

**Minnesota Undergraduate Tournament 2016: A Vat of Ranch Dressing or a Bullet to the Head**  
**Questions by Sam Bailey, Rob Carson, Mike Cheyne, Akhil Garg, Carsten Gehring, Andrew Hart, Ike**  
**Jose, Shan Kothari, Cody Voight, Najwa Watson, and NOT Cory Haala**  
**Packet 11: Tossups**

1. The death of this author's daughter from complications due to porphyria was the subject of the 1994 memoir *Paula*. A mixed-race girl known as Tete falls into sexual servitude in modern-day Haiti and then flees with her master to New Orleans after a slave revolt in another of this author's books. The fictionalized memoirs of Inés Suárez, which recount the conquering of this author's home country by Pedro de Valdivia, compose this author's novel (\*) *Inés of My Soul*. In 1989, this author of *The Island Beneath the Sea* published the "stories" of a character who first appeared in a 1987 novel that ends with that character agreeing to marry Rolf Carlé. This writer's first novel, which is mostly set at the Las Tres Marias hacienda, is a chronicle of the Trueba family. For 10 points, name this Chilean woman who wrote *Eva Luna* and *The House of the Spirits*.

ANSWER: Isabel Allende [or Isabel Allende Llona] <Hart>

2. After a leader of this city was fatally wounded by a spear to the chest, he responded to the observation that he died childless by saying his two daughters were his greatest military victories. After seeing the corpses of this city's army, a king insisted the dead never "did or suffered anything unseemly". This city's army killed Cleombrotus I, the son of Pausanias. It was the home of an author of numerous victory and Olympian odes who was named Pindar. The leading city of the (\*) Boeotian (bee-OH-shun) confederacy, this city grew more powerful under Epaminondas. At the Battle of Chaeronea, the Macedonian Philip II annihilated this city's elite force of 150 pairs of male lovers, which had previously won the Battle of Leuctra against Sparta. For 10 points, what Greek city created the Sacred Band?

ANSWER: Thebes <Cheyne>

3. Eduardo Sousa uses an unconventional method to make this product, which he serves at a namesake restaurant. This substance is wrapped in bacon in a Strasbourg pie, as Strasbourg is a major center for its production. In 2014, Heston Blumenthal dropped his French supplier of this product after watching a video. Richard Daley called a 2006 Chicago law about this product "the silliest law" the City Council had passed. This product is often served after cooking a whole (\*) lobe *au torchon*. This product is most commonly produced from sterile hybrid moulards. A 2004 California law prohibits the production or sale of this product. This product, often served as a mousse or pâté, is made through gavage, in which a tube is used to force-feed birds. For 10 points, name this luxury food made of fatty goose or duck liver.

ANSWER: foie gras [prompt on "liver", "duck liver", "goose liver"] <Kothari>

4. This man names a space that is compact but not locally compact, a kind of infinitely dimensional "cube". This mathematician proved that any commutative ring that satisfies the ascending chain condition will have a polynomial ring that also satisfies that condition. In a 1924 presentation, he described a hotel with an infinite number of occupied hotel rooms accommodating an infinite number of new guests to make the point that infinite numbers are strange. This man names a (\*) vector space that is a complete metric space under its inner product. This early mathematical formalist listed the continuum hypothesis and the conjecture that arithmetic axioms are consistent as problems his colleagues should work on. For 10 points, name this German mathematician who presented a list of 23 unsolved problems at the beginning of the 20th century.

ANSWER: David Hilbert [accept Hilbert cube or Hilbert space or Hilbert's problems] <Bailey>

5. A cardinal's red hat lies in the mouth of a broken skull next to the title sleeping figure, who holds a crucifix in his right hand, in a painting by this man whose execution was interrupted by a Sack of Rome. In that painting, this man showed St. John pointing upward with a long, curved finger toward a heavenly image of the Madonna and child. When this artist was 21, he painted himself in a frilly-sleeved fur garment, wearing a gold ring on the pinkie of his (\*) enlarged right hand, in a circular self-portrait. This painter of a 1527 *Vision of St. Jerome* showed Jerome unfurling a scroll next to a single large column in the lower right of a painting in which a giant baby Jesus is held by Mary, who is painted in the Mannerist style. For 10 points, name this painter of *Self-Portrait in a Convex Mirror* and *Madonna of the Long Neck*, who was nicknamed after his hometown of Parma.

