KAVALA INSTITUTE OF TECHNOLOGY

CENTRE OF FOREIGN LANGUAGES & PHYSICAL EDUCATION

Department of ……

E.S.P.P.C.

ENGLISH FOR SPECIFIC PROFESSIONAL PURPOSES CERTIFICATE EXAM

PART I: TECHNICAL & ACADEMIC WRITING PRODUCTION

Candidate's
surname: ……
name: ……..
father's name: ……

DATE….

Instructions:

- **Respond to two (2) out of the three (3) tasks given.**
- **Write your texts on the pages provided inside the booklet.**
- **Do not write your name in or under either of your texts.**
- **Time allowed: 90 minutes**

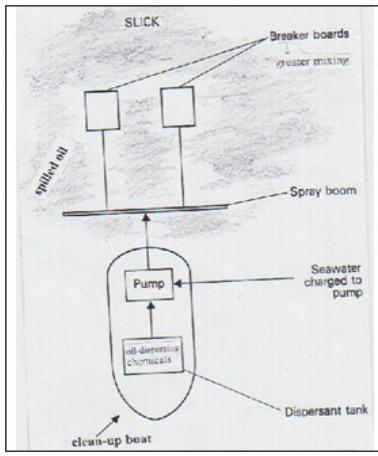
***** This part of the exam will count for 40% of the total grade. *****

TASK 1

Use the picture below to write a paragraph (120-150 words) describing how clean–up boats apply chemicals to disperse oil slicks.

The paragraph should begin:

"One of the methods of oil removal is the one using chemical dispersants, which is described in the picture."



The oil company you are working for has recently faced an accidental oil spill from an offshore oil field.
After taking part in this oil dispersant operation, you should write a report (120-150 words) to the rig supervisor (Mr Thompson) to inform him about the clean-up procedure that was applied to the oil spill. The equipment used and the process followed are shown in the picture.

(2009 E.S.P.P.C. exams, PETROLEUM TECHNOLOGY)

TASK 2

Write a data-comment paragraph (120-150 words) to accompany the following graph. The paragraph should begin:

"As demonstrated by the graph, during the 1992-1994 period the steel production of the Chinese company had a small rise."

TASK 3

Imagine that you are interested in the position advertised below. Read the job advertisement below and write your letter of application (120-150 words).

Nursery Manager, Towner State Nursery
Posted on Wednesday, December 3, 2008

The Forest Service is currently seeking a qualified person to coordinate and direct the tree production program at Towner State Nursery. Applications must be received by June 16th, 2009. This is a full-time, benefited position.

Position Description:
*administering conifer tree seeding production at Towner State Nursery
*coordinating on-site activities for the annual production of 1.2 million seedlings.

Personal qualities
** collaboration and teamwork*
** communications and customer service*
** professionalism and responsibility*
** strategic thinking and decision-making*
** continuous improvement.*

Minimum Qualifications:
** Bachelor degree in forestry, biological sciences, agricultural economics, horticulture, or a closely related field (5 years of greenhouse or tree nursery experience may substitute);*
** Demonstrated oral and written communication skills in English;*
** Computer technology expertise (proficiency with Word, Excel and Power Point);*
** Valid driver's license;*
** Ability to obtain commercial pesticide applicator's licenses in greenhouse*

Preferred Qualifications:
** Three (3) years of supervisory experience with high level of interpersonal skill to motivate others in addition to minimum qualification OR*
** three (3) years of forest tree nursery production experience in addition to minimum qualification.*

E.S.P.P.C.

ENGLISH FOR SPECIFIC PROFESSIONAL PURPOSES CERTIFICATE EXAM

Department of ……

PART II: READING COMPREHENSION OF TECHNICAL & ACADEMIC TEXTS

Candidate's
surname: ……
name: ……..
father's name: ……

DATE……..

