Michigan Fall Tournament (Written by Will Nediger, Kurtis Droge, Cody Voight, Saul Hankin, Ben Forster, Siddhant Dogra, and Peter Jiang)

Editors Round 5

Warm-Up Tossup (Optional)

In the *Hyouka* series, Houtarou traces the source of an Agatha Christie-inspired chain of events to an order named after this animal. In another series, one character named after this animal comes from Tevua and likes to say "wafu!"; that character is from *Little Busters* and has two dogs named Belka and Strelka. One of Strelka's namesake's puppies were given by Kruschev to Caroline Kennedy, unlike this earlier dog, which wasn't able to have puppies. Dying as expected from overheating after launch, for 10 points, who is this stray Russian dog that was the first animal to orbit the Earth?

ANSWER: Kudryavka [also accept Laika]

Tossups

1. An inquisitive woman in this play is told that the family solicitors of one female character are Messieurs Markby, Markby and Markby; that female character reveals to an imposter that they have already been engaged and broken up, unbeknownst to him. One man in this play uses an imaginary invalid to get out of boring engagements in the city. Two men in this play decide to have Canon Chasuble rechristen them with the same name, and one of them lies that he has a brother so he can visit the daughter of Lady Bracknell. Later, Cecily Cardew and Gwendolyn Fairfax state they can't love men with names like Algernon and Jack. At the end of this play, Miss Prism confesses she absent-mindedly left John Worthing in a handbag in a train station. For 10 points, name this Oscar Wilde play.

ANSWER: The Importance of Being Earnest

2. Forces led by James Martin killed nineteen striking coal miners in this state in the Lattimer Massacre, and it was where Eliza Turner and Sarah Hallowell founded the New Century Trust to advocate women's rights. In 1992, one governor of this state placed a set of restrictions on the access to abortions, leading to a Supreme Court case against Planned Parenthood. The slave catcher Edward Prigg was arrested in this state, home to the leader of the Radical Republicans, Thaddeus Stevens. Levies to pay for the Quasi War led to Fries's Rebellion in this state, while Lighthorse Harry Lee was called on to suppress a different rebellion here that was sparked by Alexander Hamilton's tax on an alcoholic beverage. For 10 points, name this state home to the Whiskey Rebellion where the Battle of Brandywine was fought outside Philadelphia.

ANSWER: Pennsylvania

3. This thinker used the example of a detached human hand to illustrate how the soul can live on after death without existing as a separate substance inside the human body, thus rejecting the argument of the plurality of forms. John Haldane is one of the leaders of an "analytical" school of thought dedicated to this thinker, the study of whose work was espoused by Leo XIII's bull Aeterni Patris. One of his works may have been written at the behest of Raymond of Peñafort and is split into a discussion of human truths and divine truths. He referred to Averroes as "The Commentator" and Aristotle as "The Philosopher" in a work in which he reproduced the arguments of the first cause and the unmoved mover as two of his "five ways" for showing the existence of god. For 10 points, name this Dominican scholastic philosopher, the author of Summa Theologica.

ANSWER: Thomas Aquinas

- 4. Although not Saturn's rings, the density wave theory of Lin and Shu was developed to explain these objects. These objects have low positive values in the numerical Hubble stage. One of the original motivations for Modified Newtonian Dynamics was the asymptotically flat rotation curves of these objects. The luminosity of these objects is empirically correlated with their velocity width according to the Tully-Fisher relation. These objects are found on the tongs of the Hubble tuning fork and have a central bulge, halo, and rotating disc. For 10 points, identify this type of galaxy that can be "barred" and which includes the Milky Way.

 ANSWER: spiral galaxies [prompt on lenticular galaxies; accept spiral arms before "Hubble stage"]
- 5. A screenshot of this painting is seen near the beginning of Luis Buñuel's film *The Phantom of Liberty*. This painting served as the basis for a Pablo Picasso painting showing a group of robotic men and a group of pregnant women in North Korea. This painting's only light source is a large, box lantern partially obscured by one figure's leg. That lantern casts light on a man in a white shirt and yellow pants whose arms stretch upwards in a V shape, mirroring the posture of a bloody corpse beneath him. The companion to a painting subtitled *The Charge of the Mamelukes*, the right hand side of this painting is dominated by a row of soldiers wearing hats and pointing muskets away from the viewer. For 10 points, name this painting showing a massacre by French troops during the occupation of Spain, a work of Francisco de Goya.

