ профессиональной терминологии при ответе.

Показатели и шкала оценивания:

Шкала оценивания	Показатели

отлично	обучающийся в полном объёме, правильно понял информацию, осознанно и правильно ответил на все вопросы по теме/перевел/прочитал, продемонстрировал грамотное языковое оформление ответа, в полной мере использовал изученную повседневную лексику, профессиональную терминологию
хорошо	обучающийся достаточно полно, правильно понял информацию, осознанно ответил на все вопросы, допустив некоторые недочёты или одну негрубую ошибку, продемонстрировал грамотное языковое оформление ответа, в достаточной мере использовал изученную повседневную лексику, профессиональную терминологию
удовлетворительно	обучающийся понял более 50% содержания вопросов, ответил на 50 % вопросов, допустив некоторые недочёты и/или 2-3 негрубые ошибки, пользовался помощью преподавателя в виде наводящих вопросов, не в полной мере использовал изученную повседневную лексику, профессиональную терминологию
неудовлетворительно	обучающийся раскрыл менее 50% содержания вопросов, показал неграмотное языковое оформление ответа, допустив недочёты и грубые ошибки, в значительной мере пользовался помощью преподавателя, не использовал/ мало использовал изученную лексику

3.2.2 Задания для зачета

Форма зачета - устная

Условия выполнения задания

1. Место (время) выполнения задания: учебный кабинет

2. Максимальное время выполнения задания: 30 минут

3. Источники информации, разрешенные к использованию на зачете, оборудование: англо-русские, русско-английские словари, карточки с заданиями

Задания для зачета

3 курс, 5 семестр

1 *Чтение и перевод текста*

THE ICE-BREAKER “ERMAK”

The old way of travelling in the Polar region was by means of dogs and sledges. Dr Nansen proposed travelling by ship making her so strong as to resist the pressure of polar ice. But the best way to penetrate the Arctic region was by means of a powerful ice-breaker.

The 9,600-ton ice-breaker was built in England and the name of the conqueror of Siberia, "Yermak ", was given to her. Her first voyage was from Newcastle to St. Petersburg. Having entered the ice fields near Revel the ship had to force her way through 160 miles of ice. Nobody expected that the ship would go to Kronstadt in winter tune and her arrival in Kronstadt harbour caused quite a sensation.

Soon after the arrival of the "Yermak" in Kronstadt a telegram was received that thirteen steamers were caught in the ice near Revel, some of them being in danger. The "Yermak" went at once to Revel and opened the way for these and other steamers, the total number being forty-one, partly caught in the ice, and partly waiting in Revel harbour and other ports for several weeks. This work having been done, the "Yermak" again proceeded to Kronstadt and helped forty steamers going to St. Petersburg.

The ship was built for the Kara Sea where the ice is not very thick so it was decided to try the ship in heavy polar ice. In the month of June, the ice-breaker having-made her first passage in the polar ice, it was found that the ship had to be strengthened. For this purpose the ice-breaker returned to Newcastle and on August 6 the expedition entered the polar ice again. This time they were in the ice for two weeks covering during that period 230 miles in 87 hours. During the whole voyage there was an opportunity to study the nature of the polar ice, the "Yemiak" with her powerful cranes and winches offering a very efficient means for this investigation.

THE NORTHERN SEA ROUTE

One of the most important developments in the Russian Arctic since the Great October Socialist Revolution has been the decision to establish a sea route alone the northern coast of Siberia. These waters are known to be icebound and impassable for shipping for at least seven month in the year, and. in some parts even for ten. For a few months there is still plenty of ice around and this, in turn, causes fogs which appear to be most frequent when there is least ice. So it is not a very easy place for navigation.

In Russian times it was decided to make this route work. If all the points along the North Siberian shore could be used regularly for shipping, then a large area of unexploited territory would be utilized. First of all a route was established through the Kara Sea to the mouth of the river Yenissei, where the port Igarka was founded. Later some more new ports were built at the mouths of the great Siberian rivers.

