

\_\_\_\_\_ points of 60 points

Name: \_\_\_\_\_

Matrikelnummer: \_\_\_\_\_

**Fachhochschule Südwestfalen – Technische Betriebswirtschaft**  
**Klausur**  
**Technisches Englisch**  
**Wintersemester 2021/2022**

**Bitte drucken Sie die Antwortblätter auf den Seiten 2 bis 5 aus und tragen Sie Ihre Antworten dort ein! Vergessen Sie nicht, Ihren Namen und Ihre Matrikelnummer anzugeben, da Ihre Klausur andernfalls nicht gewertet werden kann!**

**Scannen Sie die ausgefüllten Antwortbögen im Anschluss an die Prüfung ein und speichern Sie sie als PDF-Dokument.**

**LADEN SIE NUR DAS PDF-DOKUMENT MIT IHREN ANTWORTBÖGEN HOCH (NICHT DIE GESAMTE KLAUSUR!)**

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Technisches Englisch, Wintersemester 2021/2022

## Antwortblatt 1

Übertragen Sie Ihre Lösungen auf diese Antwortblätter:

### Task I

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

### Task II

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

### Task III

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

14. \_\_\_\_\_

15. \_\_\_\_\_

16. \_\_\_\_\_

17. \_\_\_\_\_

18. \_\_\_\_\_

19. \_\_\_\_\_

20. \_\_\_\_\_

21. \_\_\_\_\_

22. \_\_\_\_\_

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## Antwortblatt 2 (Fortsetzung von Antwortblatt 1)

**Task IV (Write down the word and encircle the syllable with the primary stress)**

23. \_\_\_\_\_

24. \_\_\_\_\_

25. \_\_\_\_\_

**Task V**

26.    a ☐    b ☐    c ☐    d ☐    e ☐    f ☐

27.    a ☐    b ☐    c ☐    d ☐    e ☐    f ☐

28.    a ☐    b ☐    c ☐    d ☐    e ☐    f ☐

**Task VI a**

a \_\_\_\_

b \_\_\_\_

c \_\_\_\_

d \_\_\_\_

e \_\_\_\_

f \_\_\_\_

g \_\_\_\_

h \_\_\_\_

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**Antwortblatt 3 (Fortsetzung von Antwortblatt 2)**

**Task VI b**

37. \_\_\_\_\_

38. \_\_\_\_\_

39. \_\_\_\_\_

40. \_\_\_\_\_

41. \_\_\_\_\_

42. \_\_\_\_\_

43. \_\_\_\_\_

44. \_\_\_\_\_

45. \_\_\_\_\_

46. \_\_\_\_\_

47. \_\_\_\_\_

48. \_\_\_\_\_

49. \_\_\_\_\_

50. \_\_\_\_\_

51. \_\_\_\_\_

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**Antwortblatt 4 (Fortsetzung von Antwortblatt 3)**

**Task VII**

52.    a ☐    b ☐    c ☐    d ☐

53.    a ☐    b ☐    c ☐    d ☐

54.    a ☐    b ☐    c ☐    d ☐

**Task VIII**

55.    \_\_\_\_\_  
\_\_\_\_\_

56.    \_\_\_\_\_  
\_\_\_\_\_

57.    \_\_\_\_\_  
\_\_\_\_\_

**Task IX**

58.    \_\_\_\_\_

59.    \_\_\_\_\_

60.    \_\_\_\_\_

**I. Insert words that indicate the opposite of the underlined words:** [3 points]

1. a **flexible** piece of cable - a/an \_\_\_\_\_ steel rail
2. Unworked stainless steel plates appear rather \_\_\_\_\_, but when they are polished, they are **lustrous** and thus reflect light.
3. When iron is heated, it **melts**. - When it cools down, it \_\_\_\_\_.

**II. Fill in the gaps below with the correct word, changing the form (i.e. singular/plural, tense etc.) when necessary.** (3 points)

4. Infrared cameras can be used to scan walls, floors and ceilings of buildings in order to detect defects in (**isolation / insulation**) \_\_\_\_\_ and air sealing.
5. Most vaccines against viral diseases are (**made of / made from**) \_\_\_\_\_ viruses grown in chicken eggs.
6. The pressure in the vessel (**raise / rise**) \_\_\_\_\_ dramatically since we checked it this morning.

**III. Fill the gaps in the following text using the correct form of the word in brackets:** [16 points]

... One of the major ways to solve performance bottlenecks is to find a better algorithm.

In our (increase) [7]\_\_\_\_\_ data-rich societies,

(efficiently) [8]\_\_\_\_\_ search of vast databases is becoming

(increase) [9]\_\_\_\_\_ (importance) [10]\_\_\_\_\_ as well as

(increase) [11]\_\_\_\_\_ (difficulty) [12]\_\_\_\_\_ .

Not only do we need to search data for (exact) [13]\_\_\_\_\_ matches, but we

also need to do so for (partial) [14]\_\_\_\_\_ matches, for combinations of

substrings, and for matches with - (possibility) [15]\_\_\_\_\_ large - gaps

between one part and another.