ANSWER: The Third of May, 1808

6. One character in this play claims scientists have proven women have smaller brains, which is why they are called the weaker sex. Two girls in this play mock a man by pretending to use a camera and to drive a motorcycle. One character in this play is addressed as Ruth, Rachel, Esther, and Bathsheba. Ailatu pulls out the armpit hairs of a character described as "panther of the trees," who Sadiku claims is impotent. One of the title characters calls for the Dance of the Lost Traveller and is told a stamp will be made in her image after pictures of her appear in a magazine, and another character in this play who repeatedly refuses to pay the bride price is the schoolteacher Lakunle. For 10 points, name this play in which the two title characters are Baroka and Sidi, written by Wole Soyinka.

ANSWER: The Lion and the Jewel

7. Although it is not the pancreas, cancer of this organ can be fought with the S-1 chemotherapy regimen and is particularly prevalent in East Asian populations. This organ is host to a bacteria whose virulence is partially based on the presence of the cagA gene. Histamine is secreted by enterochromaffin-like cells in this organ. Pernicious anemia is caused by the loss of intrinsic factor-secreting cells in this organ, parietal cells. Two of the upper parts of this organ are the fundus and the cardia. The mucosal lining of this organ is burrowed into by *H. pylori*, which can cause ulcers and gastritis. For 10 points, name this organ that contains hydrochloric acid and is found at the end of the esophagus.

ANSWER: stomach

8. One deity in this myth system was symbolized by four arrows pointing in different directions. An evil deity in this myth system gave birth to the Nine Diseases. This system's creation myth involved a duck laying three eggs on the knee of a floating goddess. One figure in this myth system has sex with his sister, causing her to kill herself, and later takes revenge by killing the tribe of Untamo. Another figure from this system is impregnated by eating a lingonberry. One deity in this myth system created thunderstorms by having sex with his wife, Akka, and wielded a namesake hammer, Ukonvasara. The primary account of this system includes the forging of the Sampo, is set in such realms as Pohjola and Tuonela, and was compiled by Elias Lonnrot. For 10 points, name this myth system chronicled in the *Kalevala* that originates in a Scandinavian country.

ANSWER: **Finnish** mythology [accept word forms]

9. This book argues that considerations of representability affect the phenomenon of displacement. This book's final chapter describes an incident in which a child cries out "Father, don't you see that I am burning?" It's not by Robert K. Merton, but its fourth chapter, which deals with distortion, introduces the distinction between manifest and latent content. This book famously analyzes an incident in which an infection results from an injection given to a woman named Irma with a dirty syringe. It argues that the title experiences are forms of wish fulfillment. The author of this book described its central subject as the "royal road" to understanding the unconscious. For 10 points, name this book by Sigmund Freud which analyzes some nocturnal experiences.

ANSWER: The <u>Interpretation of Dreams</u> [or Die <u>Traumdeutung</u>]

10. After this man's death, an outburst of counterculture occurred in his capital simply called "The Movement" that included meetings at Rock Ola. This man used forced labor to construct a monument called The Valley of the Fallen and housed opponents in the Carabanchel Prison, both part of his country's White Terror. He outlawed all labor unions but one, creating the Vertical Syndicate. He authorized his country's Blue Division to fight alongside the Germans in the eastern front of World War Two, despite maintaining neutrality in the conflict. This man's rise to power began with a command in the Canary Islands, from which he joined a rebellion to take over his country's forces in Africa. He joined with Emilio Mola to win his country's Civil War as the head of the Falange Party. For 10 points, name this dictator of Spain during the mid 20th century.

ANSWER: Francisco Franco

11. A Nobel-winning environmentalist from this country founded the Green Belt Movement. This country's government tried to increase the export price of gold in the Goldenberg scandal during the 1990s. This country's army fought against secessionist ethnic Somalis in the Shifta War. The trial of a group of nationalists from this country known as the "Kapenguria Six" took place under the governorship of Evelyn Baring. Hezekiah Ochuka led a failed 1982 coup attempt against its second president, Daniel arap Moi. The execution of Dedan Kimathi signaled the defeat of this country's rebellion against its British colonizers, the Mau Mau Uprising. For 10 points, name this African country whose founding father, a member of the Kikuyu people, was Jomo Kenyatta.