In 1932 the steamship "Sibiryakov" was reported to have made the first voyage from Arkhangelsk to Vladivostok in one summer. Two years later the ice-breaker "Lidtke" is known to have completed the passage in the opposite direction, from Vladivostok to Murmansk. In 1936 seventy-five merchant vessels entered the Arctic and fourteen of them-sailed through to St. Petersburg from Vladivostok. Since that day the Northern Sea Route has proved to be passable for navigation every summer. It is interesting to note that the passage from Arkhangelsk to Vladivostok by way of the Atlantic, Indian and Pacific Oceans is about 14,000 miles long, as compared with the 6,000 mile voyage through the Arctic.

The need to have the best possible weather and ice reports required the establishment of number of radio and meteorological stations along the Arctic shores. A hydrographic service was organized to chart these unknown waters and to provide lights and buoys.

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Gales blowing for many days were hard tests for the men but they never complained. The ships arrived in our harbours in lime and when the dockers unloaded the cargo, merchant gunners stood by ready to repel the attacks of enemy from the air.

PROTOTYPE OF ROBINSON CRUSOE

If Alexander Selkirk had not requested to be left alone on an uninhabited island some two Hundred and fifty years ago, Daniel Defoe would perhaps never have written his famous novel *Robinson Crusoe.*

Born in 1676 at Largo in Scotland, Selkirk received a sound education.

At that period the East Coast of Scotland was a centre of merchant shipping. Alexander, who often visited the harbour, had a strong desire to go to sea to experience sea adventures. Had he not lived near the sea, this idea might not have occurred to him. If he had obeyed his father, who did not want him to go to sea, he would have never experienced hardships and perils at sea.

When nineteen years old, Selkirk made up his mind to run away from home. He offered his services to the master of a ship which was about to weigh anchor.

In 1701, he came back to Largo, but did not stay there, as the life of an adventurer seemed more attractive to him. Soon he obtained the position of sailing master on a ship. On September 4th, 1703, his ship sailed off from Bristol. A fair wind took the ship to Madeira. But the captain of the ship suddenly died, and the acting lieutenant was appointed to the command of the ship. Selkirk and the new captain could not stand each other, and one day Selkirk asked to be landed on the uninhabited island of Juan Fernandez.

There was much fresh water on the island and there were lots of goats that supplied him with food and clothing.

In January 1709, two English ships heading for the south ran short of water in the vicinity of Juan Fernandez. Captain Dampier directed them to the island because there was an abundant supply of fresh water there and they needed water badly. He knew the island to be uninhabited, but to his great surprise, he saw several bonfires on the shore.

When the sailors landed, they found Selkirk who had made those fires. Selkirk was cordially received on the ship, as he and Captain Dampier had known each other before. Thus, had it not been for the shortage of water on the two English ships, Selkirk-wouldn't have been found.

On Dampier's recommendation Selkirk was appointed the mate on one of the ships. When Selkirk appeared in London the story of his adventures aroused much interest. Every periodical in the city published articles about Selkirk, and it was then that Daniel Defoe decided to write his *Robinson Crusoe.*

SAILING ROUND THE WORLD

Magellan's voyage proved that men could sail round the world. It proved that the world is round.

Magellan was from Portugal. But he sailed for the king of Spain. On September 20, 1519, he left Spain with five ships and 240 men. He thought he could reach the

Spice Islands of the east by sailing west But he didn't know that the world was so big. He didn't know that there was a great ocean between die Americas and Asia.

Let's follow Magellan's voyage on a map of the world. We'll start at Spain. Magellan started there. It took him over two months to cross the Atlantic Ocean. In November, Magellan first saw the coast of Brazil in South America. Then he sailed south along the eastern coast of South America to the La Plata River. In March of 1520, he arrived in southern Argentina There he stayed for the winter.

When spring came, he was sailing again, and in October he discovered a strait. We now call the strait the Strait of Magellan. It is 350 miles long. It took Magellan thirty-eight days to sail through this strait and into another ocean. Magellan called it the Pacific Ocean because it looked so calm. The word “pacifico” means “calm” in Spanish.

After Magellan and his men sailed into the Pacific Ocean, they didn't see any land for almost 100 days. They ran out of food and were eating sawdust and even rats. At last they saw the island of Guam. They stopped there and found food and water. Again they sailed west, and in April of 1521 they reached the Philippine Islands. Magellan was killed there. He himself did not sail round the world. But some of his men did.