We also have to cope with a (vary) [16]\_\_\_\_\_ of different 'alphabets'. For

example, the (explosion) [17]\_\_\_\_\_ (growth) [18]\_\_\_\_\_ of

work in genetics and in proteins means that we have databases with more restricted

alphabets but with (substance) [19]\_\_\_\_\_ amounts of data to search. In

many areas of algorithmic research, (improve) [20]\_\_\_\_\_ have been

(relative) [21]\_\_\_\_\_ (slow) [22]\_\_\_\_\_ and normally only by

small amounts.

**IV. This task is about pronunciation. Encircle the syllable that is stressed in the following words:** [3 points]

- |     |   |                               |
|-----|---|-------------------------------|
| 23. | determine   | <b>de - ter - mine</b>        |
| 24. | circumference   | <b>cir - cum - fe - rence</b> |
| 25. | <i>The customer purchases huge amounts of steel every year.</i> | <b>pur – chas – es</b>        |

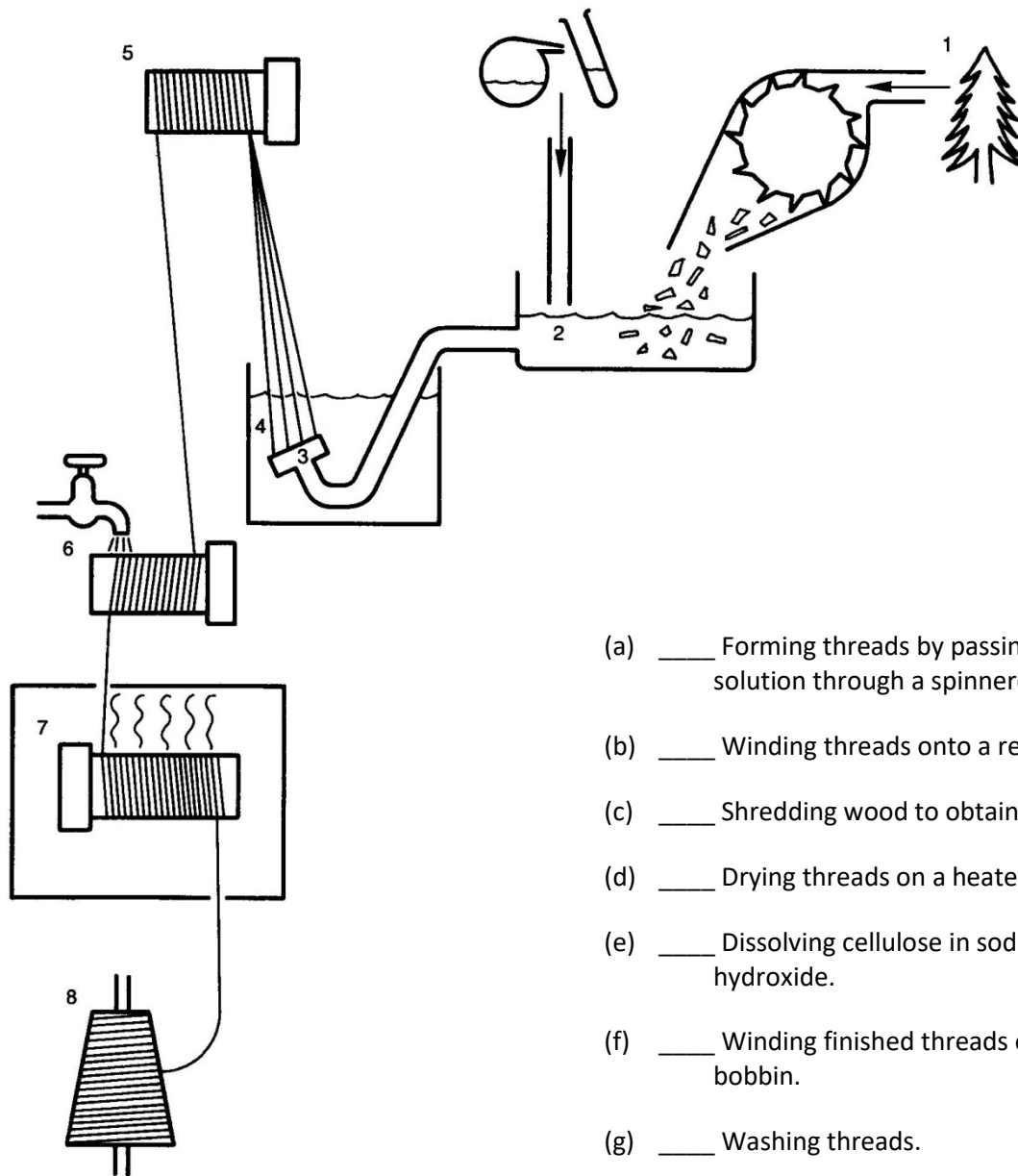
V. *Tick the correct answers. Note that multiple options may be correct!*  
[3 points]