ANSWER: Parmigianino [or Il Parmigiano or Girolamo Francesco Maria Mazzola] <Hart>

6. After forces from this modern-day country lost the Battle of Marignano (mar-EEN-yah-noh), they were forced to sign an “eternal peace” with a western neighbor, which lasted about three centuries. A man killed in this modern-day country rejected the Trinity in a book translated as *The Restoration of Christianity*; that man burned at the stake here was Michael Servetus. The first edition of the (\*) *Institutes of the Christian Religion* was published by a man living in this modern-day country, whose religious groups fought the Kappel Wars. A leader from this country met Martin Luther at the Marburg Colloquy (CALL-uh-kwee). Once known as the Helvetic Republic, this country was where the religious leaders John Calvin and Huldrych Zwingli worked. For 10 points, what modern-day country comprises twenty-six cantons?

ANSWER: Switzerland [or Swiss Confederation; or Swiss Confederacy; accept “Helvetic Republic” until mentioned] <Cheyne>

7. “Type IIb (two B) metal-enmeshed polymers are defined by metals that create these structures. The Flory-Rehner equation can be used to calculate the density of these structures from swelling experiments. After exposing a photo•resist to light, one does a hard•bake to allow these structures to be created. These structures can exist on the three “ortho” and “para” positions in phenol, which is why phenol•ic resins are almost entirely connected by them. PEX, or XLPE, is a polymer that is named for the presence of these structures. Charles (\*) Goodyear discovered a way of introducing sulfur versions of these structures in natural rubber, which allows rubber to stretch but not tear. For 10 points, name these bridges that occur between polymer chains, as exemplified by disulfide bonds.

ANSWER: cross-links [accept word forms such as cross-linking; prompt on “links” or “linking”; prompt on “bridges” before “bridges”] <Garg>

8. This man included the aside “what do you think of that, Citizen Proudhon?” at the end of the manuscript of his poem “Let's Beat Up the Poor”. He asked “let me breathe in for hours and hours on end the odor of your hair” at the beginning of his “A Hemisphere in a Head of Hair”, which he included in a set of prose poems inspired by Aloysius Bertrand's *Gaspard de la Nuit*. This poet added a section of *tableaux* to a collection that includes a poem comparing poets to birds that soar in the sky but walk awkwardly on land entitled “The (\*) Albatross”. He used the exclamations “my twin!” and “my brother!” to refer to the “hypocrite reader” in his poem “To the Reader”, which appears at the beginning of a collection by him that includes the sections “Wine”, “Revolt”, and “Spleen and Ideal”. *Paris Spleen* is by, for 10 points, what French poet who wrote *Les Fleurs du Mal*?

ANSWER: Charles Baudelaire <Hart>

9. This man's son by the nymph Axioche was abducted and taught to drive a chariot by King Laius of Thebes. The fisherman Demarmenus recovered one of this man's bones, which had previously been lost in a shipwreck as the Greeks tried to fulfill a prophecy by moving it from Elis to Troas. According to Pausanias, this man was worshiped more than any other hero at Olympia due to his role in revitalizing or founding the Olympic Games. He became the king of Pisa after winning a contest by convincing (\*) Myrtilus to sabotage the chariot of his opponent, Oenomaus. This man was given an ivory shoulder after his original one was absentmindedly eaten by Demeter at a feast given by his father for which he was the main course. His son Chrysippus was killed by his other sons Atreus and Thyestes at the urging of his wife Hippodameia. For 10 points, identify this son of Tantalus, the namesake of a Greek peninsula.

ANSWER: Pelops <Carson>

10. Edward Bullough wrote about the role of "psychical distance" in perceiving this kind of thing, and Clive Bell discussed them using the concept "significant form". George Dickie's institutional theory of these things was inspired by the idea of them being embedded in a namesake "world", a concept formulated by Arthur Danto. José Ortega y Gasset explored the gradual removal of human forms from these things in an essay on their dehumanization, and John Dewey described the ways the "live creature" encounters them in a book on them (\*) "as experience". The "penetration" of surgeons and cameramen is compared in an essay on these things by Walter Benjamin, which claims that their "aura" is diminished by mechanical reproduction. Martin Heidegger's essay on the origin of these dissects Van Gogh's *A Pair of Shoes*. For 10 points, name these objects of study of aesthetics.

ANSWER: works of art [or artworks; accept reasonable answers mentioning art] <Kothari>

11. A failed American covert operation into this country was known as Operation Ivory Coast. People were encouraged to leave this country during Edward Lansdale's Operation Passage to Freedom, which mostly assisted Catholics. Temporary residents of it were known as the "Alcatraz Gang", which included James Stockdale. The first president of this country worked as a waiter while unsuccessfully trying to get support from the victors at the (\*) Paris Peace Conference following World War I. This country was officially separated from a pro-Western neighbor at the 1954 Geneva Accords, which were signed after the French defeat at the Battle of Dien Bien Phu. For 10 points, what communist country, now unified with its southern neighbor, was led by Ho Chi Minh?

