# References

Version 1.0

# Contents

# Introduction

This document contains **sample** examination questions the likes of which can be used in the written examination. They are intended for orientation purposes only and do not claim to reflect all topic areas of the tekom competence framework.

## I    Information on Educational Objectives

In accordance with the qualification levels of the European Qualification Framework (EQF), the educational objectives "Ⓐ Knowledge, Ⓑ Knowledge/Comprehension, Ⓒ Skills/Application" have different characteristics regarding content depth, scope and cognitive processing level of the educational content. The following describes the educational objectives that apply to different qualification levels.

Modeled after Bloom's Taxonomy of Educational Objectives:

−   **Verbs indicating the acquisition of knowledge (Ⓐ Knowledge) are:** invoke, specify, list, note, enumerate, describe (data, facts), determine (data, facts), represent, define, name, depict (data, facts), complete, reproduce

−   **Verbs indicating the acquisition of comprehension (Ⓑ Knowledge/Comprehension) are:** select, justify, describe (correlations), determine (contexts), classify, explain, clarify, formulate, contrast (data, facts), identify (correlations), arrange, depict (correlations), transmit, distinguish, illustrate, summarize

−   **Verbs indicating the acquisition of skills (Ⓒ Skills/Application) are:** deduce, produce, be able to apply, carry out, evaluate, edit, assess, calculate, demonstrate, discuss, perform, create, find out, interpret, indicate, design, solve, plan, compare, use, associate

**Professional Level**

−   **Ⓐ Knowledge** (EQF 4): Reproduction of factual knowledge, terms, simple definitions, data, events or rough representations of theories, remembering and reproduction of facts, terms, concepts and answers.

   Example of an educational objective: "To know the definition of product safety"

−   **Ⓒ Skills/Application** (EQF 4): Ability to use facts, application of methods, implementation of processes.

   Examples of an educational objective: "To be able to correctly formulate warning messages", "To know the process as well as the different phases of information development"
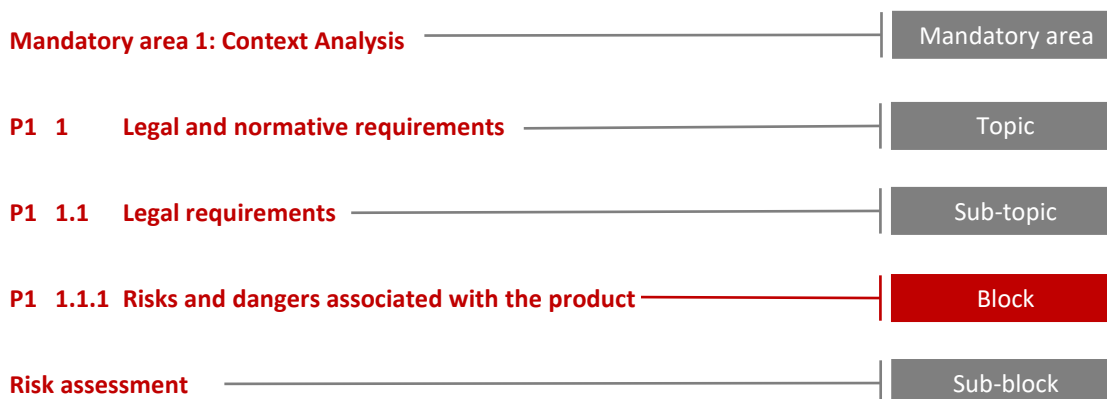
**Expert Level**

−   **Ⓑ Knowledge/Comprehension** (EQF 5):

   **Knowledge:** Reproduction of factual knowledge, terms, simple definitions, data, events or rough representations. Remembering and reproduction of facts, terms, concepts and answers

   Example of an educational objective: "To know the definition of HTML"

   **Comprehension:** Formulation and explanation of issues in one's own words, representation of theories, constructs and laws, understanding correlations, organization, comparison, interpretation, description, reproduction of main ideas regarding facts, terms, ideas and concepts in own words.

