Fachhochschule Frankfurt am Main – University of Applied Sciences
Fachbereich 3
Studiengang: EEE / EKT / IST

Modulprüfung (PL)

Fach: Academic Skills
Dozent: Nyalwaal/Cohn/Slawney
Sommersemester 2017
Datum der Klausur: 24.07.2017
Zeit: 10.00-11.30
Dauer der Klausur: 90 Minuten

Von dem Studenten/der Studentin auszufüllen:

Name:_____

Vorname:_____

Matrikel - Nr.:_____

Studiengang: EEE   EKT   IST   EIT   Ing. Informatik

Unterschrift:_____

Von dem Lehrer auszufüllen

Erreichte Punktzahl:_____ Note: _____

Datum: _____ Unterschrift: _____

Notenskala: 1,0/1,3/1,7/2,0/2,3/2,7/3,0/3,3/3,7/4,0/5,0

A. LISTENING   (20 Points)

You will hear a tape recording two times.

Paula, a design engineer for a GPS manufacturer, is discussing product development with José, a senior managernew to the company. Listen to the conversation and complete the following notes.

- the primary application of GPS
- associated applications

- more creative features

- not technical innovations

(1) _____

Tracking systems for (2) _____

Tracking systems for (3) _____

(4) _____ alarms

(5) _____ buttons

(6) _____ the technology

In addition, complete the following extracts from the discussion with words that come from "use."

1   *Then you've got associated applications, _____ that are related to navigating ...*
2   *... tracking systems you can _____ for monitoring delivery vehicles ...*
3   *... from the end-_____ point of view, accuracy is no longer the main selling point. Most devices are accurate enough. The key is to make them more _____ .*

Notes:

_____

_____

_____

_____

_____

_____

_____

_____

B. LANGUAGE REVIEW

1.) Match the verbs (1- 9) to the definitions (a- i). Write the letter of the correct definition in the blank next to the word.

1	connecting	a	carried (objects, over a distance)
2	raise	b	hold something firmly / bear its weight
3	transported	c	climb down
4	support	d	provided with energy / moved by a force
5	attached	e	joining
6	ascend	f	driven / have movement directed
7	descend	g	fixed
8	powered	h	climb up
9	controlled	i	lift / make something go up

1. __e__
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

2.) Match the GPS applications (1 – 6) to the descriptions (a – f). Write the letter of the correct description in the blanks next to the numbers for the applications.

1	topographical surveying	a	navigation and safety at sea
2	geological exploration	b	setting out positions and levels of new structures
3	civil engineering	c	mapping surface features
4	avionics equipment	d	applications in mining and the oil industry
5	maritime applications	e	highway navigation and vehicle tracking
6	GPS in cars and trucks	f	air traffic control, navigation and autopilot systems

1. __c__
2. _____
3. _____
4. _____
5. _____
6. _____

3.) Complete the following phrases using adjectives based on the words in the brackets. Write the word in the blank in the sentences.

1 ... there are _circular_ pins for live and neutral. (circle)
2 ... the earth slot's got a flat base with one side _____ over to form a semi-circle. (round)
3 This one has _____ blades for live, neutral and earth ... (rectangle)
4 ... it has a _____ slot to receive the earth pin. (cylinder)
5 ... the pins are arranged in _____ configuration. (line)
6 ... they're laid out in _____ configuration. (triangle)

**4.) Match the words (1- 6) to the synonyms (a – f). Write Write the letter of the correct definition in the blank next to the word.**

1 conventional   a   decreases
2 eliminates   b   better / the best
3 superior   c   improved
4 energy-efficient   d   standard, usual
5 enhanced   e   gets rid of
6 reduces   f   has low energy consumption

1. _d_
2. _____
3. _____
4. _____
5. _____
6. _____

**5.) Label the diagrams using the preposition in the box. Where is the ball in relation to the box?**

~~above~~ adjacent to alongside around below beneath beside
inside outside over underneath within

a _above_ c _____ e _____
   _____   _____   _____

b _____ d _____ f _____
   _____   _____
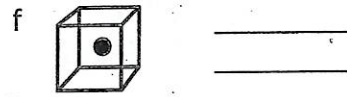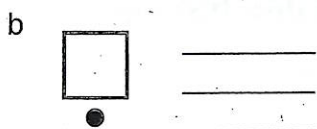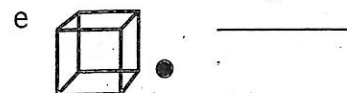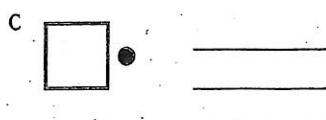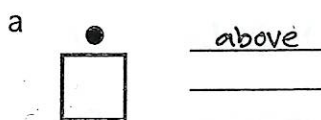
C. READING   (14 Points)

Look at the following plan and sections from the drawing on a ski complex project, showing details on part of a ski lift. Examine how the rectangular plate is bolted to the T profile below it. There is a discrepancy between the details, and the clash prevents the connection from being assembled.

