## **NEW TRIER VARSITY 2009**

## FINALS 2



- 1. The protagonist of this work sees "Kirby" written on the wall of the bathroom at the Scope, a bar where Mike Fallopian talks about the Peter Pinguid society. This novel features characters like Genghis Cohen, a philate-list, and an ex-Nazi psychiatrist from Buchenwald, Dr. Hilarius. This novel details a fictional play titled *The Courier's Tragedy*, and the protagonist leaves KCUF radio to play "Strip Botticelli" with Metzger. As the estate of Pierce Inverarity is settled in this work, the muted post-horn symbol keeps popping up. Name this Thomas Pynchon work in which representatives from Tristero go to an auction to outbid Oedipa Maas during the title action. ANSWER: *The Crying of Lot 49*
- 2. Tetrabenazine was recently approved to treat this disease, functioning by inhibiting VMAT-2. While this disease's mechanism is not fully understood, it is known to result in nuclear inclusion bodies, which may explain the toxicity caused by its characteristic protein misfolding. On a larger scale, it damages the striatum in the brain, likely responsible for its symptoms of chorea. Marked by a long CAG repeat on chromosome 4 resulting in a mutant namesake protein, identify this neurodegenerative autosomal dominant disease whose onset comes around age 40. ANSWER: <a href="Huntington">Huntington</a>'s disease [or <a href="Huntington">Huntington</a>'s chorea]
- 3. Isabella, the title character of one of this man's works, gets Mustafa drunk and escapes with Lindoro, while in another work Ninetta is nearly killed for stealing a spoon that was actually stolen by the title character; those works are the operas *The Italian Girl of Algiers* and *The Thieving Magpie*. The Austrian Gessler is the antagonist of this man's final opera, while another features the baritone aria "Largo al factotum" and is based on the first play in a trilogy by Beaumarchais. Famous for stopping writing opera forty years before his death, name this Italian composer of *William Telland The Barber of Seville*.

ANSWER: Gioachino Antonio Rossini

**4.** With Henri de Saint-Simon, this man wrote essays like *The Industry* and *The Organizer*, and he died shortly after writing a philosophical examination of mathematics entitled *The Subjective Synthesis*. This man coined a word that describes one's unselfish concern for the well-being of others. He speculated that man goes through phases of animism, polytheism, and monotheism in the larger Theocratic Stage, a part of his Law of the Three Stages. He also invented a philosophy that states that the only true knowledge is sensory knowledge. Name this Frenchman who came up with Altruism and Positivism, sometimes considered the first sociologist.

ANSWER: Auguste Comte

5. In this painting, six stars appear in the sky and the central figure's left arm is hidden from the viewer but the right arm is at a ninety degree angle and holds a stick. The artist's signature is seen in the extreme bottom right corner, just below a partially concealed red vase, presumably full of water, given the location. The brightness of the central figure's multicolored garment contrasts with the darkness of the creature above her which lurks under the moonlight. A mandolin appears on the desert sand next to the dark-skinned title figure of this painting, which is classified as Post-Impressionist and Primitivist. Name this oil painting in which a lion mystically examines a defenseless woman, a work by Henri Rousseau.

ANSWER: The Sleeping Gypsy

- 6. The narrator of this work returns home from Trinity Church to find that his key won't work because the title character is inside. One of the title character's coworkers only makes mistakes in the afternoon, and another coworker is so-named because he brings a specific flavor of cake. The title character, who used to work at the Dead Letters Office, is imprisoned and dies of starvation, prompting the narrator, called "the lawyer," to cry, "Ah, humanity!" Turkey, Nippers, and Ginger Nut are all characters who appear in this work whose title character always says, "I would prefer not to." Name this "Story of Wall Street," a short story by Herman Melville.

  ANSWER: "Bartleby, the Scrivener: A Story of Wall Street"
- 7. This woman's father was assassinated shortly before he would have become his country's first prime minister following British rule, when she was two years old. She entered politics as the leader of the newly formed National League for Democracy after the ruling socialist resigned. However, a military junta had seized power. They called for a general election, and in 1990, she was elected Prime Minister of her country, her party winning 59% of the vote. The junta, however, threw out the results and instead placed her under house arrest for 14 of the past 20 years. The junta is now headed by Than Shwe. Name this Burmese winner of the 1991 Nobel Peace Prize.