   Example of an educational objective: "To understand the advantages and disadvantages of modular information development"

- **©** **Skills/Application** (EQF 5): Ability to use facts, application of methods, implementation of processes, autonomous problem solving, even in new situations.

  Examples of educational objectives: "To be able to develop a structuring concept", "To be able to conduct an analysis for product use"

## II    Information about Sample Examination Questions

Sample examination questions are categorized by **blocks**.

| | |
|---|---|
| **Mandatory area 1: Context Analysis** | Mandatory area |
| **P1  1      Legal and normative requirements** | Topic |
| **P1  1.1    Legal requirements** | Sub-topic |
| **P1  1.1.1  Risks and dangers associated with the product** | Block |
| **Risk assessment** | Sub-block |

Every sample examination question has an **educational objective** and a **degree of difficulty**.

| Question | Educational objective | Degree of difficulty |
|---|:---:|:---:|
| What are the criteria for a risk assessment? Name 3 criteria. [4] | Ⓐ | ** |
| How is the formulation of safety notes and warning messages related to risk assessment? Explain the correlation. [47] | Ⓑ | *** |
| Which media trends will change technical documentation in the coming 10 years? Name 3 media trends and apply each trend to technical documentation in 1 to 2 sentences, using examples. [290] | Ⓒ | ** |
| What are the types of danger that can be caused by a product? Classify these and give an example. [10] | Ⓑ | * |

**Legend**

- The verbs marked yellow (e.g., name, clarify) indicate the educational objective. The allocation of possible verbs to educational objectives is provided under *I Information on Educational* Objectives*, Pg. 3* in this document.

- Educational objectives Ⓐ Knowledge and Ⓒ Skills/Application for the Professional Level qualification

- Educational objectives ⒷKnowledge/Comprehension and Ⓒ Skills/Application for the Expert Level qualification

- Degrees of difficulty: * ≙ easy | ** ≙ medium | *** ≙ difficult

# Mandatory area 1: Context analysis

**Class recommendation**

– Professional:  1.5 coins (45 hours)
– Expert:  3 coins (90 hours)

Achtelig, M. (2016). Tool- und Web-Guide Technische Dokumentation: (gemischtsprachig englisch/deutsch). München: neobooks Self-Publishing; indoition publishing.

Albrecht, A., Eidenmüller, T., Lembach, T., & Mussmann, A. (2018). International product liability on a global business environment: Ethical and legals perspectives for business managers. Schriftenreihe der Allensbach Hochschule. Konstanz: Allensbach Hochschule Konstanz c/o Dr. Thorsten Eidenmüller.

Ericson, C. A. (2015). Hazard Analysis Techniques for System Safety (2., Auflage). New York, NY: John Wiley & Sons.

Heuer-James, J.-U., & Fritz, M. (2020). Managing legal risks – COVID-19 and Technical Communication: Whitepaper 1/20. Whitepaper. Stuttgart: tcworld GmbH.

Heuer-James, J.-U., Schmeling, R., & Schulz, M. (2018). Safety notes and warning messages. (Gräfe, E., Ed.). Stuttgart, Germany: tcworld GmbH.

Polly, S. (Ed.) (2018). Practice. EU product compliance, safety and liability: A best practice guide for the automotive sector (1st edition). Berlin, Wien, Zürich: Beuth Verlag GmbH.

Purnhagen, K. (2013). The Politics of Systematization in EU Product Safety Regulation: Market, State, Collectivity, and Integration. Ius Gentium: Vol. 26. Dordrecht: Springer.

Rizzi, M. (2017). The evolution of consumer product safety policy and regulation in India. Journal of consumer policy : consumer issues in law, economics and behavioural sciences, 40(3), 389–412.

Robinson, P. A. (2009). Writing and designing manuals and warnings (4th ed.). Boca Raton: CRC Press.

Yates, W. D. (2015). Safety Professional's Reference and Study Guide, Second Edition (2nd ed.). Hoboken: Taylor and Francis.