Only one of the five ships with thirty - one men returned to Spain. This ship sailed around the Cape of Good Hope at the southern tip of Africa, stopped for a short time at the Canary Islands, and arrived in Spain on December 21, 1521. It took these men over two years to sail round the world!

ADMIRAL S.O. MAKAROV

S. O. Makarov was born on December 28, 1848 into the family of a naval officer. He loved the sea very much and at the age often he entered the naval school in Nikolaevsk-on-the Amur. When he was studying at the naval school he had shipboard training on eleven different ships.

After school S. O. Makarov sailed in the Atlantic and Pacific Oceans. In the summer of 1869 he served on the armoured ship Rusalka.

In 1877-78 when Russia was at war with Turkey Admiral S. O. Makarov worked in the field of naval strategy. After the war when he was sailing on board the *Taman* in the Black and Mediterranean Seas he studied the direction of underwater currents in the Bosporus.

In 1886 on board the corvette Vitiaz S. O. Makarov started on his round-the-world voyage which lasted for three years.

It was S. O. Makarov who designed the famous ice-breaker "Yermak". It is important to note that the ice-breaker "Yermak" was the first ship in the Russian Merchant Marine to have radio equipment on board.

During the Russo-Japanese war S. O. Makarov was the Commander of the Pacific Fleet On April 18, 1904 he perished on board the cruiser Petropavlovsk.

DAILY ROUTINE

I live in St. Petersburg and study at the Admiral Makarov State Maritime Academy. I'm a first - year cadet of the Navigation Faculty (Department). I want to tell you about my working day. We have classes on week - days. Life at the Academy begins early on week - days. This is our daily routine.

We always get up at 6:45 a.m. Then we leave the living-quarters to do our morning exercises. After morning exercises we return to the living - quarters to wash, make the beds and clean the room. At 7:45 we line up and go to the dining-room to have breakfast At 8:30 we line up again for morning inspection.

Then we go to the classrooms. Classes begin at 9 o'clock. Cadet on duty must come to the classroom earlier to air it.

We usually have six classes a day. They last from 9 o'clock in the morning till 2 o'clock in the afternoon with five- or ten-minutes breaks after each class. During the breaks we smoke or talk. Our classes finish at 14:05.

So at 14:05 we line Up and go to the dining - room to have dinner. It takes us about half an hour to eat our dinner. After dinner we have some spare time. In spring and early autumn we play outdoors. In winter and late autumn it often rains in St. Petersburg, so we can't play outdoors and we usually stay indoors. Some cadets go to the gym hall to play games there other cadets go to the library to read. We take pan in social activities before preparation hours

During preparation period which starts at 17:55 we do our homework. At 19:00 we line up and go to the dining - room to have supper. After supper we return to the classrooms and go on with our homework till 21:55.

We go to bed at 22:4 5 after the "lights-out" signal. But before that we must line up for out evening roll-call.

FLEET COMMANDER AND SCIENTIST

Admiral Makarov was born on the 28 th of December, 1848 in the family of a naval officer. From his father Makarov inherited his love for the sea and at the age often he entered the Naval school in Nikolaevsk-on-Amur. During the time he spent at this school Makarov had training practice on board eleven different vessels. While sailing on board the cruiser "Bogatyr", he mastered the English language and even translated a book from English into Russian.

In 1865, having graduated from the Naval school with a brilliant record, Makarov sailed first in the Atlantic Ocean and then in the Pacific. In the summer of 1869 he served in the armoured ship the "Rusalka" which ran aground while cruising in the Finnish skerries. Later on, having analysed the causes of the shipwreck, Makarov came to the conclusion that it was necessary to study the question of the unsinkability of ships and he worked hard at this problem.

In 1877-1878, when Russia was at war with Turkey, Makarov worked much in the field of naval strategy and torpedo attack. After the Russo-Turkish war Makarov was given command of the ship "Taman" which sailed in the Black and

Mediterranean seas, and on this ship Makarov began to study the direction of underwater currents in the Bosphorus".