ANSWER: Republic of Kenya

12. A six-movement work of chamber music by this composer includes movements entitled "Floe," "Rubric," and "Façades." His first cello concerto, written for Julian Lloyd Webber, is one of the eight concertos collected in his Concerto Project. This composer's album Solo Piano ends with the tracks "Mad Rush" and "Wichita Sutra Vortex," which follow five tracks named "Metamorphosis." This composer wrote Music in Twelve Parts for his namesake ensemble. He scored a work whose name is Hopi for "life out of balance," Koyaanisqatsi. This composer's "Portrait Trilogy" includes operas about Gandhi and Akhenaten, as well as an opera with five intermezzos called "knee plays." For 10 points, name this minimalist composer known for his film scores and his opera Einstein on the Beach.

ANSWER: Philip Glass

13. An equation for this process is corrected by multiplying by the Breit-Dirac recoil factor, raised to the second or third power, to account for radiation pressure. An important parameter for this process is equal to Planck's constant over a particle's rest mass times the speed of light. CMBR photons gain energy in the Sunyaev-Zel'dovich effect, which is an example of the inverse type of this process. At higher energies, the differential cross-section of this process can be calculated using the Klein-Nishina formula while at lower energies, an analog of it named for Thomson occurs. The wavelength change for this relativistic, inelastic process depends only on the angle of scattering. For 10 points, identify this type of scattering, named for an American physicist, in which a photon is scattered by a charged particle.

- 14. An order given by one of these figures is known as a hukamnama. One of them rode a blue horse called Nila Ghora. One of these figures was tortured for five days before mysteriously disappearing in a river. The first of these figures is said to have disappeared the morning after his death, leaving only the flowers which were placed on either side of him. In 1699, one of these figures baptized his congregation by administering Amrit and giving them a name meaning "lion," thus founding the Khalsa, a group of people who are required to wear the Five Ks. The current one was appointed by Gobind Singh as his successor, and was compiled by Arjan as a sacred text called the Adi Granth. For 10 points, name this group of eleven religious leaders, the first of whom was Nanak. ANSWER: Sikh gurus [prompt on Sikhs; ask "of which religion?" if someone says gurus]
- 15. Along with Fourier's equation, this law can be used to derive a parabolic partial differential equation that describes diffusion. When mass flow rate is constant, this law is often expressed as the SFEE, which contains an enthalpy plus one-half velocity squared plus gravitational acceleration times elevation term. In the statement of this law, two process functions commonly appear as inexact differentials and can be set equal to each other for an ideal gas undergoing an isothermal process. For an adiabatic process, this law can be stated as the work done depends only on the system's endpoint conditions. This law is commonly expressed as Q equals delta U plus W, or heat transferred equals the change in internal energy plus the work done by the system. For 10 points, name this thermodynamic law of conservation of energy.

ANSWER: <u>first</u> law of <u>thermodynamics</u> [or the law of <u>conservation of energy</u> until it is read]

16. An unseen character in this play is last heard from via a postcard sent from Mazatlan that contains only the words "hello" and "good-bye." At the start of this play, one character addresses the audience by claiming that he is unlike a stage magician because he will present truth in the guise of illusion rather than illusion in the guise of truth. One character in this play refers to another by the nickname "Shakespeare" at the warehouse where they used to work, while it is discovered that another character has not been attending Rubicam's Business College. Two characters in this play execute a clumsy waltz, resulting in a figurine of a unicorn breaking and losing its horn. In this play, Jim, a gentleman-caller, visits the Wingfield home to meet the socially withdrawn Laura. For 10 points, name this Tennessee Williams play named after a zoo of transparent statuettes. ANSWER: The Glass Menagerie

