



**UNIVERSITY OF RUHUNA
FACULTY OF ENGINEERING**

Final

**End - Semester 8 Examination in Engineering - February 2020
TIMETABLE**

DATE	TIME	MODULE NO.	MODULE NAME	NO OF STUDENTS	VENUE
24.02.2020	9.00 a.m. – 12.00 noon	IS8201	English for the Professional World (N/C)	63	DO2
	1.30 p.m. – 4.30 p.m.	ME8301	Heat Transfer(N/C)	65	DO2
25.02.2020	1.30 p.m. – 4.30 p.m.	EE8211	Design and Management of Data Networks (N/C)	26	AUD
26.02.2020	9.00 a.m. – 12.00 noon	CE6251	Building Services Engineering (N/C)	05	DO2
		EE8203	High Performance Computing (N/C)	12	DO2
	1.30 p.m. – 4.30 p.m.	CE6252	Dynamic & Control of Structures (N/C)	05	AUD
		CE6254	Coastal Engineering (N/C)	58	
27.02.2020	9.00 a.m. – 12.00 noon	EE8301	High Voltage Engineering (N/C)	36	AUD
28.02.2020	9.00 a.m. – 12.00 noon	EE6206	Operating Systems and Programming (N/C)	01	DO2
		EE6208	Introduction to Hardware Description Language (N/C)	02	DO2
29.02.2020	9.00 a.m. – 12.00 noon	ME8302	Industrial Fluid Dynamics (N/C)	68	AUD
		EE8207	Optimization Techniques for Engineers (N/C)	61	
		CE6253	Ecological Engineering (N/C)	41	DO1
03.03.2020	9.00 a.m. – 12.00 noon	EE8202	Electrical Systems in Buildings (N/C)	56	AUD
		EE8205	Principles of Software Architecture (N/C)	12	
	1.30 p.m. – 4.30 p.m.	ME8312	Energy Management (N/C)	62	DO1
05.03.2020	9.00 a.m. – 12.00 noon	EE8209	Microwave Communications (N/C)	14	DO2
06.03.2020	9.00 a.m. – 12.00 noon	EE8210	Digital Communication (N/C)	20	DO2
07.03.2020	9.00 a.m. – 12.00 noon	EE8208	Intelligent Systems Design (N/C)	17	DO1

Assistant Registrar
Faculty of Engineering
18.02.2020



UNIVERSITY OF RUHUNA

Faculty of Engineering

End-Semester 8 Examination in Engineering: February 2020

Module Number: IS8201

Module Name: English for the Professional World

[Three hours]

[Answer all questions]

Q1.

a) Complete the sentences with the correct form of the verb in brackets.

- i.) They _ in an apartment right now because they can't find a cheap house close to their working site. (live)
- ii.) Everyone _ when the earthquake hit the small town. (sleep)
- iii.) I just remembered that I _ the rent yet. I'm surprised that the landlord _ me up and reminded me. (not pay, not ring)
- iv.) Our daughter _ from the university yet. (graduate)
- v.) I _ two mistakes in the last quiz for English. (made)
- vi.) Most people _ at the site when the fire _. (be, start)
- vii.) _ a new car? (you ever buy)
- viii.) Nimal's father _ his son's birthday. (never forget)

[05 Marks]

b) Transform into passive.

- i.) We don't allow mobile phones in the labs.
- ii.) The batch top of this year will sing a song at the Colors night.
- iii.) Who wrote that book?
- iv.) You must show your ticket at the door.
- v.) Please don't make too much noise or we will ask you to leave the room.
- vi.) They created that comedy show in the USA.
- vii.) They will broadcast the Edinburgh festival online this year.
- viii.) They should have awarded her an Oscar for her performance in that film.
- ix.) Will they postpone the award ceremony?

x.)Quentin Tarantino is going to direct a new film.

[05 Marks]

Q2.

Read the passage and answer the questions given below.

Why bridges collapse?

Some of the biggest and most expensive transportation projects in the world have involved building bridges. Bridges are crucial links that carry cars, trucks and trains across bodies of water, mountain gorges or other roads. As a result, they are one of the most important aspects of civil engineering and are subject to intense scrutiny, especially when they collapse.

Bridge collapses can be tragic events, leading to loss of life and serious property damage. That's why bridge engineers, designers and builders must always take their jobs very seriously. The best way for them to prevent these accidents is to understand why bridges collapse in the first place. Understanding bridge collapses can lead to major changes in the design, construction and safety of future building projects. The following are main reasons why bridges fall.