Instructions:

- **Answer all the questions.**
- **Write your answers on the booklet.**
- **Do not write your name inside the booklet.**
- **Time allowed: 90 minutes**

***** This part of the exam will count for 30% of the total grade. *****

- **TASK 1: Read the following extract and complete the statements that follow by circling the option (*A*, *B* or *C*) which you think fits best according to the text.**

Waste vegetable oils as a fuel

Waste edible oils and fats pose significant disposal problems in many parts of the world. In the past much of these waste products have been used in the production of animal feeds. However due to possible links between BSE and this practice, the use of waste edible animal fats for animal feed is not as common as it once was, resulting in disposal problems. As it is often difficult to prevent the contamination of waste vegetable oil with animal products during cooking, waste vegetable oil often must be treated in a similar manner as is waste animal fats.

One possibility for the disposal of these products is as a fuel for transport or other uses. Conversion of waste oils and fats to biodiesel fuel has many environmental advantages over petroleum based diesel fuel. However it is not commercially available in Australia and the "back yard" production of biodiesel may present serious risks as the process uses methanol, a toxic and flammable liquid, and sodium or potassium hydroxide, both of which are caustic. By-product disposal may present further difficulties and environmental considerations may preclude production in sensitive areas.

An alternative to the use of biodiesel is the use of vegetable oil or rendered animal fats as fuel.

Using unmodified oils not only eliminates problems such as residual biodiesel alkalinity by-product disposal, but also increases the economic viability of using the oil or fat.

While the use of vegetable or animal oils and fats as fuels may be somewhat surprising at first, when examined in an historical context we can see that the compression ignition engine, first developed to a usable level of functionality by the French-born Rudolf Diesel near the end of the 19th century, was originally designed to operate on vegetable oil.

In 1990, Rudolf Diesel demonstrated his new compression ignition at the World Exhibition in Paris running on peanut oil. In 1911 he wrote "The engine can be fed with vegetable oils and would help considerably in the development of agriculture in the countries that uses it".

It was about this time that new drilling technology and exploration techniques were developed and together these ushered in the age of cheap and plentiful fossil fuels. Consequently, the use of vegetable and animal oils and fats as fuels has only been used for a few special purposes such as in racing fuels or in environmentally sensitive areas where petroleum spills tend to cause more serious problems than do spills of animal and/or vegetable derived fuels.

After some one hundred years of using liquid petroleum fuels, we are now finding that there are unforeseen side effects, the foremost perhaps being the so-called Enhanced Greenhouse Effect.

In Australia, transport use contributes some 16% of Australia's greenhouse gas emissions. Of this, diesel fuel contributed about 17% or 11,705,000 tones of CO2 equivalent. An additional 1,622,000 tones is released from diesel fuel used for electricity generation. On top of greenhouse gas emissions is the vexing question of how little –or much– is left.

However oils of vegetable and animal origin, unlike fossil fuels, have to potential to be produced not only on a sustainable basis but also could be greenhouse gas neutral, or at the very least, emit substantially less greenhouse gases per unit energy than do any of the fossil fuels.

1. What makes it necessary for waste vegetable oil to be treated similarly to waste animal fats is

A) that both cause significant disposal problems to rich countries.

B) that waste vegetable oil can be contaminated due to cooking with animal products.

C) that there can be links between BSE and the production of animal feeds.

2. Biodiesel fuel which derives from waste oils and fats may be

A) equally advantageous to petroleum based diesel fuel concerning environment.

B) consumed only as transport fuel.

C) dangerous for the environment because of the caustic substances used for its treatment.

3. One could choose unmodified oils as fuels because

A) they are environmentally-friendly and economical.

B) they are cheap and increase environmental problems

C) they do not cause problems due to their economic viability.

4. Compression ignition engine was

A) first built to work on vegetable oil.

B) a surprising development of a converted diesel engine.

C) the French model of diesel engine to operate on vegetable and animal oils.

5. The use of unmodified oils as transport fuels was not well received in the market due to

A) the shortage of natural resources.

B) cheap and abundant fossil fuels which resulted from the use of new technologies in drilling oil.

C) their special purpose use as racing fuels.

6. The unexpected side effects caused by the long use of petroleum fuels

A) were realized long after petroleum fuels had been used.

B) took a short time to be estimated.

C*)* were considered soon after the appearance of the Greenhouse Effect.

7. Australia's greenhouse effect is due to

A) the use of diesel fuel by vehicles.

B) both electricity generation and car engines' emissions.

C) the use of fossil fuels as an energy fuel.