From 1886 to 1889 Makarov was making his famous round-the-world voyage on board the corvette "Vitiaz". When sailing in the Pacific, Makarov made most valuable hydrological observations which later on were used by him in his book called "The 'Vitiaz' and the Pacific". Admiral Makarov was the first who proposed the construction of the ship that could sail in the ice fields of the Arctic. Thus, the famous ice-breaker "Yermak" was built according to Makarov's design. How perfectly the "Yermak" was designed can be seen from the fact that in 1938 she set a record for Arctic navigation. Foreseeing the unlimited possibilities of wireless communication on board ships, Makarov systematically assisted A. S. Popov in his work. It is interesting to note that the ice-breaker "Yermak" was the first ship in the Russian merchant fleet with radio equipment on board.

Having been appointed commander of the Pacific fleet during the Russo-Japanese war, Makarov displayed quite unusual military talents but unfortunately, two months later, he lost his life tragically on board the cruiser "Petropavlovsk" which struck a Japanese mine on April 18, 1904.

Admiral Makarov will live in the memory of the Russian people not only as a brilliant fleet commander respected by officers and sailors, but also as an outstanding scientist known far beyond the borders of our country. Admiral Makarov wrote more than 50 important books on different subjects of nautical science. Many of them, being of great scientific value, are used even today.

THE MПRTHERNSEA ROUTE

One of the most important developments in the Russian Arctic since the Great October Socialist Revolution has been the decision to establish a sea route along the northern coast of Siberia. These waters are known to be icebound and impassable for shipping for at least seven month in the year, and in some parts

even for ten. For a few months there is still plenty of ice around and this, in turn, causes fogs which appear to be most frequent when there is least ice. Sort is not a very easy place for navigation.

In Russian times it was decided to make this route work. If all the points along the North Siberian shore could be used regularly for shipping, then a Large area of unexploited territory would be utilized. First of all a route was established through the Kara Sea to the mouth of the river Yenissei, where the port Igarka was founded. Later some more new ports were built at the mouths of the great Siberian rivers.

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OUR SAILING PRACTICE

In spring we shall take our examinations. As soon as we pass them we shall have our sailing practice. We are going to have a voyage in the Baltic Sea. It will be our practice on the "Sirius". It is a training ship, she is sailing vessel. She usually sails between St. Petersburg and other ports of the Baltic. The captain of the ship is Comrade Voronov. He is an old experience captain. We shall be glad to work under him. His chief mate is Comrade Petrov. He is a graduate of the Odessa Marine College. The crew of our ship consists of 30 members.

When we have our practice our life will be a very busy one. On the board the ship we shall work as sailors. As a rule we shall get up very early. We shall work as sailors. As a rule we shall get up very early. We shall stand at the wheel, wash and scrub the deck and study seamanship and navigation. As our crew is not large, we shall often be on watch. Before we leave we shall paint our ship. We shall put to sea at the end of June. The ship will be bound for Riga. On our way to Riga we are going to call at some ports. After we unload the cargo, we shall be able to get leave of absence and go ashore. If the ship stays in the port for some days, we shall be able to do the town.

Our sailing practice will last about three months. If the weather is favorable, it will be pleasant to be at sea. At the end of August our sailing practice will be over. When our practice is over we shall be glad to see our relatives and friends again. We shall have to return to St. Petersburg between the 25-th and the 30-th of August. After we come back, we shall begin our studies. Our school-year will begin on the 1st of September.

SHIPBOARD TRAINING

Russia has excellent facilities to train officers and ratings for the Russian Merchant Marine. In Russia there are several motor vessels, large sailing vessels, many yachts and other types of smaller vessels for training merchant seamen.

The cadets of Makarov State Maritime Academy in St. Petersburg have a good opportunity to develop their practical skills aboard five modern training vessels. The port of registry of the vessels is St; Petersburg. During the voyages the vessels call at different ports of Europe. The cadets work under the direction of the ship's officers and the Academy teachers.

The aim of the shipboard training is to train skilful ship's officers. While having their shipboard training the cadets must do all the necessary work on board. They must keep watches, wash the deck, act as look-outs in any weather. After their shipboard training senior cadets are able to solve problems of navigation, plot the course of the ship, find her bearings, use radars and other modern radio equipment, operate her engines.

While being on board ship the cadets can collect information for their research work but they always have to keep their eyes and ears open. If they don't they can miss many important things.