ANSWER. The Glass Menagerie

- 17. Christine Stark wrote an expose about sex trafficking on this body of water, in which Native women were forced to live on commercial boats. A mythological being called the Great Lynx was said to live on one island in it. The Apostle Islands are found in this body of water. The Greenstone Ridge Trail is found on one island in this body of water that was the site of a study of predator-prey dynamics between its populations of moose and wolves. This home of Isle Royale is drained by the St. Marys River, and the Whitefish Point Underwater Preserve was established to preserve the numerous shipwrecks it contains, including that of the *Edmund Fitzgerald*. The cities of Thunder Bay, Marquette, and Duluth are located on its shores. For 10 points, name this largest of the Great Lakes. ANSWER: Lake <u>Superior</u>
- 18. The historian Alwyn Ruddock left a book about this man unfinished at her death. This man worked with William Weston, although it is not known whether they traveled together. This man sailed on a ship owned by Richard Ameryk, whose name is thought by some scholars to be the true origin of the word "America." Much of what we know about his major voyage comes from the so-called "John Day letter." His son, an explorer who sailed up the Paraná River, was named Sebastian. This explorer sailed on the ship *Matthew* from Bristol, and he gives his name to a strait north of Cape Breton Island. For 10 points, name this Italian explorer who reached Newfoundland in the 1490s under the commission of Henry VII of England.

ANSWER: John Cabot [or Giovanni Caboto]

- 19. This sculptor unusually emphasized the figure of Iakchus in his trio *Demeter, Kore, and Iakchus*, which was designed for the Eleusinian Mysteries. His statue of a *Pouring Satyr* was made for his favorite model, the courtesan Phryne. One of this sculptor's works was rejected by the citizens of Kos and shows its main figure holding a piece of clothing in her left hand draped over an urn. A deity watches as a lizard climbs up a tree without any leaves in his statue that may symbolize the slaying of the python, *Apollo Sauroktonos*. He created the first full size female nude, *Aphrodite of Knidos*, but he may be better known for a sculpture in which a deity looks at a baby that is perched on his left arm. For 10 points, name this ancient Greek sculptor of *Hermes and the Infant Dionysos*. ANSWER: **Praxiteles**
- 20. A boarding school in one of this author's novels is run by a hunchbacked crone named Sesame Weichbrodt. In that novel, the alcoholic hops merchant Alois Permaneder is briefly married to Tony, who also has a brief and loveless marriage to Bendix Grünlich. In another of his novels, Mynheer Peeperkorn and the protagonist are both attracted to the intriguing Russian woman Clavdia Chauchat. In one of his novels, Christian ends up in an insane asylum and Hanno dies of typhus, which is the culmination of the decline of the title family. He wrote about the contrasting philosophies of Naphta and Settembrini in a novel about Hans Castorp's stay in a Swiss sanatorium. For 10 points, name this author of *Buddenbrooks* and *The Magic Mountain*, who also wrote *Death in Venice*.

ANSWER: Thomas Mann

21. One governor in this country was supposedly named Tippu Tib after the sounds his firearms made, and that man's son Sefu later fought against this country's FP army in an Arab war. As part of Operation Black Dragon, foreigners were evacuated from Isiro during a rebellion that was led by the Maoist leaders of the African Solidarity Party; that was the Simba Rebellion. Dag Hammarskjöld died before he could negotiate a ceasefire in this country. Colonial atrocities in this country were described in the Casement Report. Moise Tshombe of the CONAKAT Party declared independence for Katanga in this country. Conflict between the leader of the ABAKO Movement and his prime minister led to this country's namesake Crisis; those leaders were Joseph Kasavubu and Patrice Lumumba. For 10 points, what is this country, formerly Zaire, which has its capital at Kinshasa?

ANSWER: <u>Democratic Republic of the Congo</u> [accept <u>DRC</u>; accept <u>Zaire</u> until mentioned; accept <u>Belgian</u> <u>Congo</u>; accept <u>Congo</u> Free State; prompt on "Congo"; do not accept or prompt "Republic of the Congo"]

Bonuses

- 1. Name some things related to a German chemist, for 10 points each.
- [10] This [3,3]-sigmatropic rearrangement involves heating an allyl vinyl ether. It has a shitload of eponymous modifications.

ANSWER: Claisen rearrangement

[10] Claisen's main claim to fame though is probably this type of reaction, which involves combining moieties with the loss of a small molecule. You might be more familiar with the Dieckmann or aldol varieties of this type of reaction.

ANSWER: Claisen condensation

[10] One of the small compound often released by a condensation is this compound that is cleaved to create bonds in hydrolysis.

ANSWER: water [or H2O]

- 2. Pope Eugene III called for this crusade in his bull Quantum Praedecessores. For 10 points each:
- [10] Name this crusade that included Conrad III of Germany and Louis VII of France. Its crusaders decided to try and capture Damascus instead of retaking Edessa, but they were foiled by the arrival of troops under Nur ad-Din.