8. One reason one could prefer unmodified oils to fossil fuels is because

A) unmodified fuels, although they produce more energy, contribute to greenhouse effects.

B) fossil fuels have a neutral attitude to environmental pollution.

C) unmodified oils contribute to the clean energy production.

- **TASK 2: Read the following text and decide whether the statements below are *True*, *False*, or *Not Stated*. Put a tick (√) in the space provided.**

Making profits in year 1.

Starting business in Japan is not difficult and neither does it need to be expensive. If you have a unique and good quality product or service then by carefully controlling your starting costs you will be profitable in your first year in the Japanese market. It's that simple. The trick is understanding Japanese business and the mentality of Japanese businesspeople well enough to be able to control your costs.

This is a great time to make a decision to start doing business in Japan, especially if you are a European company that can benefit from the investment edge offered from the presently strong Euro and for US companies that will benefit from the new US-Japan tax treaty. The costs of starting business in Japan have reduced dramatically due to the domestic recession and resulting price deflation of the past 8-10 years. Office rents are significantly lower as land values have continued to decline since the bursting of Japan's property bubble at the end of the 1980s. Japanese salaries have reduced in real terms as many companies have used the recession as rationale to decrease the summer and winter bonuses traditionally paid to most Japanese employees and for many employees guaranteed annual salary increases have become a thing of the distant past. Having said that, the Japanese economy is now (July 2004) rebounding at an astonishing rate and it was just announced that summer bonuses are back to near-record levels with some companies paying as much as ¥1million (US$9,260) to each employee. While good for the consumer markets it is also an indicator of potential pent-up salary demand which will make it much more expensive to establish in Japan for companies that delay the decision to enter the Japanese market. At this time it is still true to say that Japanese employees' previous expectations of regular annual salary raises, jobs for life and other former obstacles to foreign companies setting up a Japanese office or Japanese company have been radically reduced in the past 10-15 years. Given Japan's aging and declining workforce though, and government predictions of severe shortages of labour in certain industries well before the end of this decade, the market climate for new entrants may soon change. My advice is to start now, get established at relatively low cost so that

future revenues are stable before any inflationary pressure emerges. Those companies that do not start now will find it much more difficult to start in 3 or 4 years time.

Given the presently low cost of entering the Japanese market, there is no reason why a foreign company with a competitive product or service and a winning attitude should not make substantial profits in Japan within their first year of operations here and, depending on industry-specific factors, be contributing 30% to your global profits within 3 years.

The first and maybe most obvious advice to give any foreign company that is thinking of doing business in Japan, is to be properly prepared and thinking as a team from frontline sales-marketing to Board director. A properly prepared entry into the Japanese market will generate substantial levels of revenue, profit and all the glories that go with them. Success doing business in Japan will also significantly enhance a company's valuation because investors will correctly perceive that a company able to succeed in the Japanese market is a company that will succeed everywhere. Conversely, a failed attempt at Japanese business is not only soul-destroying for those involved but can cost a company heavily both in cash and credibility.

	True	***False***	***Not Stated***
9. Japanese market is quite demanding for someone who wants to run a business there.			
10. Offering high quality products or services and consideration of financial issues are both necessary if you want to have a profitable first year in the Japanese market.			
11. There are no anticipated problems for foreign companies who start business in Japan.			
12. The strength of the European currency enables European companies to make successful business in Japan.			

13. Because of the local recession in the Japanese market, foreign investors have to make high expenditures in case they want to start business there.			
14. The value of property in Japan has been continuously decreasing for about thirty years.			
15. The majority of employees, who used to receive extra money in winter and summer, do not get an increase in their annual salary any more.			
16. There have been fewer obstacles to foreign companies setting up a Japanese company in the last 10-15 years.			
17. Japanese companies with foreign business associates make substantial profits in Japan within their first year of operation.			
18. The prerequisite for a firm to gain success entering business in Japan is to be properly prepared.			
19. Companies' success or failure in the Japanese market is evaluated by the investors accordingly.			