  ANSWER: Aung San Suu Kyi
- **8.** As developed by the LCAO procedure, this phenomenon arises because the Schrödinger equation is linear, so linear combinations of solutions to it are also valid solutions. One model predicts that hydrogen sulfide would exhibit this phenomenon, but it is not observed because the bonds lengths are high, decreasing electron-electron repulsions. It applies to the central atoms of methane, ammonia, and water, and was proposed by Linus Pauling. Name this phenomenon from VSEPR (ves-pur) theory in which two atomic orbitals mix to create new ones, such as the *sp* orbital.

ANSWER: <u>hybrid</u>ization [accept word forms; accept <u>hybrid</u>ized orbitals, etc.]

9. This Christian sect adopted a Book of Common Prayer with revised liturgy so that its clergy would not be guilty of treason; this was done at its 1789 founding in Philadelphia. Headed today by Presiding Bishop Katharine Jefferts Schori, its services always include a prayer for the Archbishop of Canterbury, since it is part of the Anglican Communion with the Church of England. It uses a symbol of a shield with the Cross of St. George and a smaller Cross of St. Andrew in its canton, since its succession of bishops can be traced to both England and Scotland. Identify this American Christian sect.

ANSWER: Episcopalian Church [prompt on Anglican Church or Church of England before "1789"]

- 10. If not for this property's introduction, omega-minus baryons would violate the Pauli exclusion principle. This property actually increases with distance from the particles that possess it. It changes when a quark gives off a gluon, and combines with its *anti-* variety to form mesons. Particles with this property cannot be isolated, its namesake confinement. This quantity can have three values, which can combine neutrally to form a baryon, while particles without this property are known as leptons and are not subject to the strong nuclear force. Name this property possessed by gluons and quarks, studied in quantum chromodynamics.

  ANSWER: color charge
- 11. This woman becomes enamored with Brazilian culture, and in one scene, cooks with a "Jets to Brazil" poster in the background. When her cooking goes amiss, she eats at a restaurant; upon returning home, she is arrested in connection with Sally Tomato's drug ring. This character's wealthy Brazilian fiance, José, cancels the engagement, leading her to throw her cat out of a taxi. Prior to that engagement, she wedded Doc, a Texas doctor, at the age of 14. By the end of the movie, she kisses Paul, a struggling writer, who like her, provides company to wealthy, older patrons. Name this character portrayed by Audrey Hepburn, who goes to a title jewelry store on Fifth Avenue whenever she gets the mean-reds, the protagonist of *Breakfast at Tiffany's*.

ANSWER: Holiday "Holly" Golightly [accept any underlined part or combinations thereof]

- 12. This man wrote a story in which the main character almost drowns, then returns to find that no one noticed he was missing. This author of "Cramp" and "The Temple" described a cyclist getting hit by a bus in "The Accident". In one of his plays, the Man and the Card Player are encountered by the Crowd, a group of actors who play a rope game. He also wrote "The Temple", "In the Park", and *The Other Shore*, as well as a work inspired by a display of fishing equipment, *Buying a Fishing Rod for My Grandfather*. His most famous work details a man with cancer who travels down the Yangtze to the title location. Name this Nobel Laureate and author of *Soul Mountain*, a Chinese author. ANSWER: Gao Xingjian [or Kao Hsieng-chien]
- 13. This figure is sometimes referred to as Mekhenty-er-irty, or "he who has no eyes," while his childish aspect is called Harpokrates (har-PAWK-ruh-teez). When his vision is impaired, he has been known to decapitate the deities fighting at his side. His elder form was among the children of Geb and Nut, while in his younger form, he tore off one leg and the testicles of his uncle during an eighty-year fight he waged against his uncle Seth as vengeance for the death of his father. Identify this falcon-headed Egyptian god, the son of Osiris.

