

# EASTERN UNIVERSITY, SRI LANKA



FIRST YEAR SECOND SEMESTER EXAMINATION IN SCIENCE – 2013/2014  
(April/May 2016)

## ENGLISH LEVEL- I

Time: 02Hours

Register No : .....

Instructions to the candidates:

1. Duration: Two (02) Hours
2. Answer all the questions on this paper itself.
3. Marks will be deducted for wrong spellings and grammar.
4. Read each question carefully and answer them.
5. This paper consists of 12 pages.
6. Write your Index Number clearly on the space given.

Examiner's use only

Question Number	Maximum Marks	Marks Obtained
1	30	.....
2	15	.....
3	15	.....
4	20	.....
5	20	.....
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	100	=====

Read the following text and answer questions that follow:

.....

is essential to our daily lives, but noise is not. Noise is generally used as an unwanted sound or sound which produces unpleasant effects and discomfort on the ears. Sound becomes noise when it either interferes with normal activities such as sleeping, conversation, or work or diminishes one's quality of life. Not all noise can be called noise pollution. If it does occur regularly, it may be termed as 'Nuisance'

Scientists also believe that it is not only humans who are affected. For example, water animals are affected by noise by submarines and big ships on the ocean, and chain-saw operations by logging companies also create extreme noise to animals in the forests. Generally, noise is caused by household gadgets, big trucks, vehicles and motorbikes on the road, jet planes and helicopters hovering over cities, loud speakers etc. Noise (or sound) is measured in the units of decibels and is denoted by the dB. Noise which is more than 115 dB is intolerant. The industrial noise level in the industries must be 75 dB according to the World Health Organization.

Noise is considered as environmental pollution, even though it is thought to have less damage on the environment than water, air or land pollution. But people who are affected by severe noise pollution say that it is a massive issue that needs attention.

What are the sources of noise pollution?

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Examples like food mixer, grinder, vacuum cleaner, washing machine and dryer, cooler, air conditioners can be very noisy and injurious to health. Others include loud speakers of sound systems and TVs, iPods and ear phones. Another example may be your neighbor's dog barking every day at every shadow it sees, disturbing everyone else in the apartment.

C) .....

Places of worship, discos and gigs, parties and other social events also create a lot of noise for the people living in that area. In many market areas, people sell with loud speakers, other people shout out offers and try to get customers to buy their goods. It is important to note that when such events are not often, they can be called 'Nuisance' rather than noise pollution.

D) .....

Printing presses, manufacturing industries, construction sites, contribute to noise pollution in large cities. In many industries, it is a requirement that people always wear earplugs to reduce their exposure to heavy noise. People who work with lawn mowers, tractors and noisy equipment are also required to wear noise-proof gadgets.

E) .....

Think of aero planes flying over houses close to busy airports like Heathrow (London) or O'Hare (Chicago), over ground and underground trains, vehicles on road—these are constantly sources of a lot of noise and people always struggle to cope with them.

### Effects of noise pollution

Generally, problems caused by noise pollution include stress related illnesses, hearing loss, interference, hearing loss, sleep disruption, and lost productivity. Most importantly, the three major effects we can look at:

F) .....

The immediate and acute effect of noise pollution to a person, over a period of time, is the impairment of hearing. Prolonged exposure to impulsive noise to a person will damage the eardrum, which may result in a permanent hearing impairment.

G) .....

Marine scientists are concerned about excessive noise used by oil drills, submarines and other vessels on and inside the ocean. Many marine animals, especially whales, use hearing to find food, communicate, defend and survive in the ocean. Excessive noises are causing



2. Give the Summary of the text in 30—40 words

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Marks

3. What is noise pollution, according to the text?

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Marks

4. Is noise different from nuisance? How?

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Marks

5. What is the unit of measurement by which noise is measured ?

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Marks

6. List some of the main sources of noise pollution? (Answer in point form is encouraged)

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Marks: 03

How, according to the text sound pollution affects human being?

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Marks: 01

How could the sound pollution be controlled or prevented? Suggest your answer based on the information directly or indirectly inferred from the text?