- **TASK 3: You are going to read a text describing the reciprocating petrol engine. Complete the eleven (11) gaps in the diagram that follows with the missing components of the engine.**

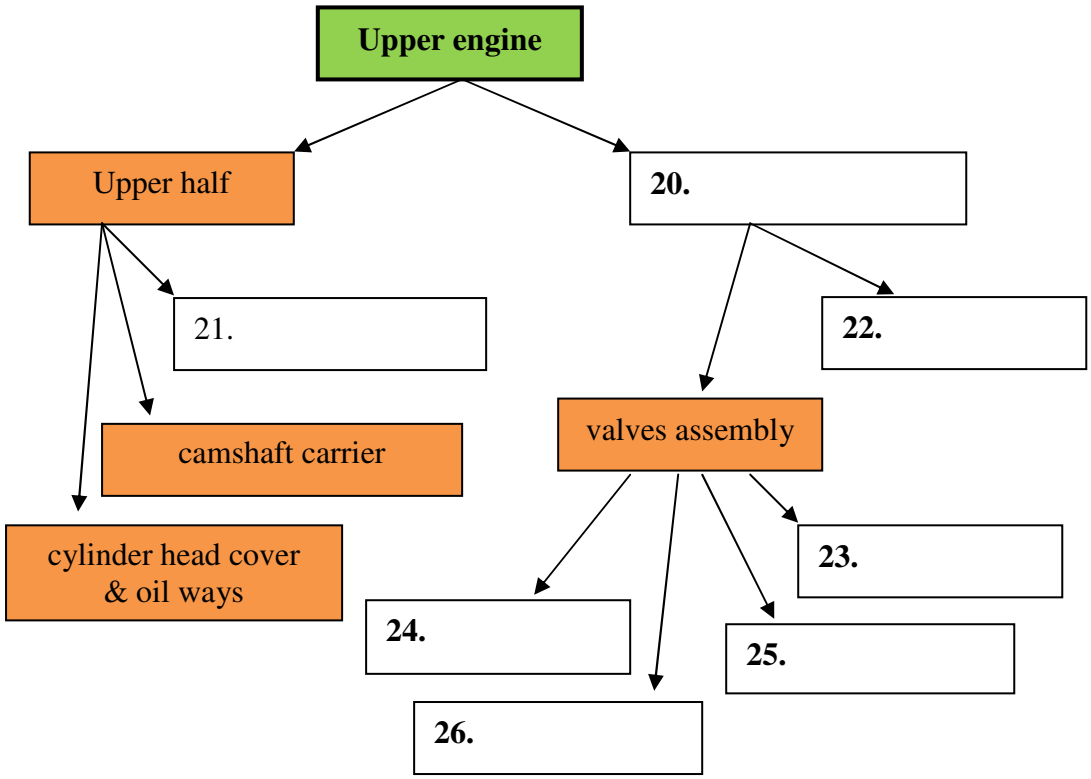
The reciprocating petrol engine

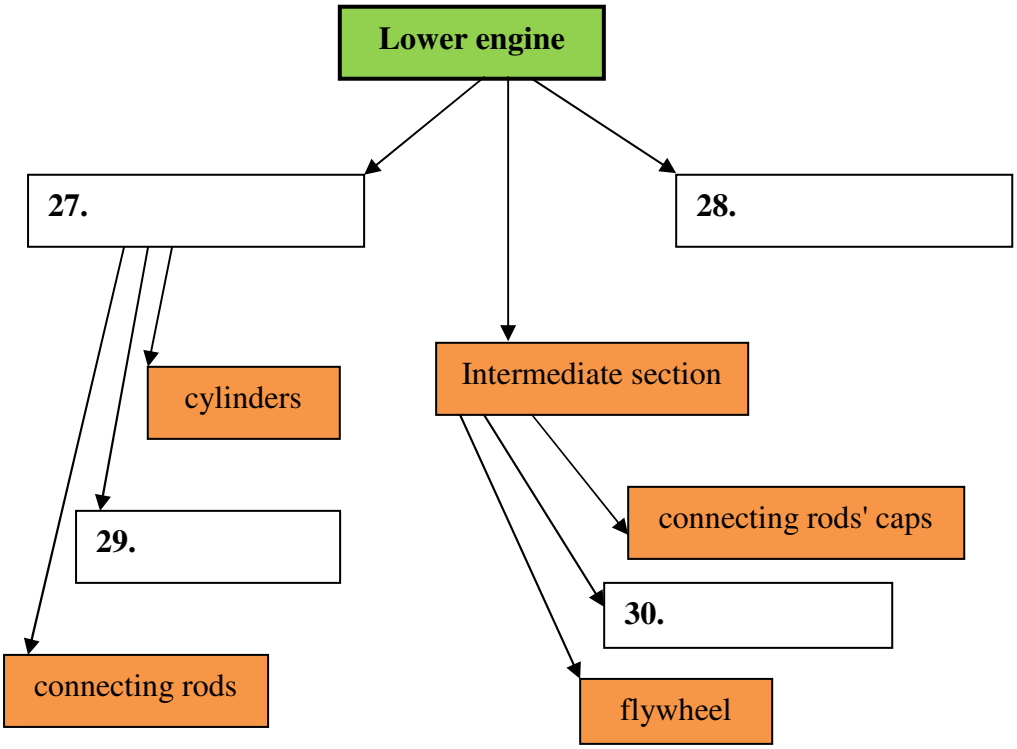
The engine of most passenger cars is of the reciprocating type and uses petrol as a fuel. It is manufactured of light aluminium alloy and is divided into two parts: the upper engine or cylinder head and the lower engine.