26. Which of the following terms can be used to describe the cavity into which molten metal is forced **by means of pressure**?
- a. mould
  - b. form
  - c. die
  - d. shape
  - e. ladle
  - f. vessel
27. A chemical substance that combines atoms of two or more chemical elements, i.e. a molecule, is called ...
- a. a solution
  - b. a combination
  - c. a link
  - d. a compound
  - e. a connection
  - f. a mixture
28. Which of the following words denote(s) a non-ferrous alloy?
- a. stainless steel
  - b. lead
  - c. brass
  - d. potassium
  - e. bronze
  - f. copper



**VI. Combined task:**

**VI (a):** The following diagram illustrates the production process of rayon fibres. (Rayon is a synthetic material, similar to nylon). Match the labels to the numbers in the diagram by writing the numbers 1 - 8 next to the letters a - h of the steps below. It may be helpful to refer to the descriptive text on the next page! [8 points]



- (a) \_\_\_\_ Forming threads by passing the solution through a spinneret.
- (b) \_\_\_\_ Winding threads onto a reel.
- (c) \_\_\_\_ Shredding wood to obtain cellulose.
- (d) \_\_\_\_ Drying threads on a heated roller.
- (e) \_\_\_\_ Dissolving cellulose in sodium hydroxide.
- (f) \_\_\_\_ Winding finished threads onto a bobbin.
- (g) \_\_\_\_ Washing threads.
- (h) \_\_\_\_ Setting threads in dilute sulphuric acid.

**VI (b) Fill the gaps in the following text using the correct form of the verbs, i.e. correct tense, correct mode (active/passive). It may be helpful for you to refer to the diagram on the previous page. [15 points]**

### **Synthetic Materials**

Man-made fibres (be) [37]\_\_\_\_\_ with us since 1995 when Courtaulds, *a former (!) UK based manufacturer of chemicals*, first (produce) [38]\_\_\_\_\_ rayon. Other materials that (develop) [39]\_\_\_\_\_ by competitors before were of little practical use.

This is how rayon (produce) [40]\_\_\_\_\_ by Courtaulds: In the first step, cellulose (dissolve) [41]\_\_\_\_\_ in a solution of sodium hydroxide, which (also know) [42]\_\_\_\_\_ as caustic soda. The cellulose (obtain) [43]\_\_\_\_\_ from shredded wood pulp. The dissolved cellulose (form) [44]\_\_\_\_\_ into threads by forcing it through a spinneret (*a metal plate with holes in it*) in a setting bath of dilute sulphuric acid. After the threads (draw) [45]\_\_\_\_\_ from the setting bath, they (wind) [46]\_\_\_\_\_ on a reel, on which they (wash) [47]\_\_\_\_\_, before they (dry) [48]\_\_\_\_\_ on a heated roller. Finally the rayon fibres (collect) [49]\_\_\_\_\_ on a bobbin.

Rayon was not a truly synthetic fibre, but a reconstituted natural fibre – cellulose. Today's synthetic fibres such as polyvinyl chloride (PVC) and nylon (make) [50]\_\_\_\_\_ by changing the molecular structure of coal or oil. The molecules join together end to end during a chemical reaction to form a long molecule called a polymer. Nylon (invent) [51]\_\_\_\_\_ in 1934.

**VII. One more task about pronunciation. Tick the words in which the pronunciation of the underlined part is the same as the pronunciation of the underlined part of the word given (e.g. 'male' in task 1). Note that multiple answers may be correct. If you think that the underlined part of the word given does not match with any of the underlined parts of the other words, tick ,No match':** [3 points]

52. male

- (a) ☐ height
- (b) ☐ lathe
- (c) ☐ gauge
- (d) ☐ No match

53. iron (in British English)

- (a) ☐ lion
- (b) ☐ irony
- (c) ☐ ion
- (d) ☐ No match

54. He tapped his foot to the beat (=rhythm) of the music.

- (a) ☐ Lead is a soft metal that is used in building construction, e.g. in the external coverings of roofing joints.
- (b) ☐ How do you manage to work in this heat without air conditioning?
- (c) ☐ I have asked John to lead the discussion about new products.
- (d) ☐ No match

**VIII. Below you will find four pairs of sentences labelled (A) and (B), where sentence (B) is supposed to provide a translation, explanation or logical conclusion of sentence (A). Each of the sentences (B) contains one or two mistakes. Mark the mistakes and correct them appropriately. (You don't need to rewrite the entire sentence.)**

[3 points (1 point for each fully corrected sentence (B))]

55. (A) "Die aktuelle Analyse liefert eine wichtige Information für die Optimierung des Produktionsprozesses."

(B) "The current analyses provides an important information for the optimization of the manufacturing process."

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56. (A) "Flash memory devices have the disadvantage that their memory cells eventually wear out."

(B) This means that the cells of flash memory devices may stop working after a certain number of read/write cycles.

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57. (A) "In 2015 the company's profit was EUR 100,000 euros.  
Last year the company's profit amounted to EUR 100,300."

(B) Thus the company's profit has raised by 0,3 % last year.

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**IX. Complete the missing words.** [3 points]

58. By turning a nut clockwise, you t\_\_\_\_\_ it.

59. You need a s\_o\_\_\_\_\_ if you want to mix substances that cannot usually be mixed because of their chemical properties.

60. Electronic components can be very s\_e\_\_\_\_\_ to electromagnetic radiation.