# **Extended Essay Research Questions**

The following Extended Essay Research questions were submitted by students of Linz International School Auhof (LISA) for the IB examination sessions May 2017 and May 2018. They are published here for reference purposes. The fact that they are listed here does not say anything about the quality or suitability of the research question or the final grade that student got.

#### German A

- Inwiefern verwenden die Autoren von "Die blinde Eule" und "Die Verwandlung" Metamorphosen sowie surrealistische Elemente, um die Motive der beiden Werke zu verdeutlichen?
- Inwiefern wirkt sich Robert Gwisdeks Schreibstil in seinem Buch "Der Unsichtbare Apfel" sowie in ausgewählten Liedtexten als Käptn Peng auf sein Publikum aus?
- Welche Formen von Machtausübung werden in "Der Prozeß" von Franz Kafka dargestellt und welche Parallelen ergeben sich zur Biografie des Autors?
- Inwiefern erfüllen die Werke "Spiegel das Kätzchen" und "Der Schrecksenmeister" die Merkmale eines Kunstmärchens?
- Welche Funktion und Wirkung kommen dem Stilmittel Humor in ausgewählten Kurzgeschichten Bölls zu?
- Inwiefern wirkt sich die in den Romanen "Der Mann, der Hunde liebte" von Leonardo Padura und "Herztier" von Herta Müller thematisierte Zensur auf das Verhalten der Protagonisten aus?

# **English A**

- In what ways do the authors of Alas, Babylon and The Road portray the characters of the children in their apocalyptic worlds?
- How does Jean Louise's view of morals and her father alter as she matures, during and between, "To Kill a Mockingbird" and "Go Set a Watchman"?

### **German B**

- Inwiefern beeinflusst die Verwendung des Dialekts die Werbung in Österreich?
- "Jugend ohne Gott" von Ödön von Horváth: Wie werden nationalsozialistische Werte in dem Roman vermittelt und wie beeinflussen diese Werte das Handeln des Protagonisten?
- Was führte zum Mauerbau 1961 in Berlin und welche Auswirkungen hatte die Berliner Mauer auf die Menschen in der DDR?
- Inwiefern hat die politische Lage Deutschlands im Jahr 1936 die Olympischen Sommerspiele in Berlin beeinflusst?

# **English B**

- To what extent does the protagonist's use of flowers as a means of communication in the novel 'The Language of Flowers' by Vanessa Diffenbaugh help to improve her relationships and develop as a character?
- How does Julia Alvarez portray immigration from the sisters' perspectives in "How the García Girls Lost Their Accents"?
- Could Puck from Shakespeare's A Midsummer Night's Dream have served as an inspiration to C.S. Lewis when creating the Faun Mr. Tumnus for his novel The Lion, the Witch and the Wardrobe?
- How does Roald Dahl portray children in his works and how does this affect the reader?
- To what extent do the creative methods (language, structure and stylistic choices) in comics, with a focus on Maus, create an impact on the reader, despite its limited use of language?
- How do the diseases Osteogenesis Imperfecta and Leukemia affect the sufferers and their siblings in the novels My Sister's Keeper and Handle with Care?
- How do populists, especially Donald Trump, use language as a tool of persuasion in order to get the audience on their side?
- How does the depiction of the female characters in Stephen King's novels Dolores Claiborne and Rose Madder disprove the author's alleged sexism and limited perspective of female characters?
- How is Chicago's unique correlation between gun laws and crime rates reflected in rap songs by Kanye West, the BBC documentary "The Lost Streets of Chicago" and works of art from the exhibition "The Heat"?

- To what extent are "The Note-book" by Nicholas Sparks and "The Fault In Our Stars" by John Green romantic tragedies?
- Why did Roald Dahl include dark and scary characters and challenging situations in his books aimed at children? How autobiographical are these elements?
- To what extent can the theme of duality be seen in The Strange case of Dr. Jekyll and Mr. Hyde by Robert Louis Stevenson and The Picture of Dorian Gray by Oscar Wilde and how it was portrait in the late Victorian Era?
- How did Mary Shelley challenge the notion of humanity in her book "Frankenstein"?
- How did Peter Jackson's rendition of "The Lord of the Rings" and "The Hobbit" affect New Zealand?"
- How did the Sex Pistols have an impact on modern punk culture?
- Expectations of an ideal relationship A comparison of the female protagonist's ideas, opinions and wishes in the books Gone Girl and The Girl On The Train
- How do the characters Holden Caulfield from The Catcher in the Rye by J.D. Salinger and Rowan Clark from Broken Soup by Jenny Valentine compare in how they cope with difficult situations?

### Geography

- To what extent is electro mobility in public transport a solution for Linz, Austria and its surroundings?
- What are the Economic Advantages and Environmental Implications of Steel Production in Linz, Austria? (Comment: danger of treating this topic from an Economics viewpoint)

#### **Economics**

- How has the Austrian beer price increase of December 2016 influenced prime stakeholders in the market?
- Can seasonality be observed on the market for primary goods, especially on the market for apples?
- How effective have Austria's policies against smoking been in reducing the negative externalities associated with the consumption of cigarettes?
- What are the economic benefits and drawbacks of an umbrella brand such as the GENUSS REGION ÖSTERREICH?
- To what extent can the 2015/2016 tax reform in Austria be seen as effective in promoting the main macroeconomic objectives?
- To what extent can and should negative externalities created by the purchasing of books online in Linz, Upper Austria be reduced?
- To what extent should the government regulate the market for security facilities in Upper Austria?