In most modern cars, the cylinder head is made of aluminium and is divided into two halves. Its main parts are the twin camshafts, the valves assembly and the spark plugs. The spark plugs and the valves assembly, which includes: the valve tappets, the valve springs, the valve guides and the valves themselves, are located in the lower half of the cylinder head. The two camshafts are located in the upper half of the

cylinder head. They are installed on the camshaft carrier, in six bearing caps each, over the valves assembly. The upper half of the cylinder head also functions as a cover for the valves and the spark plugs. In most cars, its cover has oilways on the underside that guarantee good oil supply to the valves assembly and the camshafts. There is also another cover over the spark-plug wells to protect the spark plugs from dirt and water. The cylinder head is separated from the cylinder block by a sealing gasket.

The lower engine is divided into three sections: a) the cylinder block, b) the intermediate section, which includes the crankshaft, and c) the oil pan. The cylinder block, which is made either of cast iron or of aluminium, has the cylinders cut directly in it. Each cylinder contains a piston. The pistons reciprocate, that is they move up and down, in the cylinders. At the lower part of the pistons are the connecting rods and their caps which connect the pistons to the crankshaft. Like the camshaft, the crankshaft is installed in six bearings. When the pistons reciprocate, the connecting rods turn the crankshaft which is free to rotate. In this way, the pistons reciprocating motion is converted into rotary motion. The rotary motion of the crankshaft is transferred outside the engine, to the wheels, by means of the flywheel. On the upper side of the intermediate section, there are cast oilways that distribute oil to the bearings via the crankshaft. At the bottom of the engine, under the crankshaft, is the oil pan. It contains the oil which is pumped inside the engine to lubricate its moving parts in order to reduce friction.




Lower engine
27.
28.
cylinders
Intermediate section
29.
connecting rods' caps
30.
connecting rods
flywheel

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ENGLISH FOR SPECIFIC PROFESSIONAL PURPOSES CERTIFICATE EXAM

PART III: ESP LANGUAGE AWARENESS

Candidate's
surname: ……
name: ……..
father's name: ……

DATE….

Instructions:

- **Answer all the questions.**
- **Write your answers on the booklet.**
- **Do not write your name inside the booklet.**
- **Time allowed: 60 minutes**

***** This part of the exam will count for 30% of the total grade.**

TASK 1: Read the following text carefully and fill in the gaps with words from the table below. There is one EXTRA word that you do not need.

permissible, start, depends, deliver, electronic, occur, equal, wiring, transmitters, applications, discharge

Batteries

Batteries are the principal source of direct current electrical power in portable, mobile, and some scientific or medical instruments. They are used extensively in radio communications, **1)** _____ instruments, and just about any other place where the goal is to get portability and safety.