ANSWER: Second Crusade

[10] The Second Crusade also included the capture of Santarem and the siege of this city by forces under the command of Afonso I. The Marquis of Pombal survived a 1755 earthquake that devastated this city.

ANSWER: Lisbon

[10] This Cistercian, named *Doctor Mellifluus* in a bull by Pius XII, was recruited to preach for the Second Crusade and traveled to Vezelay and Speyer to garner support for the initiative.

ANSWER: Bernard of Clairvaux

- 3. Name some legendary creatures from North American mythology, for 10 points each.
- [10] This giant ape is thought by some to live in the forests of the Pacific Northwest, and is also known as the sasquatch.

ANSWER: Bigfoot

[10] Several tribes have legends about these people, who can transform into any animal, often by wearing that animal's pelt. Among the Navajo, they are called *yee naaldlooshii*.

ANSWER: skin-walkers

[10] One story tells of how one of these gigantic birds fought against a malevolent whale by lifting it out of the water and dropping it from a great height.

ANSWER: thunderbirds

- 4. Some of this composer's works inspired by myth are Rusalka and Water Goblin. For 10 points each:
- [10] Who is this Czech composer who is indubitably most well known for his "American String Quartet" and *New World* Symphony?

ANSWER: Antonin **Dvorak**

[10] Dvorak also wrote this set of sixteen pieces inspired by Brahms' *Hungarian Dances*. It includes two furiants and two dumky.

ANSWER: Slavonic Dances [or Slovanske tance]

[10] Along with *In Nature's Realm* and *Othello*, this work is part of a triptych which Dvorak called *Nature*, *Life and Love*. This generally spirited and joyful piece includes a more melancholic interlude led by English horn and flute.

ANSWER: Carnival Overture

- 5. This playwright chronicled the disintegration of Jack and Gillian's marriage in his *Marriage Play*. For 10 points each:
- [10] Name this playwright, who wrote about another unhappy couple, George and Martha, in *Who's Afraid of Virginia Woolf?*

ANSWER: Edward Albee

[10] In *Who's Afraid of Virginia Woolf?*, one of George and Martha's guests, Nick, teaches this subject, although Martha is convinced he teaches math.

ANSWER: biology

[10] In this play, Albee's first, Jerry impales himself on a knife held by Peter, who is sitting on a park bench.

ANSWER: The **Zoo Story**

- 6. The best known of these locations was built near Hempstead on Long Island, and another was the subject of a study by Herbert Gans. For 10 points each:
- [10] Name these suburban centers, designed by a namesake company, that featured thousands of homes built in an assembly line fashion and came to symbolize the boom of American sprawl after World War Two.

ANSWER: Levittowns

[10] This lawyer unsuccessfully argued on behalf of African-American veterans who were denied housing in Levittowns. He was more successful in arguments during *Brown v. Board of Education*.

ANSWER: Thurgood Marshall

[10] Discrimination was outlawed in federal housing projects by this president whose inaugural address proclaimed "The world is very different now" and that one must "ask what you can do for your country."

ANSWER: **J**ohn Fitzgerald **Kennedy** [prompt on partial answer]

- 7. This character's first relationship is with a fellow parishioner named Miriam. For 10 points each:
- [10] Name this character whose relationship with Clara Dawes cannot release him from the hold his mother, Gertrude Coppard, has on him.

ANSWER: **Paul** Morel [or **P**aul **Morel**; prompt on partial answer]

[10] Paul Morel is the protagonist of this novel, which was published two years before its author's *The Rainbow*.

ANSWER: Sons and Lovers

[10] Sons and Lovers was written by this author of Lady Chatterley's Lover.

ANSWER: David Herbert Lawrence

- 8. Answer some questions about a quintet, for 10 points each.
- [10] This man's quintet is divided into two periods, known as the First Great Quintet and Second Great Quintet. This trumpeter released such legendary albums as *Bitches Brew* and *Kind of Blue*.

ANSWER: Miles Davis

[10] The First Great Quintet became a sextet when it was joined by Cannonball Adderley, who played this instrument. Another member of the quintet who played this instrument recorded the albums *Blue Train* and *My Favorite Things*.

ANSWER: **sax**ophone [accept either alto or tenor saxophone]

[10] The Second Great Quintet included this tenor saxophonist who was a member of Art Blakey's Jazz Messengers and co-founded Weather Report.