# Mandatory area 2: Planning

**Class recommendation**

– Professional: 0.5 coins (15 hours)
– Expert: 1 coin (30 hours)

Achtelig, M. (2012). Planning and structuring user assistance: How to organize user manuals, online help systems, and other forms of user assistance in a user-friendly, easily accessible way (1. ed.). Technical documentation solutions series. Zirndorf: Indoition.

Brodie Graves, H., & Graves, R. (2012). A strategic guide to technical communication (Second edition). Canadian Edition. Peterborough, Ontario: Broadview Press Ltd.

Carey, M., Lanyi, M. M., Longo, D., Radzinski, E., Rouiller, S., & Wilde, E. (2014). Developing quality technical information: A handbook for writers and editors (3rd ed.). Upper Saddle River, NJ: IBM Press.

Europe, E. A. f. T. C.-t. (2018). Delivery of information for use in electronic form - eDoc: Guidelines ([1. Auflage]). Stuttgart, Germany: tcworld GmbH.

Gerson, S. J., & Gerson, S. M. (2015). Technical communication: Process and product (8th ed.). Upper Saddle River, NJ: Prentice Hall.

Hamilton, R. L. (2009). Managing writers: A real world guide to managing technical documentation (1st ed.). Fort Collins, Colo: XML Press.

Irish, R., & Weiss, P. E. (2009). Engineering communication: From principles to practice. Don Mills, Ont., Oxford: Oxford University Press.

Keyser, P. d. (2012). Indexing: From thesauri to the Semantic Web. Chandos information professional series. Oxford: Chandos.

Lannon, J. M., & Gurak, L. J. (2016). Technical communication: Global Edition (14th ed.): Pearson.

Markel, M. (2016). Technical Communication with 2016 MLA Update (11st edition 2016). New York: Macmillan Higher Education; Bedford.

Markel, M. (2017). Practical Strategies for Technical Communication with 2016 MLA Update (2nd edition). New York: Macmillan Learning; Bedford.

Markel, M., & Selber, S. (2018). Practical Strategies for Technical Communication (3rd edition 2019). New York: Macmillan Learning; Bedford.

Markel, M., & Selber, S. (2018). Technical Communication (12nd edition 2018). New York: Macmillan Higher Education; Bedford.

Noam, E. M. (2018). Media and Digital Management. Cham: Springer International Publishing.

Pringle, A. S., & O'Keefe, S. S. (2009). Technical writing 101: A real-world guide to planning and writing technical content /Alan S. Pringle ; Sarah S. O'Keefe (3rd ed.). Research Triangle Park, NC: Scriptorium Pub. Services.

Rockley, A., Cooper, C., & Halvorson, K. (2012). Managing enterprise content: A unified content strategy (2nd ed.). Berkeley, CA: New Riders.

Sheehan, R. J. (2018). Technical communication today (Sixth edition). Boston: Pearson.

Watts, F. B. (2012). Engineering documentation control handbook: Configuration management and product lifecycle management (4th ed.). Oxford: William Andrew.

# Mandatory area 3: Concept Development

**Class recommendation**

– Professional:    2 coins (60 hours)
– Expert:          3 coins (90 hours)

Achtelig, M. (2012). Designing templates and formatting documents: How to make user manuals and online help systems visually appealing and easy to read, and how to make templates efficient to use (1. ed.). Zirndorf: Indoition.

Achtelig, M. (2012). Planning and structuring user assistance: Wie Sie Handbücher, Online-Hilfen und andere Formen technischer Dokumentation benutzerfreundlich aufbauen und den Informationszugriff erleichtern ; zweisprachig: Englisch + Deutsch (1. Aufl.). Reihe "Lösungen zur technischen Dokumentation". Zirndorf bei Nürnberg: Indoition.

Achtelig, M. (2012). Translating technical documentation without losing quality: What you shouldn't spoil when translating user manuals and online help (1. ed.). Translating technical documentation. Zirndorf: Indoition.

Ament, K. (2003). Single sourcing: Building modular documentation. Norwich, N.Y: William Andrew Pub.

Bellamy, L., Schlotfeldt, J., & Carey, M. (2012). DITA best practices: A roadmap for writing, editing, and architecting in DITA. Boston, Mass: IBM Press/Pearson Education.