ANSWER: North Vietnam [or Democratic Republic of Vietnam; or DRV; prompt on Vietnam; do not accept "Republic of Vietnam", "Socialist Republic of Vietnam", or "SRV"] <Cheyne>

12. This author's courting of the Dutch writer Isabelle de Charrière while he was studying law in Utrecht is discussed in a 2001 Adam Sisman biography titled for this man's "presumptuous task". John Croker's 1831 edition of this man's best-known work was savaged by Thomas Macaulay, who called this man a "great fool" who had no ideas of his own. This man's account of his mentor's habit of shaking, rubbing his knees, and repeating the word "too" while in conversation have led modern scholars to speculate that this author's mentor had (\*) Tourette's syndrome. This author discussed a cantankerous, half-deaf subject in a work preceded by the shorter *The Journal of a Tour to the Hebrides*. For 10 points, name this Scottish author who profiled the writer of *Rasselas* and *A Dictionary of the English Language* in his *The Life of Samuel Johnson*.

ANSWER: James Boswell <Hart>

13. **The Gadgil effect is the conjecture that competition among fungal guilds suppresses rates of this process. Rates of this process are globally coupled to manganese content, and this process is often modeled with one- or two-pool exponential models. In streams, this process is tied to the abundance of shredders, and it is often studied using mesh litter bags. This process tends to be slower on substrates with high poly•phenol and lignin concentrations and high (\*) carbon-to-nitrogen ratios, which cause recalcitrance and prevent mineral•ization. Early phases of this process include leaching of soluble cell contents and physical fragmentation. Peat accumulates in bogs because anoxic conditions inhibit this process. It results in a form of amorphous organic matter called humus (HYOO-muhs). For 10 points, name this process carried out on soil detritus by organisms like microbes and earthworms.**

ANSWER: organic matter decomposition [or word forms; or organic matter decay] <Kothari>

14. **A documentary references this artist's desire to go down to the street and “grab a hunk of lightning”. This person collaborated with economist Paul Schuster Taylor on a project titled *An American Exodus*. This artist created a work of art depicting a man in a hat with a cup in San Francisco looking away from a line at a location run by the “White Angel”. Along with various male artists, she documented life at the (\*) Manzanar camp for the interned Japanese during World War II. This artist's most famous image is of a pensive looking Florence Owens Thompson and her children at a pea pickers' camp in California during the Great Depression. For 10 points, name this photographer for the Farm Security Administration, best known for her picture *Migrant Mother*.**

ANSWER: Dorothea Lange <Cheyne>

15. **A trumpet obsessively quotes the second theme from Chopin's “Funeral March” in a symphony from this country whose second movement has a jazz improvisation between violin and piano. A Mannheim rocket opens another symphony from this country whose main theme is played first in D major, then repeated in C major. Benjamin Britten dedicated his *Cello Symphony* and cello sonata to a cellist from this country, and (\*) Van Cliburn won a 1958 piano competition in this country by performing works by two of its composers. Alfred Schnittke was from this country, as was a composer whose first symphony was nicknamed “Classical”. One composer from this country wrote his fifth symphony in response to the editorial “Muddle Instead of Music”, and included an “invasion theme” in his seventh. For 10 points, name this home of Sergei Prokofiev and Dmitri Shostakovich.**

ANSWER: The Soviet Union [or Russia; or Union of Soviet Socialist Republics; or USSR; or SSSR; or CCCP] <Kothari>

16. **The patriarch of this family meets a black nurse named Grace after falling ill on a cotton farm in Virginia in a 2005 novel by Geraldine Brooks that imagines the wartime experiences of this family's patriarch. Members of this family celebrate the 60th birthday of their matriarch after one of its members dies of a disease caught while treating the Hummel children. Another member of this family has twins named Demi and Daisy after marrying John Brooke. An 1871 novel centers on Nat Blake, an orphan who arrives at the (\*) Plumfield school run by a member of this family who has married Professor Fritz Bhaer. After Beth dies of scarlet fever, the youngest member of this family marries Theodore Laurence, who is called Laurie. Meg, Amy, and Jo are members of, for 10 points, what family, central to Louisa May Alcott's novel *Little Women*?**

ANSWER: March family [accept Marches; do not accept or prompt on “Brooke” or “Bhaer”] <Hart>

17. One man with this position, who referred to himself by a word that means “one who has thus come” or “one who has thus gone”, remained silent when asked either ten or fourteen questions by his followers. There are five of these beings during the present *kalpa*, and one of the earliest named ones is Dipankara. One of these people was born ten months after his mother had a dream about a white (\*) elephant entering her womb; that man's past lives are described in the Jataka tales. A future holder of this position, who now resides in the Tusita heaven, is Maitreya. Shakyamuni was one of these beings, who teach that suffering, or *dukkha*, can be overcome by recognizing the illusory nature of our cravings and individuality. These beings help others escape the cycle of rebirth called *samsara*, and in Mahayana, many of them spent many lives as bodhisattvas. For 10 points, name this title held by Siddhartha Gautama.