The Professor Urhov is one of the typical Russian training motor vessels. She is of 5,495 dead - weight tons (dwt). She has a crew of 49 and can also take up to 150 cadets and a teaching staff of ten. Her speed is 15 knots. Her draught is 7 metres.

There are many modern facilities for training cadets on board the Professor Urhov; a training bridge for navigating cadets, a training engine-room for engineer cadets, up-to-date radio equipment for radio- engineer cadets. You can also find several classrooms, laboratories (labs) and a library on the ship. But the Professor Urhov isn't only a training ship. She is a cargo ship, too. She can carry up to 4.000 tons of cargo.

In 1974 the Professor Urhov was on a special visit to London in connection with the International Conference on Safety of Life at Sea. The high level of training in the Russian Merchant Marine made a great impression on the foreign delegations which visited the ship.

THE ANTARCTIC VOYAGES OF TWO SISTER-SHIPS

Two diesel-electric ships, the "Ob" and the "Lena", were specially designed and built for Antarctic research.

Their first important task consisted in carrying people, building materials and scientific equipment to the Antarctic continent and helping the construction of Mirny, the first base and station there. In November 1955 the expedition left Kaliningrad on the "Ob", the "Lena" following her sister-ship in December After a very heavy passage the ships reached Mirny in the second half of January and started their unloading. During the unloading, the weather was frequently bad, the tractor trails from the ship to the base were often out of order and the two ships kept on changing their anchorages. In March the "Ob" and the "Lena" left Mirny and began carrying out their programme of oceanographical work in the southern seas. Both the ships arrived in St Petersburg in July 1956 greeted by thousands of enthusiastic citizens who had read much about the ships having successfully made this most difficult and dangerous passage.

The second Antarctic voyage of the “Ob” and the “Lena” lasted seven and a half months during which the ships covered more than 40,000 miles. After leaving

Kaliningrad on the 7th of November 1956, the "Ob" arrived at Mirny on December 11, the "Lena" joining her in a month's time. On being prevented by ice from going to the unloading place at Mirny, the "Lena" continued sailing westwards along the coast, without finding a safe anchorage. After covering some 200 miles the "Lena" managed to land the aircraft which was urgently required for the purpose of setting up the purpose of setting up the inland stations.

In January of 1957 the "Ob" was sailing westwards along the Antarctic coast carrying out her research work. On the 28th of February this scientific work was interrupted because a radiogram was received about the Japanese ship's "Soya" being caught in heavy Antarctic ice. Realizing the danger the "Soya" gave distress signals. The "Ob" immediately altered her course and after some time succeeded in releasing the "Soya". So, the Japanese ship was rescued by the Russian ship "Ob". Japanese papers then wrote much about the Russian ship's having performed this heroic act in the Antarctic waters rarely visited by ships. On successfully finishing her salvaging operation, the "Ob" continued her research, the programme being wide and various.

The "Lena's" scientific task being more limited, about 3,000 miles of coastline were nevertheless photographed and a special study of sea ice was carried out.

FRANCIS CHICHESTER - CONQUEROR OF THE SEAS

On May 28, 1967, at 8 p. m. the famous round-the-world navigator crossed the breakwater of Plymouth Harbour to the cheers of the crowds who had gathered here to welcome him home. Sir FRANCIS CHICHESTER, conqueror of the seas, was preparing to set foot on land for the first time in 119 days.

FRANCIS CHICHESTER had started on his round-the-world voyage from Plymouth on August 27, 1966. A crowd of a few hundreds watched his yacht Gypsy Moth IY as she was leaving the harbour.

During the first part of his voyage CHICHESTER was detained by the leaks in the yacht and some technical troubles.

In the Indian Ocean the yacht's self-steering gear had broken and he had to use all his engineering skill to repair it.

CHICHESTER wanted to reach Sydney in 100 days, but he was becalmed off the coast of Australia and arrived in Sydney on December 12, 1966, 107 days after he had left Plymouth.

In Sydney Sir FRANCIS looked tired and worn out after his 13,750 miles of isolation and straggle against the elements, but he ignored his friends and yachting experts who asked him not to make the trip back to Plymouth round Cape Horn. After he had made repairs and alterations to the yacht, he left Sydney on January 29, 1967.