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Marks: 03

Total: 30 Marks

Use the words given below to fill in the missing information in the answering space provided below the text numbered from 1 to 15:

powder, from, hydraulic, constituents, by, low, homogenized, heated, semi-wet, proportions, closely categories, strong, grains, located)

Cement is a fine (1)..... which sets after a few hours when mixed with water, and hardens in a few days into a solid, (2) ..... material. Cement is mainly used to bind fine sand and coarse aggregates together in concrete. Cement is a ..... binder, i.e. it hardens when water is added. There are 27 types of common cement which can be grouped into 5 general (4)..... and 3 strength classes: ordinary, high and very high. In addition, some special cements exist like sulphate resisting

cement, low heat cement and calcium aluminate cement.

Cement plants are usually located (5)..... either to hot spots in the market or to areas with sufficient quantities of raw materials. The aim is to keep transportation costs (6).....

Basic constituents for cement (limestone and clay) are taken from quarries in these areas.

Basically, cement is produced in two steps: first, clinker is produced (7)..... raw materials.

In the second step cement is produced from cement clinker. The first step can be a dry or semi-dry or (8).....process according to the state of the raw material.

The raw materials are delivered in bulk, crushed and (9)..... into a mixture which is then fed into a rotary kiln. This is an enormous rotating pipe of 60 to 90 m long and up to 3 m diameter. This huge kiln is (10).....by a 2000°C flame inside of it. The kiln is slightly inclined to allow for the materials to slowly reach the other end, where it is cooled to 100-200°C.

Four basic oxides in the correct (11)..... make cement clinker: calcium oxide (65%), silicon oxide (20%), alumina oxide (10%) and iron oxide (5%). These elements are mixed homogeneously (called "raw meal" or slurry) will combine when heated (12)..... in a flame at a temperature of approximately 1450°C. New compounds are formed: silicates, aluminates and ferrites of calcium. Hydraulic hardening of cement is due to the hydration of these compounds.

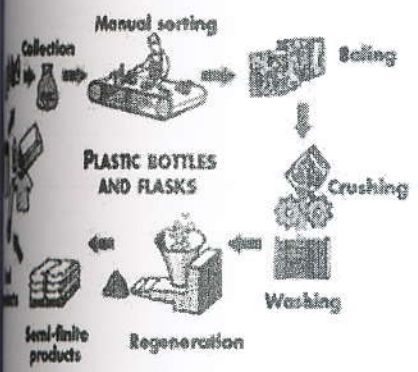
The final product of this phase is called "clinker". These solid (13)..... are stored in huge silos. The second phase is handled in a cement grinding mill, which is (14)..... in a different place to the clinker plant. Gypsum (calcium sulphate) and possibly additional cementitious (such as blastfurnace slag, coal fly ash, natural pozzolana) or inert materials (limestone) are added to the clinker. All (15)..... are ground leading to a fine and homogenous powder. End of phase two. The cement is then stored in silos before being dispatched either in bulk or bagged.

Source edited from: <http://www.cembureau.eu/about-cement/cement-manufacturing>

- 9.....
- 10.....
- 11.....
- 12.....
- 13.....
- 14.....
- 15.....

Marks: 15

Using the flow chart given below, write a paragraph using the data presented in the



<http://www.polystyrene-compactor.com/category/waste-plastic-recycling/>

70-80

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**Q4: Using the following phrases construct meaningful sentences:**

Marks will not be given for grammatical inaccuracy, wrong spelling and incorrect punctuation marks

Environmental pollution

Annual research forum

Critical thinking

Soft skills development

Data analysis

Software

Being competent in

h) Theory and application

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i) Climate change

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j) Scientific advancement

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Marks: 20

**Q5:** Your Faculty sent you on a short training course on “Soft Skills Improvement” conducted by the Career Guidance Unit of the Eastern University and at the end of the training you received a certificate of attendance which you have lost. Request for a copy of the certificate of attendance by writing **a letter to the course organiser** and tell him/her:

How you lost your certificate.

Why you need the certificate now.

What you need him to do for you.

Words: 150

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Handwriting practice lines consisting of 25 horizontal dotted lines.

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