Fire

Historically, more bridges were made of wood and were much more susceptible to fire. This was particularly true of old-fashioned train bridges, where the spark created by the steel wheels and steel tracks could sometimes cause a bridge to catch fire and burn to the ground.

During construction

A large number of bridge accidents occur during the construction of the bridge itself. These accidents are often due to an error made by the engineers, such as a miscalculation. The bridge collapses under its own weight, and this can be deadly for the workers on it at the time.

Earthquakes

Earthquakes damage all structures, including bridges. Luckily, this kind of collapse is relatively infrequent, especially with modern bridges. Engineers have learned to design bridges in earthquake zones on areas that are much more resistant to movement.

By defect

Some bridge collapses are mysteries, and engineers only realize why after they conduct a complete investigation. In some cases, this could happen because inferior-quality material was used in the construction, or because of a defect in a key piece of the bridge. In other cases, the bridge was designed only to support a certain amount of weight and no more.

Boat or train crash

Both of these kinds of accidents are extremely rare, but boats and trains can cause a bridge to collapse for different reasons. With trains, it's the velocity of the impact that can bring a bridge down. With boats, it's the very large mass they have that can bring about the collapse, even if they are moving very slowly when it occurs.

The best way to avoid bridge failures is to plan for them. Modern technologies that can detect structural weakness, safer working environments and better designs can all help to reduce these terrible accidents.

(Source adapted from <https://learnenglish.britishcouncil.org/sites/podcasts/files/LearnEnglish-Reading-B2-Why-bridges-collapse.pdf>)

- a) Answer the questions below.
- i.) Why bridges are considered so important according to the article?
 - ii.) Why should bridge engineers be more responsible on their job?
 - iii.) How can the people who make bridges stop collapse?
 - iv.) What is the reason given as the cause of a bridge catching fire?
 - v.) Give an example of an error during construction
 - vi.) How common is it for an earthquake to destroy a bridge?
 - vii.) Mention a cause of defect in bridge construction.
 - viii.) How does a train cause a bridge to collapse?

ix.) What role can modern technology have in reducing bridge accidents?

x.) What is the reason why boats cause bridge collapses?

[05 Marks]

b) Match the definitions (a-j) with the vocabulary (i-x).

Vocabulary

i... susceptible to something

ii... scrutiny

iii... to collapse

iv... tragic

v... a defect

vi... to bring about

vii... to occur

viii... crucial

ix... to prevent

x... a gorge

Definitions

a. extremely important

b. a deep valley with high sides

c. careful examination of something

d. to fall down suddenly

e. causing great sadness

f. to stop something from happening

g. easily affected by something

h. to happen

i. a fault in something

j. to make something happen

[05 Marks]

Q3.

a) Write down a telephone conversation. Assume that you are a senior project manager of ABC Construction Company. Your Company is currently responsible in the construction of the Colombo- Kandy Highway construction project. The project is supposed to be completed on the 1st of March 2020. But your company is unable to complete the project on the due date. A reporter from the XYZ newspaper calls you and requests a clarification for this delay and when the project can be completed. Follow these clues. Write 06 exchanges.

Senior project manager: Good morning, ABC construction project manager. How can I help you?

Reporter: This is Perera, a reporter from XYZ newspaper.

[05 Marks]

b) Write a formal email by using the following information:

You have received an email from A.T. Kearney International consulting firm stating that you have been selected to work with them for a contract period of 2 years. You are supposed to start work on the 15th of March 2020, but you are unable to start

work on that date since you have to sit for your final examination. You do not want to miss this offer since this was your dream company that you were expecting for a long time period. Write a reply. Sign the email as Ramesh. (Minimum 50 words)

[05 Marks]

Q4.

Write short notes on the following:

- a) Presentation skills
- b) Telephone etiquette rules
- c) How personality matters for professionalism
- d) Verbal and non-verbal body language in an interview
- e) Importance of communication skills for a successful engineer

Write at least 80 words each.

[10 marks]

Q5.

a) You have decided to resign from your work in order to try a new field. Write a letter of resignation to your boss. In your letter

- i.) tell your boss of your decision and explain why you are leaving.
- ii.) explain what you have learnt from your current job and how you feel about leaving.
- iii.) ask for a letter of reference.

Write at least 100 words.

[05 marks]

b) A friend has written to you asking for advice about a problem at work. You have had a similar problem in the past. Write a reply to your friend. In your letter:

- i.) tell your friend you understand the problem.
- ii.) explain what happened to you in the past.
- iii.) suggest possible solutions to the problem.

Write at least 100 words.

[05 marks]