Fears for CHICHESTER's safety intensified after Gypsy Moth had overturned just two days out of Sydney. But me brave mariner battled on, and successfully rounded Cape Horn 50 days later.

The sighting of a few ships and a radio were his only contacts with the outside world. He used the radio seldom so as to conserve the batteries in case of an emergency. Before CHICHESTER reached England, he had radioed Plymouth saying: "I hope I shall have come by the evening of the 28th."

Half a million people had come to welcome the 65 year old mariner. Humphry's Wharf was decorated with signal flags which spelled the simple message: "Welcome Francis! "

The press of the nation, and of the world, were ready to broadcast the news of his landing to the millions everywhere.

Deeds of courage are nothing new for FRANCIS CHICHESTER. In 1929 he flew solo to Australia in a Gypsy Moth biplane, in 1930 he flew a Gypsy Moth seaplane from New Zealand to Japan. In 1960 aboard Gypsy Moth III he sailed into New York as the winner of the first transatlantic solo race.

AN ACCIDENT AT SEA

The arrival of the cargo ship *Igarka* was delayed due to a severe storm in the North Sea. The wind force was about 20 metres per second and as the Captain of the *Igarka* had reported to the shore station it was difficult for the ship to keep her course.

The ship could make only 2 or 3 miles per watch as her propeller was seriously damaged. The damage to the propeller had occurred before the storm began, when a floating log struck against the propeller and damaged it.

Captain Gavrilov decided to continue the voyage and to repair the propeller at the port of destination. The storm was becoming stronger and stronger and the wind reached the hurricane force. The ship had a list to starboard. Due to a considerable pitching and rolling the list was gradually increasing and soon it reached 25 degrees.

The situation was very dangerous, as the ship could capsize. The Master ordered the Chief Officer to inspect the holds and to find out what caused the list.

Soon the Chief Officer returned to the navigating bridge and reported:

"The cargo in holds one and two has shifted to starboard, sir."

"Had you inspected the holds before leaving Glasgow?"

"Yes, but most probably the cargo wasn't properly fastened by the British stevedores."

Suddenly the list increased and they heard the voice of the Second Officer:

"Boatswain Gromov has fallen overboard!" "Stop engine! Slow astern! Steady! Switch on the searchlight!" the Master commanded.

Soon the ray of light pierced the darkness and the seamen saw the man who was fighting the waves to keep himself on the surface.

"Launch the life-boat. Eight hands in the boat!" ordered the Captain.

The sailors rushed to the life-boat. Pushed by the wind it moved fast to the Boatswain who was becoming weaker and weaker. Soon the seamen's strong hands helped the man out of the water arid some minutes later the boat and the people were on board ship again.

When the ship's doctor was rendering the Boatswain the first aid the crew heard the Captain's command:

"All hands into holds! Fasten the cargo!"

Everybody rushed to the holds. The sailors did their best to save the vessel and the cargo. After they had fastened all the shifted boxes, bales and bags the list decreased to 10 degrees. The ship could proceed to the port of destination.

By the time of the arrival the wind and the sea had moderated. The *Igarka* moored in the port of Archangelsk with a 35 hours' delay. One more voyage was over

2 Поддержать беседу на предложенную тему:

About you and your family.

Around the Institute.

Around the ship.

Around your Institute.

Biography.

Describe the picture.

Duties of a motorman.

Duties of engineers

Duties on board a ship.

English in your profession

Family life.

Free-time activities. Your hobby.

Healthy style of life.

Internet, its advantages and disadvantages.

Location of safety equipment on board your vessel.

Principal particulars of the ship, parts of ships.

Safe working practice.

Safety system on board a ship.

Ship's crew.

Shipboard training.

Speak about your daily routine.

Sport in your life.

Types of ships.

What did you do yesterday?

Your own room (your cabin).

Your plans for the future.

3 *Укажите единственно правильный вариант ответа.*

1. What ___ now, Sasha?

are you doing; c) do you do;

did you do; d) were you doing.

2. What language ____ in foreign ports?

do you usually speak; c) did you usually speak;

are you usually speaking; d) were you usually speaking.

3. He is in his cabin now. He ___ about his future voyages.

is thinking; c) thought;

thinks; d) was thinking.