  ANSWER: Horus
- 14. In 1934, this man became chief attorney for the Federal Alcohol Control Administration after serving as assistant to Jerome Frank of the AAA. A lawyer for Colonel Frank Knox, FDR's Secretary of the Navy, he defeated Dwight H. Green in a gubernatorial election, and JFK made him U.S. Ambassador to the U.N., a position in which he declared that he would wait for an answer from Valerian Zorin "until Hell freezes over". He implored, "eggheads of the world unite, you have nothing to lose but your yolks", and, in 1948, he became governor of Illinois. Name this Democrat who lost the 1952 and 1956 Presidential elections to Dwight D. Eisenhower. ANSWER: Adlai Ewing Stevenson II
- 15. Devised to test Alexander Oparin's 1924 hypothesis, experiments similar to this one were performed by Wilde and MacNevin. A purely aqueous variation used hydrogen cyanide to produce adenine, and was performed by Joan Oró. A 2008 reanalysis of the solutions in this experiment found that the "volcanic" version of the experiment produced far more compounds than previously realized—not five, but twenty-two amino acids. Using an electrical spark to simulate lightning and producing organic compounds from hydrogen, ammonia, water, and methane, name this 1952 experiment which demonstrated the feasibility of abiogenesis on an early Earth.

  ANSWER: Miller-Urey experiment [or Urey-Miller experiment]
- 16. The name of this country was restored when it won its independence in 1980, and two years later its capital lost the name Salisbury. Its former leader remained in Parliament until 1987; he had worked out deals with Abel Muzorewa and the British government to hold national elections. That leader, who signed a Unilateral Declaration of Independence, was Ian Smith, head of the Rhodesian Front party. One of the leaders in its fight for independence was Joshua Nkomo, who worked with the man who became its first Prime Minister and still serves as its President, sharing power with Morgan Tsvangirai. Name this troubled country in southern Africa headed by Robert Mugabe. ANSWER: Zimbabwe
- 17. Markov's inequality can be used with Chebyshev's inequality to derive one form of this law, a form that also leads to the asymptotic equipartition property. The other form of this theorem applies if the sum of all variances divided by the index squared converges; that is known as the Kolmogorov criterion, and applies to the strong version of this theorem, which adds that the convergence is almost sure. With a name coined by Simeon Poisson, identify this law that states that as *n* approaches infinity, the arithmetic mean of *n* random variables converges to its expected value. ANSWER: law of <u>large numbers</u> [accept "weak" or "strong" as a modifier; accept <u>Bernoulli</u>'s Theorem]

- 18. Until recently, a main thoroughfare of this African nation's capital city was named after Herman Göring. It is home to a number of other oddities, including the world's largest underwater lake, located near Grootfontein, and the largest iron meteorite in the world, weighing sixty tons. Colonized by the Germans, it was taken over by the South Africans at the end of World War I and remained under its rule until independence in 1990 at the end of a twenty-four year insurgency led by SWAPO. Name this southwest African country with its capital at Windhoek. ANSWER: Republic of Namibia [or Republiek van Namibië]
- 19. This man's brother was supported by Harald Hardrada, and by some accounts the final action of the Witena gemot was its support of this leader. His preparations for war included training 3,000 huscarls to wield two-handed axes to supplement his public levy troops, or fryd. His sister, Edith of Wessex, married the King he temporarily succeeded, Edward the Confessor. He died when an arrow pierced his eye according to the Bayeux Tapestry. Name this Anglo-Saxon King who lost the Battle of Hastings to Normans under William the Conqueror. ANSWER: King <u>Harold Godwinson</u> [or <u>Harold II</u>, prompt on <u>Harold</u>]
- **20.** In this novel, one of the characters is at first very upset that wine was spilled on his book of Hoyle and later marries Nancy. The schoolmaster Mr. Partridge is driven out of town by suspicion that he is the father of the main character. Its protagonist's suspected mother, Jenny, had nursed Bridget back to health in the estate of Bridget's wealthy brother. The protagonist loves Sophia Western, but she is betrothed to Bridget's son Master Blifil, who discredits the protagonist before it is revealed to Squire Allworthy that the protagonist is actually Bridget's son. Allworthy then adopts the main character as his heir. Name this novel about a foundling written by Henry Fielding. ANSWER: *The History of Tom Jones*, a Foundling