ANSWER: Buddhas [or sammasambuddhas; or samyaksambuddhas; or buddhahood] <Bailey>

18. Robert Clower introduced a model where this thing serves as a constraint in the consumer's optimization problem. The Friedman rule calls for reducing the amount of it over time so that its nominal return is the same as the discount rate. Baumol and Tobin created a model of the demand for this thing that relies on the existence of transaction costs for switching between it and bonds. Its rate of growth has no effect on variables like consumption or labor if it is (\*) superneutral. Monetarists argued that its supply was directly proportional to the price level, a notion called the “quantity theory” of this thing. The “fiat” type is unbacked by a commodity like gold or silver. M0, M1, and M2 denote forms of the “supply” of, for 10 points, what thing that can be exchanged for goods or services?

ANSWER: money [or cash] <Bailey>

19. A constant divided by this quantity is the slope of a worldline, whose angle must always be greater than 45 degrees. In some cases, summing this quantity,  $x$ , for an object A and this quantity,  $y$ , for an object B, relative to A, requires using the formula  $x$  plus  $y$  over one plus  $x$  times  $y$  over  $c$  squared, which is Einstein's addition formula. The Kennedy-Thorndike experiment verified time dilation by building on the Michelson-Morley experiment and demonstrating that the speed of light was independent of this property of the testing apparatus. A (\*) boost transformation requires changing this quantity. In a coefficient symbolized by gamma, this quantity is divided by the square of the speed of light. In an inertial reference frame, an object has a constant value for this quantity. For 10 points, name this quantity that appears in the Lorentz factor and which cannot exceed the speed of light, according to special relativity.

ANSWER: velocity [do not accept or prompt on “speed”] <Garg>

20. Legendarily, a commander during this war escaped by sliding 400 feet down a hill to the frozen Lake George; that occurred after the Battle on Snowshoes. In this war, the Forbes expedition finally succeeded in taking a fort after several failed attempts. It featured Tanacharison killing an enemy commander at the Battle of Jumonville Glen, which began after Governor Dinwiddie sent out a regiment. The end of this war resulted in the mass deportation of (\*) Acadians. During this war, Edward Braddock died during a disastrous expedition and James Wolfe and Louis Montcalm died at the Battle of the Plains of Abraham near Quebec. For 10 points, name this American phase of the Seven Years War that led to the British becoming the dominant North American power.

ANSWER: French and Indian War [prompt on Seven Years War until mentioned] <Cheyne>

Tiebreaker. Applying the ergodic theorem to a field of mathematics named for this quantity allows various scientists to develop coding theorems. That field of applied mathematics named for this quantity considers such models as additive white Gaussian noise. That field of mathematics named for this quantity was developed following the publication of the paper *A Mathematical Theory of Communication*. Its name comes from a 1928 Ralph Hartley paper that defines it as the number of (\*) symbols in a transmission times the log of the number of possible symbols. If  $p_{-i}$  is the probability that the  $i$ -th symbol occurs, the sum for all  $i$  of  $p_{-i} \log_2 p_{-i}$  is the entropy, or how much of this quantity is contained in a message. For 10 points, name this quantity, often measured in bits, that names a field of mathematics begun by Claude Shannon.

ANSWER: information [accept information theory or information entropy; accept answers mentioning informational instead of “information”] <Bailey>

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**Packet 11: Bonuses**

1. Meals were often seen as a combined sacrifice to this goddess and the Penates, a group of household gods. For 10 points each:

[10] Name this Roman goddess of the hearth and home, the equivalent of the Greek Hestia. Rome's only full-time group of priestesses were known as this goddess's namesake "virgins".

ANSWER: Vesta [accept vestal virgins]

[10] A group of twelve "leaping priests" known as the Salii ritually wielded the ancilia, a set of twelve shields kept in the temple of this Roman god, a member of the Archaic Triad. Augustus ordered the construction of a temple dedicated to this god's form of "Ultor", or the avenger.