Broda, S., Brüning, H., Dierssen, S., Friese, O., Fritz, M., Hellfritsch, E., et al. (2014). Guide to mobile documentation. Stuttgart: tekom.

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Gurak, L. J., & Hocks, M. E. The Technical Communication Handbook (1st ed.): Pearson.

Hackos, J. T. (2007). Information development: Managing your documentation projects, portfolio, and people. Timely, practical, reliable. Indianapolis, Ind.: Wiley.

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Mathur, A. (2017). Writing High-Quality Standard Operating Procedures: A Practical Guide to Clear, Concise, and Correct SOPs (1.th ed.): Createspace Independent Publishing Platform.

Pfeiffer, W. S. Pocket Guide to Technical Communication (5th ed.): Pearson.

Schmitz, K.-D., & Straub, D. (2018). Successful terminology management in companies: Practical tips and guidelines: basic principles, implementation, cost-benfit analysis, and system overview. Studies. Stuttgart, Germany: tcworld GmbH.

Schultz, S., Darrow, J., Kavanagh, F., & Morse, M. (2014). The Digital Technical Documentation Handbook: Digital Technical Documentation Handbook (1. Aufl.). s.l.: Elsevier Reference Monographs.

Schultz, S., Darrow, J., Kavanagh, F., & Morse, M. (2014). The Digital Technical Documentation Handbook: Digital Technical Documentation Handbook (1. Aufl.). s.l.: Elsevier Reference Monographs.

Setchi, R. (2009). Intelligent Product Manuals: The Technical Documentation that Delivers Up-to- date, Accurate and Relevant Information to the Right Person. Saarbrücken: VDM Verlag Dr. Müller.

Shelf, T. (2011). The Dita Style Guide: Best Practices for Authors: Scriptorium Publishing Services.

Tarnoruder, A. (2018). Standards and guidelines for API documentation: For technical writers, software developers, information and software architects. Practical guides. Stuttgart: tcworld GmbH.

White, L. W. (2017). DITA for print: A DITA open toolkit workbook (Second edition). Laguna Hills, CA: XML Press.

# Mandatory area 4: Content Creation

**Class recommendation**

– Professional:   7 coins (210 hours)
– Expert:        8 coins (240 hours)

Achtelig, M. (2012). Designing templates and formatting documents: Wie Sie Benutzerhandbücher und Online-Hilfen attraktiv und gut lesbar gestalten, und wie Sie effiziente Formatvorlagen erstellen ; zweisprachig: Englisch + Deutsch (1. Aufl.). Reihe "Lösungen zur technischen Dokumentation". Zirndorf: Indoition.

Achtelig, M. (2012). "How to write that f…ing manual": The essentials of technical writing in a nutshell (1. ed.). Technical documentation basics. Zirndorf: Indoition.

Aidoo, J. (2009). Effective Technical Writing and Publication Techniques: TROUBADOR PUB LTD.

Alred, G. J., Oliu, W. E., & Brusaw, C. T. (2018). The Handbook of Technical Writing (12nd edition 2019). New York: Macmillan Learning; Bedford.

DeRespinis, F., Hargis, G., Schlotfeldt, J., Bellamy, L., & Carey, M. (2012). Best practices for technical writers and editors: Collection ; DITA, quality, and style (Video enhanced ed.). Boston, MA, s.l.: IBM Press.

Finkelstein, L. (2008). Pocket book of technical writing for engineers and scientists (3rd ed.). BEST (Basic Engineering Series and Tools). Boston: McGraw-Hill Higher Education.

Gallon, R. (2016). The language of technical communication. Laguna Hills, California: XML Press.

Kmiec, D., & Longo, B. (2017). The IEEE Guide to Writing in the Engineering and Technical Fields (1. Auflage). IEEE PCS Professional Engineering Communication Series. New York, NY: John Wiley & Sons.

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Tebeaux, E., & Dragga, S. (2012). The essentials of technical communication (2nd ed.). New York: Oxford University Press.

van Laan, K. (2012). The insider's guide to technical writing. Laguna Hills, Calif: XML Press.