4. Yesterday he got up, washed his face, had breakfast and _____ to the University.

goes; c) went;

is going; d) was going.

5. They ____ the cargo the whole week.

unloaded; c) unload.

were unloading;

6. The Second Engineer ____ the main engine yesterday.

overhauls; c) is overhauling;

overhauled; d) was overhauling.

7. The cadets _____ the hull at 3 o'clock yesterday.

was painting; c) painted.

were painting;

8. It is 2 o'clock. The Officers _____ watch in 4 hours.

keep; c) will keep;

was keeping; d) kept.

9. When the Officers comes, we ____ to plot the ship's position.

learn; c) learnt;

will learn; d) are learning.

10. We _____ English since we entered the Institute.

studied; c) have studied;

study; d) has study.

11. Next week we ____ come into that port.

come; c) will come;

came; d) were coming.

12. This equipment ____ modern

is; c) are

am;

13. They ____ their homework at the moment.

do; c) are doing;

does; d) were doing.

14. I ____ to London.

have never been; c) will never been.

had never been;

15. When the master the radio-room, I ____ a weather report.

was receiving; c) received;

receive; d) am receiving.

16. When summer comes, they ____ shipboard training.

have; c) will have

had; d) are having

17. Tomorrow I ____ to the port.

go; c) went;

will go; d) was going.

18. I ___ him for half an hour.

have known; c) know;

knew; d) will know.

19. He ____ by sea yet.

has never been; c) is never been;

have never been; d) will never be.

20. We ____ at the Arctic Maritime Institute.

studies; c) studied;

study; d) have studied.

4 Укажите единственно верный перевод слова.

1. брать

to take; c) to put;

to work; d) to see.

2. работать

to overhaul; c) to work;

to repair; d) to lubricate.

3. входить

to come; c) to go;

to enter; d) to carry.

4. красить

to paint; c) to scrub;

to clean; d) to work.

5. нести вахту

to keep watch; c) to clean the deck;

to watch keep; d) to sail.

6. оставлять, покидать

to live; c) to take;

to leave; d) to bring.

7. приказывать

to tell; c) to watch;

to order; d) to explain.

8. понимать

to know; c) to understand;

to study; d) to call.

9. to check

проверять; c) чистить;

ремонтировать; d) мыть.

10. to call at

заходить (о судне); c) управлять (судном);

ходить (в море); d) слушать.

11. to carry, to transport

перевозить; c) осматривать;

прибывать; d) посещать.

12. to load

грузить; c) укладывать;

разгружать; d) перевозить.

13. to repair

осматривать; c) настраивать;

ремонтировать; d) смазывать.

14. to study

учиться; c) писать;

читать; d) слушать.

15. to visit

ходить; c) плавать;

посещать; d) читать.

Задания для зачета

3 курс, 6 семестр

1 Поддержите беседу по предложенной теме

Arkhangelsk – a cultural and industrial centre.

Arkhangelsk – a large port.

At the airport.

Duties of a motorman.

Duties of engineers

Ecological problems and my profession.

Moscow.

Russia.

Visit to a doctor.

At the Messroom

2 Перевести предложения

Возьмите эти документы.

Не мойте палубу.

Я знаю много типов судов.

Она не изучает английский.

Мы сдаем экзамен (сейчас).

На каком судне вы работаете?

Кто помогал Вам?

Он поможет нам получить документы.

Мы должны выйти из порта.

Я занимался спортом.

Дайте мне Ваш паспорт моряка.

Не помогайте мне.

Мы часто проверяем спасательное оборудование.

Мне не нравится моя работа.

Матрос красит корпус (сейчас).

Где Ваш капитан?

Как Вам понравился суп?

Я провожу Вас до судна.

Мы должны встретить членов экипажа во вторник.

Я учился в институте.

Идите в машинное отделение.

Не говорите по-русски.

Мы ходим в институт шесть дней в неделю.

Я не работаю на танкере.

Он читает текст (сейчас).

Что Вы делаете сейчас?

Сколько времени Вы добирались до судна?

Когда Вы с нами встретитесь?

Я могу перевести этот текст.

Мы изучали навигацию.

Следуйте за мной.