Many different sizes and shapes of batteries are on the market, and which to select **2)** _____ on the application. Expect such diversity because of the wide range of **3)** _____ for which batteries are designed; hearing aid batteries are not generally suited to operating hand-held radio **4)** _____ or starting automobile engines. It is generally true that the size determines the current-time rating of the battery and sometimes the voltage rating.

Batteries are rated by the product of the available current and the time over which it is available: ampere – hours (A-H), milliampere-hours (mA-H), etc. For example, a 2 A-H battery should be able to **5)** _____ 2 A for one hour, or 1 A for two hours, 0.5 A (500 mA) for four hours, or any other current-time product that is **6)** _____ to 2 A-H.

Some batteries have a maximum **7)** _____ rate specification that is less than the ampere-hour rating. These batteries might be rated at, for example, 2 A-H, but it is not **8)** _____ to draw a full 2 A at any one time or overheating will **9)** _____. The 2 A-H energy capacity rating is none the less accurate.

If this limitation were true of all batteries, incidentally, you would not be able to **10)** _____ an automobile engine with a battery. The typical automobile engine draws from 100 to 400 A, yet the typical car battery is rated at 40 to 100 A-H.

➢ **TASK 2: Read the text below and circle the answer (*A*, *B* or *C*) that best fits each space.**

Productivity basics

Over the years, productivity has had many common misunderstandings associated with it. It is not a measure of production; it is not a measure of costs; it does not measure the cost of a **11)** _____; and it is not precisely a measure of **12)** _____. Productivity is a measure of the relationship between quantity of resources used and **13)** _____ of output. Simply, it is a **14)** _____ of some measure of output to some measure of input. Output is any product or service and input is all the recourses used to produce it. The focus can be at any level, **15)** _____ on organization and mission. Productivity is improved whenever the ratio increases. More output with constant input, constant output with less input, and output increasing **16)** _____ input are some of the many ways. Pure, productivity measures are ideal, sometimes hard to come by in manufacturing areas. Other types of productivity measures **17)** _____ partials, correlated partials, and surrogates. Correlated partials are used when they **18)** _____ "good enough" answers and when obtaining the actual data would be difficult or not **19)** _____ to obtain. Surrogates are not true productivity measures but they are usually easy to get and they can be very useful **20)** _____ of productivity. The main consideration is that a connection can be shown between the surrogate measure and either input or output.

11)	***A.*** source	***B.*** recourse	***C.*** resource
12)	***A.*** efficiency	***B.*** sufficiency	***C.*** effect
13)	***A.*** number	***B.*** quantity	***C.*** quality
14)	***A.*** value	***B.*** result	***C.*** ratio
15)	***A.*** depending	***B.*** irrespective	***C.*** independent
16)	***A.*** more	***B.*** more than	***C.*** more to
17)	***A.*** include	***B.*** consist	***C.*** solve
18)	***A.*** prevent	***B.*** avoid	***C.*** provide
19)	***A.*** cost-effective	***B.*** costly	***C.*** cost-cutting
20)	***A.*** indicative	***B.*** indicators	***C.*** indicate

- **TASK 3: Read the text below and use the word given in capitals at the end of each line to form a word that fits in the space provided.**

White birch (Betula papyrifera)	
White birch was selected as the Canadian provincial tree in 1988. It is distributed throughout most of the province, but is found mostly in the northern and central parts. White birch require **22)** _____ light and prefer moist **23)** _____ soil. They are generally found growing with a **24)** _____ of conifers and broad-leafed trees. **25)** _____ stands of white birch often occur as a result of a forest fire.	***22) CONSIDER***
	23) SAND
	24) MIX
	25) PURITY
The tree is fast-growing and may reach a height of 21 metres and a diameter of up to 60 centimetres. Appreciated for its **26)** _____ beauty and easily recognized chalk-white **27)** _____ bark, white birch is frequently planted as an **28)** _____ tree in gardens and as a shelterbelt choice in farmyards. The wood is **29)** _____ hard, strong and **30)** _____. It is creamy white to light brown in colour and straight-grained, with a fine, even texture. When dried properly, birch wood is well suited for furniture, turnery, flooring, veneer, novelties, joinery and firewood. Essential oils may also be extracted.	***26) STATE***
	27) PAPER
	28) ORNAMENT
	29) MODERATE
	30) DENSITY