ANSWER: Wayne Shorter

- 9. Kant claims that arithmetical statements like "7 + 5 = 12" are examples of this seemingly contradictory type of proposition. For 10 points each:
- [10] Name this propositions which, according to Kant, are logically necessary and do not have their subject concept contained in their predicate concept.

ANSWER: **synthetic** *a priori* propositions [prompt on partial answer; accept anything containing both "synthetic" and "a priori"]

[10] A paper by W. V. O. Quine disputes the analytic/synthetic distinction and the doctrine of reductionism, which he holds to be dogmas of this philosophical position.

ANSWER: empiricism

[10] In "Two Dogmas of Empiricism," Quine cites a puzzle about the descriptions "Scott" and "the author of *Waverley*," which was introduced in this philosopher's "On Denoting." He co-wrote *Principia Mathematica* with Alfred North Whitehead.

ANSWER: Bertrand Russell

- 10. This movement may have been catalyzed by Molotov cocktails thrown by agents provocateurs. For 10 points each:
- [10] What month of anarchic events in France began with student protests at the Sorbonne and forced the president to flee the country?

ANSWER: May 1968 events [prompt on partial answers]

[10] This leader of the Free French during World War II had to flee the country during the May 1968 events. Somewhat ironically, this man had come to power during the May 1958 crisis, amid the Algerian War of Independence.

ANSWER: Charles de Gaulle

[10] De Gaulle was the first president of the French republic of this number.

ANSWER: the **Fifth** Republic [or **five**]

- 11. Humans are at the top of this culinary construct. For 10 points each:
- [10] Identify this construct that depicts "who eats whom" in an ecosystem.

ANSWER: **food web** [or **food chain**; or **food cycle**]

[10] This type of species is connected to an unusually high amount of other species in a given food web. Because of its many connections, it maintains the structure of an ecological community and examples include the *Pisaster* sea star.

ANSWER: keystone species

[10] The eradication of the otter keystone species in certain areas may have contributed to the demise of the Steller's sea cow, which presumably fell under this type of selection, since their gestation period lasted for over a year.

ANSWER: K-selection

- 12. He ascended to his current position after the retirement of Hu Jintao in 2012. For 10 points each:
- [10] Name this current leader of the People's Republic of China, who uses the slogan "Chinese Dream."

ANSWER: Xi Jinping

[10] Xi Jinping is from this province of China, also home to the historic eastern end of the Silk Road, Xi'an. The province to its east has the same name as this province, aside from the tone.

ANSWER: Shaanxi

[10] Xi Jinping's second in command, Li Keqiang, holds this official title, previously held by men such as Wen Jiabao and Zhou Enlai.

ANSWER: Premier of the State Council of the People's Republic of China

- 13. Two answers required. These two Harvard economists came under fire for exclusion of data and for misrepresenting summary statistics after they published a paper that was used to justify austerity measures. For 10 points each:
- [10] All or nothing, name this duo who analyzed "Eight Centuries of Financial Folly" in their book *This Time Is Different*.

ANSWER: Carmen Reinhart and Kenneth Rogoff

[10] Reinhart and Rogoff's most notable work argued that this parameter was slowed in times of debt. The Solow model concerns this phenomenon, which represents the expansion of an economy over time.

ANSWER: economic growth

[10] This economist claimed that Reinhart and Rogoff neglected the importance of profits that arise from monopolistic causes in *This Time Is Different* in one article from his blog The Conscience of a Liberal.

ANSWER: Paul Krugman

14. Early on in this novel, a prophecy is fulfilled by the death of Rosa the Beautiful. For 10 points each:

[10] Name this novel in which Esteban becomes enraged at Pedro Tercero after he discovers that Pedro is sleeping with his daughter, Blanca. Esteban later befriends his granddaughter from the liaison, Alba.

ANSWER: The House of the Spirits [or La casa de los espiritus]

[10] This Chilean author made her name with *The House of the Spirits* and later penned *Daughter of Fortune* and *Portrait in Sepia*.

ANSWER: Isabel Allende

[10] The relationship between Francisco Leal and Irene Beltran is at the heart of this other Allende novel. Not surprisingly, Irene becomes disenchanted with her fiance, who is nicknamed the Bridegroom of Death.