Не ходите на мостик.

33 Он часто встречается с друзьями.

Я никогда не хожу в увольнение.

Он ремонтирует двигатель (сейчас).

Где Вы учитесь?

Где Вы работали?

38 Мы окончим институт через два года.

Вы должны проверить документы.

Мне нравилась астрономия.

Улучшайте Ваш английский.

Не давайте ему карту.

Мне нравится мой институт.

Мой брат не работает.

Матрос моет палубу (сейчас).

Сколько времени Вам нужно, чтобы отремонтировать двигатель?

Мы учились в институте.

Он будет работать в крюинговой компании.

Я могу говорить по-английски.

Где Вы работали?

Познакомьтесь с нашим старпомом.

Не берите эти документы.

Я работаю на танкере.

Этот человек - не наш старпом.

Он спит (сейчас).

Вы часто ходите в увольнение?

Мы ремонтировали двигатель в прошлом году.

Мы встретимся через два дня.

Можете ли Вы ответить на вопрос?

Кто работал вместе с Вами?

Переведите это предложение.

Не ходите в увольнение.

Этот человек - наш старпом.

Мы нечасто проверяем спасательное оборудование.

Мы завтракаем (сейчас).

Где Ваши документы?

Я работал на контейнеровозе.

Я стану судоводителем.

Он должен идти.

Я не работал не ледоколе.

Помогите Вашему матросу.

Не следуйте за мной.

Я иногда хожу в увольнение.

Он нечасто встречается с друзьями.

Мы проверяем спасательные средства (сейчас).

Кто прокладывает курс?

Мой друг занимался спортом.

Где Вы будете работать?

Можно мне выйти?

Мы не мыли палубу.

Покрасьте корпус.

Не переводите этот текст.

83 Мой брат работает на буксире.

Я не знаю этого человека.

Он проверяет сигнализацию (сейчас).

Кто отвечает за службу эксплуатации?

Все были на борту судна в 10.00.

Мы пойдем в кино.

Вы можете быть свободны.

Меня не было дома

Вымойте палубу.

Не красьте корпус.

Она изучает английский.

Мы не ходим в институт каждый день.

Я ищу документы (сейчас).

Кто работает в машинном отделении?

Кто изучал английский в школе?

Мы будем друзьями.

Вы можете идти.

Он не был в увольнении.

Прямо руль

Лево/право пять

Лево/право десять

Лево/право пятнадцать

Лево/право двадцать

Лево/право двадцать пять

Лево/право на борт

Лево/право не ходить

Отводи

Одерживай

Отводи до пяти/десяти/ пятнадцати/ двадцати

Так держать

Держать буй/ориентир/знак/слева/справа

Доложить, если судно не слушается руля

От руля отойти

(Левая/правая машины) Полный вперед/назад.

(Левая/правая машины) Средний вперед/назад.

(Левая/правая машины) Малый вперед/назад.

(Левая/правая машины) Самый малый вперед/назад.

Стоп (левая/правая) машины(-а).

Самый полный вперед/назад.

Товсь машина.

Машина(-ы) не нужна (не нужны).

Носовое подруливающее полный/средний влево/вправо.

Кормовое подруливающее полный/средний влево/вправо.

Носовое/кормовое подруливающее стоп.

Критерии оценивания заданий

– точность и полнота перевода;

–правильность понимания собеседника;

– правильность реагирования на реплики собеседника;

– степень осознанности, понимания изученного;

– грамотное языковое оформление ответа;

– степень использования изученной повседневной лексики/ профессиональной терминологии при ответе.

Шкала оценивания	Показатели
зачёт	обучающийся правильно выполнил задание (перевел/понял собеседника/ поддержал беседу) более чем на 50%, показал развитое умение работать с профессиональной терминологией и грамотное языковое оформление ответа, не допустив ошибок/допустив некоторые недочёты и/или 2-3 негрубые ошибки, не пользовался/ умеренно
незачёт	обучающийся выполнил менее 50% задания (перевел/понял собеседника/поддержал беседу), показал недостаточно развитое умение работать с профессиональной терминологией, неграмотное языковое оформление ответа, допустив недочёты и грубые ошибки, в значительной мере пользовался помощью преподавателя