B

A   A

B
Plan

Section B-B   Section A-A
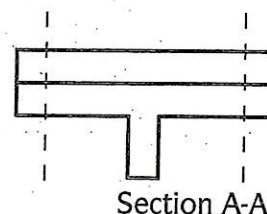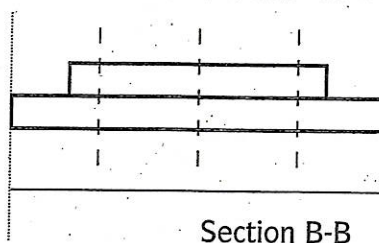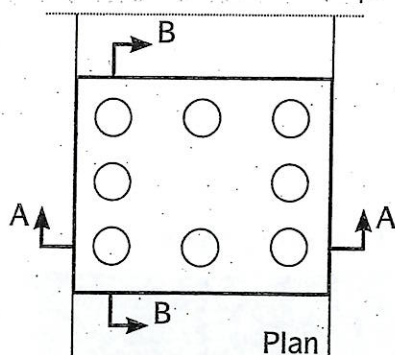
Chen, a technician, is explaing the problem in a conversation with Ron, an engineer. Complete the conversation using the words in the box.

alternative as per clarify clash confirm contradicts discrepancy propose

Chen: There's a (1) _discrepancy_ between these details that you might be
able to (2) _____ straight away. On the plan of this plate, it
shows eight bolts. But on section A, here, there are no bolts shown in the
middle. So there would only be six, which obviously (3) _____ the
plan. But as you can see, this plate's going to be bolted to a T profile.
So we couldn't put a row of bolts down the middle, because they'd
(4) _____ with the flange running along the middle of the T. So I'd
(5) _____ just going for two rows of bolts. The (6) _____
would be to redesign the T section, which would obviously be a bigger
job.

Ron: Yes. Let's go for two rows of bolts, (7) _____ the sections.

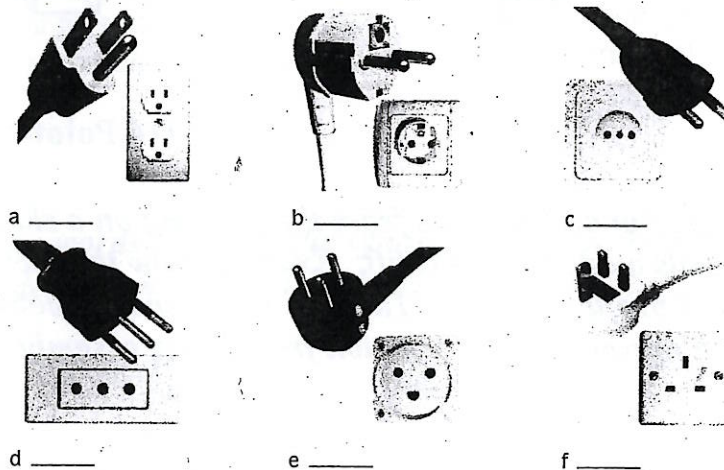Chen: OK, fine. Will you send an email to (8) _____ that?

5

D. WRITING (30 Points)

Choose one (1) out of two (2) possible themes (A or B) and write 150-200 words on it.

## THEME A: ADVANTAGES AND DISADVANTAGES OF PLUG TYPES

Select two (2) plug and socket formats from the illustration below (a – f). Compare the two formats in terms of the advantages and disadvantages of their main features.

a _____   b _____   c _____

d _____   e _____   f _____

THEME B: SPACE ELEVATORS

Write out a text about space elevators answering the following three questions:

1. How does a space elevator work?
2. What could it be used for?
3. What technical challenges would it face?
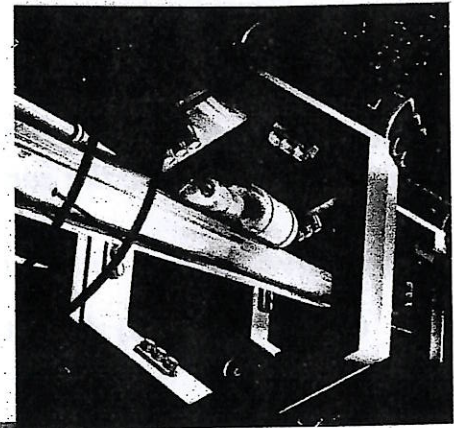
Write your text here.

_____

_____

_____

_____

_____

Notes:

End of Exam