# History

- For what reasons should Vasil Levski not be regarded as the main revolutionary hero of Bulgarian history during the Ottoman rule?
- To what extent did the Hiroshima and Nagasaki Atom bomb attacks hasten the outbreak of the Cold War?
- To what extent did the British colonization alter the Akan's beliefs in waterbodies?
- Which of the two queens of the Mongolian Empire- Burte or Sorkhugtan- was the more powerful and influential?
- To what extent was Romania involved in the Holocaust from 1941 to 1944?
- A comparison of Alexander the Great and Genghis Khan's military tactics in the early phase of the rapid expansions of their empires. (Problem: this is not formulated as a question)

#### **ITGS**

- Is VR (Virtual Reality) a success or is it just a flash in the pan?
- To what extent does the usage of information technology affect students physically and psychologically?
- To what extent has CGI affected the commercial and critical success of Hollywood movies?

## **Psychology**

- What effect does growing up with a schizophrenic parent have on a child's cognitive, emotional and social development?
- How does Multilingualism Influence Cognition?
- How Does Meditation Affect the Human Brain and Behaviour?

#### **Biology**

- How do different light intensities influence the contrast vision of the human eye?
- Is the relationship between hair colour and its thickness existent or non-existent?
- In comparison to other adults, to what extent can a teachers hearing be influenced in a negative way because of how noise they are exposed to?
- How are different abiotic stressors influencing seed germination/ plant growth?
- To what extent does water hardness affect the growth of cress over a period of 5 days?
- How do different concentrations of sodium chlorite influence microbial growth?
- If small groups of hungry bees are presented in a control chamber the choices of: Glucose (2 to 1 in water), Fructose (2 to 1 in water), Lactose (2 to 1 in water), Sucrose (2 to 1 in water), Sucrose (8 to 1 in water), (Maltose 2 to 1) which of the following sugars will be preferred by most bees; i.e. in which chamber will most bees be present?
- Does different colors of apple juice and concentration of apple juice affect perceived taste?
- How do varying concentrations of six different spices, namely garlic (Allium sativum), turmeric (Curcuma longa), dry ginger (Zingiber officinale), cinnamon (Cinnamomum burmannii), cumin (Cuminum cyminum) and black pepper (Piper nigrum) affect the rate of growth of Lactobacillus acidophilus in fermented milk over time as a measure of pH change?

### Chemistry

- How do the characteristics (viscosity, pH, colour) of tea change with increasing brewing time?
- How is the electrochemical process of cleaning silver metal affected by the presence of sodium chloride, magnesium chloride, potassium chloride, calcium chloride and rubidium chloride?
- How does the viscosity of green tea change with fusion time?
- To what extent does storing Aspirin tablets under refrigeration for different time periods affect the amount of acetylsalicylic acid in the tablets that has broken down into salicylic and ethanoic acid?

# **Physics**

- To what extent do differently sized surface areas of a bob behave when being exposed to air resistance?
- How does moisture affect the critical angle of repose of sand piles?

## **Mathematics**

- What is the expected loss or gain for a particular three-reel slot machine?
- How did the two scientists, Isaac Newton and Gottfried Wilhelm von Leibniz come up with their fundamental theories of calculus in the 17th century? What are the similarities and differences between their approaches to calculus, and how are they similar to the concepts used nowadays?

### Music

- What defines the Future Bass genre and how has it evolved since its appearance?
- What are the differences between the piece "Die Schuldigkeit des ersten Gebots" (KV35) and the piece "Requiem in D-minor" (KV 626) by Wolfgang Amadeus Mozart, concerning the instrumentation, the use of choir and soloists, as well as the structure, the use of key signatures, the lyrical content and the messages?
- Arabic and Turkish Longa: How is Longa differentiated so that it fits the old Turkish and modern Arabic culture?

#### **Visual Arts**

- How are political situations portrayed in Art Spiegelman's graphic novel 'Maus' compared to Marvel's 'Captain America' comic books?"
- What are the Elements and Principles of Art in "Yellow Submarine"?
- How has the street art scene in Linz developed since the year 2000?
- How did mental illness influence van Gogh's choice of content and colour of his artworks?

- To what extent are the paintings 'Mona Lisa' and 'Girl With A Pearl Earring' comparable and how do they depict idealized versions of female beauty?"
- How did Monet 's use of color transform in different stages of his artistic career and what are possible reasons for it?
- How did the annual themes of the Ars Electronica Festival change, considering the technological advancements in the media from 1979 to present-day?
- Changes in the Illustrations of Hatschi Bratschi between 1904 and 2011 (problem: not formulated as a question)
- Artistic Movements and the Political Power: How did the political development influence the work of Adolf Ziegler and Otto Dix?
- How does the use of visual means for the depiction of evil differ from "Sleeping Beauty" to "Tangled"?

#### **Theatre Arts**

- What are the characteristics of modern radical theater and to what extent does the production "Radikal" from the Landestheater Linz, fit into theis theatrical genre?
- How does the drama "Oh My Sweet Land" bring to light the customs and traditions of the Middle Eastern people while conforming to a Western theatrical tradition?