ANSWER: Mars [do not accept "Ares"]

[10] The three flamens maiores, or major priests, were dedicated to the three members of the Archaic Triad: Jupiter, Mars, and this god, whose name was sometimes used as an aspect of Janus. Originally a Sabine war god, he was later identified as the deified Romulus.

ANSWER: Quirinus <Carson>

2. This ballet shares its name with the cat whose habit of wandering across Domenico Scarlatti's harpsichord keyboard inspired the unusual theme of Scarlatti's so-called "Cat Fugue". For 10 points each:

[10] Name this neoclassical ballet whose music is based on compositions spuriously attributed to Giovanni Pergolesi. Florindo and Cloviello beat up its *commedia dell'arte*-inspired title character after he is caught dancing with Rosetta.

ANSWER: Pulcinella

[10] The first collaboration between Sergei Diaghilev and the composer of *Pulcinella* was this 1910 ballet, whose protagonist Prince Ivan was originally played by choreographer Michel Fokine. The title character bewitches the servants of Koschei the Immortal, forcing them to perform an "Infernal Dance".

ANSWER: *The Firebird* [or *L'Oiseau de feu*; or *Zhar-ptitsa*]

[10] The music for both *Pulcinella* and *The Firebird* was composed by this Russian, whose collaboration with the Ballets Russes also produced the famously controversial *The Rite of Spring*.

ANSWER: Igor Stravinsky [or Igor Fyodorovich Stravinsky] <Carson>

3. Answer the following about the programming language Clojure, for 10 points each.

[10] Clojure is a dialect of this other language that treats code as data. John McCarthy developed this language in the 1980s for use in AI programming.

ANSWER: Lisp

[10] Clojure provides support for this kind of data structure, which was the only data structure in the original version of Lisp. Pointers and nodes are often used to implement the "linked" type of this structure.

ANSWER: lists [accept linked lists]

[10] Clojure was developed to modernize Lisp in accordance with the principles of this programming paradigm, which evaluates code as the namesake type of mathematical object. Side effects are minimized in this paradigm.

ANSWER: functional programming <Jose>

4. This poet began a monody with the line, "How changed is here each spot man makes or fills". For 10 points each:

[10] "Name this Victorian poet who wrote "Thyrsis" (**THURR-sis**) and "Dover Beach".

ANSWER: Matthew **Arnold**

[10] This Arnold poem, an earlier companion-piece to "Thyrsis", describes a student who left Oxford and "roamed the world with that wild brotherhood", waiting for the "spark from Heaven".

ANSWER: "The **Scholar-Gipsy**"

[10] "Thyrsis" memorialized this poet, who wrote, "Thou shalt not kill; but needst not strive / officiously to keep alive" in "The Latest Decalogue". Claude writes to Eustace of upheaval in Rome in his verse-novel *Amours de Voyage*.

ANSWER: Arthur Hugh **Clough** <Kothari>

5. After around 250,000 people died during a battle in this war, the Daya River supposedly turned red. For 10 points each:

[10] Name this war that began in 261 BCE and deeply shook the victorious ruler, a son of Bindusara.

ANSWER: **Kalinga** War

[10] The Kalinga War was a victory for the Mauryan ruler Ashoka, who was so disturbed by the bloodshed that he converted to this religion.

ANSWER: **Buddhism**

[10] At the Buddhist site of Sarnath, atop his namesake pillar, Ashoka placed a sculpture of four of these animals; that sculpture with these animals now serves as India's national emblem.

ANSWER: Asiatic **lions** [or Indian **lions**; or Persian **lions**] <Cheyne>

6. The *China Clipper* was a Pan American Airways flying boat used to carry the first ever trans-Pacific airmail service in March 1935. Name these things relating to it, for 10 points each.

[10] After stops in Honolulu, Midway Island, Wake Island, and Guam, the *China Clipper* landed in its final destination, this city on the island of Luzon. It's the capital of the Philippines.

ANSWER: **Manila** [or **Maynilà**]

[10] As it took off from the US, it was supposed to fly over this then-under-construction suspension bridge, though it failed to achieve the necessary altitude and went under it instead. This bridge's two spans are connected by a tunnel on Yerba Buena Island.

ANSWER: the San Francisco-Oakland **Bay Bridge**

[10] The *China Clipper* sank when it crashed on approach to the harbor of this city, whose elliptical Nicholas Tower is the headquarters of Caribbean Airlines. Piarco International Airport is also located in this capital of Trinidad and Tobago.