ANSWER: Of Love and Shadows [or De amor y de sombra]

15. Answer the following about terrorism in Canada, for 10 points each.

[10] Members of a Quebec separatist group called the FLQ kidnapped James Cross and kidnapped and killed Pierre Laporte in this 1970 crisis.

ANSWER: October Crisis [or La crise d'octobre]

[10] This charismatic Prime Minister replied "Just watch me" when asked how far he would go to maintain order during the October Crisis, days before invoking the War Measures Act.

ANSWER: Pierre Elliott Trudeau

[10] In 1985, Sikh militants blew up this airline's Flight 182, which was flying from Montreal. Over 250 Canadians were killed.

ANSWER: Air India

16. Answer the following about nudism in religion, for 10 points each.

[10] This sect of Jainism is also called "Sky-Clad" because its monks do not wear clothes.

ANSWER: Digambara

[10] An early Christian sect which practiced religious nudism is named after this man, since he went naked before covering himself with a fig leaf.

ANSWER: Adam

[10] After most of the members of this Russian sect moved to Canada, they often staged nude protests against various government policies. Their name means "spirit wrestlers."

ANSWER: Doukhobors

17. Name the following about statistical distributions, for 10 points each.

[10] This distribution's expected value and variance are the same. It yields the probability of a given number of events occurring in some period, given an average rate for that period.

ANSWER: Poisson distribution

[10] A distribution has this property if the probability of x greater than s plus t given x is greater than t, for s not equal to t, is equal to the probability of x greater than s. The exponential and geometric distributions have it.

ANSWER: <u>memoryless</u>ness [or <u>forgetful</u>ness]

[10] The mean of the binomial distribution is equal to the probability of success times this quantity.

ANSWER: <u>number of trials</u> [or <u>n</u>; or obvious equivalents]

- 18. Name some members of the nine lyric poets, for 10 points each.
- [10] This man's Pythian odes can be found in the four books he wrote of *epinikia*, the form for which he is best known.

ANSWER: Pindar

[10] The "Hymn to Aphrodite" is the only completely extant poem by this poet from Lesbos. Anne Carson's translation of her fragments is called *If Not, Winter*.

ANSWER: Sappho

[10] "The Star-Spangled Banner" is set to the tune of a song dedicated to this poet, who is known for his drinking songs.

ANSWER: Anacreon

- 19. Angular momentum is equal to this quantity multiplied by angular velocity. For 10 points each:
- [10] Identify this rotational analog of mass.

ANSWER: moment of inertia [or I]

[10] In rigid body dynamics, this mathematician names a set of equations that relates the components of torque, moment of inertia, and angular acceleration and velocity. This mathematician extended Newton's laws of motion to rigid bodies and developed a set of equations for inviscid flow in fluid dynamics.

ANSWER: Leonhard Euler

[10] This construction can be used to understand the rotation of a rotating body by constructing a polhode and herpolhode based on the angular velocity vector and the invariance plane of an inertia ellipsoid.

ANSWER: **Poinsot** construction [or **Poinsot**'s ellipsoid]

- 20. This painting is the most famous in its artist's St. Mark series. For 10 points each:
- [10] Name this painting that shows an upside down St. Mark at the top, as he saves the title figure, who lies on the ground at the bottom of this scene.

ANSWER: The Miracle of the Slave [accept The Miracle of St. Mark]

[10] This Italian painted *The Miracle of the Slave*. He also depicted Hera suckling Hercules in *The Origin of the Milky Way*.

ANSWER: Tintoretto [accept Jacopo Comin]

[10] Among the works of Tintoretto is a depiction of this scene, which includes a diagonal representation of the apostles sitting at a table. A more famous depiction of this scene was created by Da Vinci.

ANSWER: The **Last Supper**

21. Windradyne led his Wiradjuri people in rebellion against the British in the Bathurst Wars. For 10 points each: [10] Like others who are recognized on National Sorry Day, Windradyne was one of these people, some of which hopefully still follow the songlines that were left after the Dreamings.

ANSWER: Aborigines

[10] This term refers to Aboriginal youths who were forcibly taken from their families to be given away to foster parents. Many of them were abused, and they were the subject of the report *Bringing Them Home*.

ANSWER: Stolen Generations [or Stolen Children; or Lost Generation]

[10] This prime minister of Australia, who served before and after the term of Julia Gillard, officially issued an apology to the Aboriginal peoples of Australia for the Stolen Generations.

ANSWER: Kevin Rudd