ANSWER: **Port-of-Spain** <Carson>

7. In a painting in this series, a man with dirty hands and a plaid shirt addresses a town meeting. For 10 points each;

[10] Name this 1943 painting series later reprinted in *The Saturday Evening Post*. A more famous painting from this series shows an American family happily celebrating what appears to be Thanksgiving.

ANSWER: **Four Freedoms**

[10] The *Four Freedoms* series was painted by this American artist, whose work graced the cover of *The Saturday Evening Post* for decades.

ANSWER: Norman **Rockwell**

[10] A 1967 painting by Rockwell depicts this type of institution in the Soviet Union. A bust of Lenin is prominently on display.

ANSWER: **school** [or **classroom**; or high **school**; or elementary **school**; or grade **school**; do not accept "college" or "university"] <Cheyne>

8. Answer the following about the speeches of the Great Communicator, Ronald Reagan, for 10 points each.

[10] Rappin' Ronnie once told Mikhail Gorbachev to "tear down" what imposing symbol of Communist power separating a divided Germany?

ANSWER: **Berlin Wall** [or **Berliner Mauer**]

[10] Reagan said the future "belongs to the brave" in addressing the nation after this event. In that speech, he famously quoted a poem in describing people who "slipped the surly bonds of Earth" to "touch the face of God".

ANSWER: Space Shuttle **Challenger** disaster

[10] In a debate with this man in Nashua, New Hampshire, Reagan once angrily said "I am paying for this microphone" after his mic was muted. This man boasted going into the debate that he had the "Big Mo", referring to momentum.

ANSWER: George Herbert Walker **Bush** [or **Bush the elder**; do not accept "George W. Bush"] <Cheyne>

9. Sean Carroll has argued that these elements play a principal role in the evolution of development, using case studies including patterns of wing pigmentation in *Drosophila*. For 10 points each:

[10] Name this general term for non-coding genetic elements that affect the expression of adjacent genes. Examples include enhancers and promoters.

ANSWER: **cis-regulatory** elements [accept word forms]

[10] Many cis-regulatory elements are binding sites for these molecules, which activate or repress mRNA expression from the genes they regulate. A number of them form a pre-initiation complex that binds to the promoter region.

ANSWER: **transcription factors** [or **TFs**]

[10] A classic example of cis-regulation occurs in this operon discovered in *E. coli* by Jacob (**yah-KOHB**) and Monod (**moh-noh**). It regulates breakdown of a sugar found in milk.

ANSWER: **lac** operon <Kothari>

10. Name these authors who were inspired by the *One Thousand and One Nights*, for 10 points each.

[10] *Two Years Eight Months and Twenty-Eight Nights*, the most recent novel by this author, is named for a span of time equal to 1,001 nights. He also referenced Scheherazade in *Midnight's Children*.

ANSWER: Salman **Rushdie** [or Ahmad Salman **Rushdie**]

[10] Many works by this author, including *The Tidewater Tales* and *Chimera*, have Scheherazade as a character. This American metafictionalist's other works include *The Floating Opera*, *Giles Goat-Boy*, and *The Sot-Weed Factor*.

ANSWER: John **Barth** [or John Simmons **Barth**]

[10] This author's story collection *The Djinn in the Nightingale's Eye* was influenced by the *One Thousand and One Nights*. She won the 1990 Booker Prize for her novel *Possession*.

ANSWER: A.S. **Byatt** [or Dame Antonia Susan **Duffy**] <Hart>

11. A paper by Gilovich, Vallone, and Tversky claimed to find evidence that this belief was fallacious among datasets of Philadelphia 76ers, Boston Celtics, and Cornell varsity basketball teams. For 10 points each:

[10] Name this belief that the probability of success is greater after a success than after a failure. A 2015 re-analysis by Miller and Sanjurjo showed the original claim that this belief is fallacious is itself based on a statistical mistake.

ANSWER: **hot hand** fallacy

[10] Besides the clustering illusion, Gilovich et al. attribute the hot hand fallacy in part to the "confirmation" type of this phenomenon, in which agents systematically deviate from rational behavior.

ANSWER: cognitive **bias** [or cognitive **biases**; accept confirmation **bias**]

[10] Amos Tversky and Daniel Kahneman helped begin a research program on biases and these mental shortcuts that can lead to biases when applied to complex problems. One example is the "availability" kind.

ANSWER: **heuristics** <Kothari>



12. George Paget Thomson shared the 1937 Nobel Prize in Physics with one of this experiment's namesakes for independently replicating its results. For 10 points each:

[10] Identify this 1920s physics experiment in which a beam of electrons was fired at a crystalline nickel surface. Though initially set up to study the nickel surface itself, this experiment ended up verifying the de Broglie (**duh BROY**) hypothesis.

ANSWER: **Davisson-Germer** experiment

[10] De Broglie's aforementioned hypothesis states that every elementary particle can exhibit the qualities of these two classical states, meaning an electron can undergo diffraction.

ANSWER: **waves** and **particles** [accept things like **wave-particle** duality; accept in either order; prompt on partial answer]

[10] De Broglie's favored explanation for wave-particle duality, which involved so-called "pilot waves", was one of the first theories of this type. According to a theorem developed by John Stewart Bell, local theories of this type cannot fully replicate the predictions of quantum mechanics.

ANSWER: **hidden variable** theories <Carson>

13. Accidentally entering "yuo" in the Google Chrome search bar while attempting to type "Youtube" may lead you to an unusually often-viewed video posted by some Italian guy of a sped-up version of this song attributed to Theodore the Chipmunk. For 10 points each:

[10] Name this song whose chorus describes "the world, for once, in perfect harmony / with all its living things". The singer of its first two verses laments that "our trio's down to two" and complains that "disaster's in the air" because of "all this romantic atmosphere".

ANSWER: **"Can You Feel the Love Tonight"**

[10] "Can You Feel the Love Tonight" was written by Tim Rice and Elton John for this 1994 Disney animated feature, in which it is most likely performed as a duet between Nala and Simba.

ANSWER: *The* **Lion King**

[10] Scar's big musical number in *The Lion King* is this song, in which he provides the title advice to an audience of hyenas. In it, Scar notes that "a shining new era is tiptoeing nearer" and asserts that "our teeth and ambitions are bared".

ANSWER: **"Be Prepared"** <Carson>

14. An author from this country wrote about the wannabe poet Olaf Karason in the novel *World Light*. For 10 points each:

[10] Name this European country that was home to Halldor Laxness, the author of *Independent People*.

ANSWER: Republic of **Iceland** [or Lydveldid **Island**]

[10] In *Independent People*, the protagonist, Bjartur of Summerhouses, is a farmer of these animals. In *Far from the Madding Crowd*, Gabriel Oak cures a number of Bathsheba Everdene's creatures of this type suffering from bloat.

ANSWER: **sheep**

[10] Laxness was credited in his Nobel Prize with renewing "the great narrative art of Iceland", a reference to these historical Icelandic prose narratives, some of which Laxness edited.

ANSWER: **sagas** <Gehring>

15. A modern-day practitioner of this school of thought may be Gertrude Himmelfarb. For 10 points each:  
[10] Name this English school of thought whose name was coined by Herbert Butterfield. As seen in the writings of Thomas Macaulay, it believes that history is inevitably proceeding towards greater liberty and enlightenment.

ANSWER: **Whig** history [or **Whiggery**]

[10] This later historian was heavily Whig in nature and won a Nobel Prize for such histories as the four-volume *A History of the English Speaking Peoples*, finished in 1958, and his mammoth six-volume series titled *The Second World War*, which begins with *The Gathering Storm*.

ANSWER: Winston **Churchill** [or Winston Leonard Spencer-**Churchill**]

[10] "The so-called "founder" of English history was this monk who wrote an 8th century ecclesiastical history of England and was known as "Venerable".

ANSWER: Saint **Bede** [or the Venerable **Bede**] <Cheyne>

16. Nikolaus and Alice Harnoncourt led a Baroque period-instrument ensemble based in this city, which names a type of French horn tuned only in F with twin-piston valves. For 10 points each:

[10] Name this city whose Musikverein hall is also home to the Gesellschaft der Musikfreunde, as well as a notoriously sexist and racist orchestra often praised for its warm sound.

ANSWER: **Vienna** [or **Wien**]

[10] Although it has no principal conductor, the guest conductors of the Vienna Philharmonic have included this late Romantic composer of symphonies nicknamed *Resurrection* and *Symphony of a Thousand*.

ANSWER: Gustav **Mahler**

[10] Later in life, Mahler conducted this orchestra, whose home is the recently renamed David Geffen Hall. Its longtime director Leonard Bernstein conducted a controversial performance of Glenn Gould playing Brahms's Piano Concerto No. 1 with this orchestra.

ANSWER: **New York Philharmonic** Orchestra [or **Philharmonic-Symphony Society of New York**; or **NYPQ**] <Kothari>

17. This publication was launched by the John Reed Club of New York, which was affiliated with the Communist Party USA. For 10 points each:

[10] Name this New York magazine dedicated to culture, politics, and literature that eventually became anti-communist. Dwight Macdonald served as an editor of this publication in the late 1930s, and it stopped publishing in 2003.

ANSWER: **Partisan Review** [prompt on "**PR**"]

[10] "Irving Howe commissioned the first translation of this Yiddish author into English for the *Partisan Review*; the story of this man's that was published was "Gimpel the Fool".

ANSWER: Isaac Bashevis **Singer**

[10] Howe commissioned this young Jewish-American author to translate "Gimpel the Fool". This man later wrote *The Adventures of Augie March*, *Henderson the Rain King*, and *Herzog*.

ANSWER: Saul **Bellow** [or Solomon **Bellows**] <Hart>

18. Much of this institution's equipment was intentionally destroyed at Scapa Flow. For 10 points each:

[10] Name this institution that lost the Battle of Dogger Bank and fought an inconclusive battle against John Jellicoe's force at the Battle of Jutland.

ANSWER: Imperial **German Navy** [or **Prussian Navy**; do not accept "Nazi Navy" or "Reich Navy"]

[10] During World War I, the Germans used submarines to prey on their enemies' commercial shipping. This anglicized term became the standard way to refer to any German submarine.

ANSWER: **U-boat** [or **U-boot**; or **Unterseeboot**]

[10] This man basically led the Imperial German Navy from 1897 to 1916. Influenced by Alfred Mahan, he modernized the fleet but eventually fell out of favor and resigned.

ANSWER: Alfred von **Tirpitz** <Cheyne>

19. Cigarette smoke is particularly dangerous because of the presence of these compounds. For 10 points each:

[10] Name these compounds that consist of fused aromatic rings. Naphtha•lene is the simplest example of these compounds, followed by anthra•cene.

ANSWER: **poly•cyclic aromatic hydro•carbons** [or **poly•nuclear aromatic hydro•carbons**; or **PAHs**; or **PNA**s]

[10] Each six-membered aromatic ring in a PAH is this hydro•carbon with formula C<sub>6</sub>H<sub>6</sub>.

ANSWER: **benzene** [or **[6]-annulene**]

[10] Most PAHs are carcinogenic because they are oxidized to form these functional groups, which are then nucleo•philically opened by DNA. These ethers form a three-membered ring.

ANSWER: **epoxides** [or **oxi•ranes** or **epoxy** or **epoxidation**] <Garg>

20. This institution's current High Priest is Peter Gilmore. For 10 points each:

[10] Name this religious group whose members carry embossed crimson cards. Anton LaVey founded this group, whose members are described as skeptical atheists who do not actually believe in the supernatural reality of the being in its name.

ANSWER: **Church of Satan** [prompt on “**Satanism**” or “**Satanic** worship” or “**Satan**”]

[10] The Biblical Satan has one of his largest Old Testament appearances in this book, in which he receives God's permission to torture the hapless title character in an attempt to make him curse God. The poor soul at the center of this book gets really bad advice from his friends.

ANSWER: **Job**

[10] *The Satanic Bible* compiled by LaVey heavily quotes this 1890 text written by the pseudonymous author “Ragnar Redbeard”. It advocates amoral hedonism and insists that weakness should be hated and that, as the title suggests, strength is the only thing that matters.

ANSWER: ***Might is Right*** [or *The **Survival of the Fittest***] <Cheyne>

Extra. A writer from this country satirized the national obsession with saying sorry in his novel *At Least We Can Apologize*. For 10 points each:

[10] Name this home country of the novelist who wrote *Please Look After Mom*. In David Mitchell's *Cloud Atlas*, the section “An Orison of Sonmi-451” is set in a corporate dystopia that has formed in this Asian country.

ANSWER: **South Korea** [or **Republic of Korea** or **Daehanminguk**; prompt on “**Korea**” or “**Daehan**”; do not accept or prompt on “North Korea” or “Democratic People's Republic of Korea” or “DPRK”] [*At Least We Can Apologize* is by Lee Ki-ho, and *Please Look After Mom* is by Kyung-sook Shin]

[10] A series of Korean literature translated into English is being published by the Dalkey Archive Press, which takes its name from the title of a book by this Irish author of *The Third Policeman* and *At Swim-Two-Birds*.

ANSWER: Flann **O'Brien** [or Brian **O'Nolan**; accept Myles na **gCopaleen**]

[10] The author of *Please Look After Mom*, Kyung-sook Shin, admitted in 2015 that she had plagiarized a passage from this Japanese author's book *Patriotism*. This author of *The Temple of the Golden Pavilion* and the *Sea of Fertility* tetralogy committed seppuku on live TV after failing to lead a coup d'etat.

ANSWER: Yukio **Mishima** [or Kimitake **Hiraoka**; accept either name in reverse order] <Hart>