

Minnesota Undergraduate Tournament 2015: My Torah Portion was an Archie Comic
Questions by Rob Carson, Mike Cheyne, Andrew Hart, Gautam Kandlikar, Shan Kothari, Bernadette
Spencer, Cody Voight, and *special guest* Ike Jose
Packet 05: Tossups

1. Leonid Mandelstam and Igor Tamm first formulated a variant of this relation for a system's time evolution and energy. The ground state of a system cannot be zero because this relation forbids the simultaneous minimization of both the potential and kinetic energy. Thus, this relation implies that a wave function's extension is, exponentially, inversely proportional to its kinetic energy. The wavelength of a photon determining the amount of diffraction is used to illustrate this relation in a thought experiment involving a (*) microscope, proposed by its formulator. This principle is often stated as the commutator of two certain variables being greater than or equal to $\hbar/2$. For 10 points, name this principle which states that one cannot simultaneously determine both the position and momentum of a particle with arbitrary accuracy.
ANSWER: Heisenberg uncertainty principle [or Heisenberg uncertainty principle; or "relation" in place of "principle"]

2. A parody of this poem in which its title character struggles to photograph a family was written by Lewis Carroll. A heron gives a "scream of pain and famine" at the end of a three-day wrestling match in this poem. A character in this poem is chided for being lazy despite feats like flinging trees through the sky and killing the King of Beavers. The title character of this poem befriends a musician and a strongman named, respectively, Chibiabos and Kwasind. It was based in part on the sloppy research of Henry (*) Rowe Schoolcraft and uses the trochaic tetrameter of the *Kalevala*. A famous passage from this poem describes a place "by the shores of Gitchee Gumee, by the shining Big-Sea-Water". A grandson of Nokomis who loves Minnehaha is the title character of, for 10 points, which epic poem by Henry Wadsworth Longfellow?
ANSWER: *The Song of Hiawatha*

3. During the negotiations for this treaty, a Foreign Minister from one side said that only choice available to the other part was of "what sauce they would be eaten with." A party in this treaty attacked the other in Operation Fist Punch after the initial talks around Christmas and New Years had failed. That signatory to this treaty appeared to agree to a six-point plan proposed by Joffe, but later stated that they wished to settle the question of Kurland and (*) Lithuania independently. This treaty, which was only in effect for a few months, was nullified by the Treaty of Rapallo. It was signed by newly formed government represented by Leon Trotsky, which made a lot of territorial concessions. For 10 points, identify this treaty which was negotiated in a namesake Belarusian town, which ended Russian participation in World War I.
ANSWER: Treaty of Brest-Litovsk

4. This composer switched between a 2/4 Allegro furioso and a 3/4 Andante at the beginning and end of one movement of a suite. The string orchestra version of one of this composer's works has violin and viola solos in its final "Rigaudon" movement. The last movement of one of his pieces starts as a 2/4 halling before shifting into 3/4 and then 4/4. That work opens with a timpani roll, followed by a dramatic chordal flourish beginning with a (*) falling minor second and major third in the solo part. A piece by this man begins with celli and basses plucking a sinister B minor theme, which is repeated in a constant crescendo. This composer wrote a suite "in olden style" called *Holberg Suite* and a *Piano Concerto in A minor*. For 10 points, name this Norwegian composer who derived "In the Hall of the Mountain King" from incidental music to an Ibsen play, *Peer Gynt*.
ANSWER: Edvard Hagerup Grieg

5. One section of this book claims that the victory of married love lies in an internal history beyond immediacy. The narrator of one section of this book describes seeing his first love at a performance of Eugène Scribe's *First Love*. This book concludes with an upbuilding discourse that asserts, "against God we are always in the wrong." It describes the constant search for interesting experiences as "Crop Rotation," and notes (*) Don Giovanni's ceaseless search for variety in "The Musical Erotic." Johannes Climacus woos and tosses aside Cordelia in its section "The Seducer's Diary." This book's title affirms Aristotelian logic against Hegel. This book consists of two sections written by "A" and "Judge Vilhelm," who represent the aesthetic and ethical stages of existence. For 10 points, name this work written by Søren Kierkegaard under the name Victor Eremita.
ANSWER: Either/Or [or Enten-Eller]

6. 19th-century "minor movements" that characterized this country are the subject of Gilbert Seldes's book *The Stammering Century*. Visits to the "holy-mouth-men" and the performance of the "mouth-rite" are described in an anthropological paper about the "Body Ritual" of a satirical version of this country's natives. Three mentions of God made by a leader of this country are analyzed at the beginning of a Robert Bellah paper on its "Civil (*) Religion". The influence of social stratification on language in this country is the subject of the work of William Labov. "Dominant individualism" and the preponderance of free land in its west led to this country's characteristic development, according to Frederick Jackson Turner's frontier thesis. For 10 points, name this country whose representative government was studied by Alexis de Tocqueville.
ANSWER: the United States of America [accept either underlined portion; or the USA; or "this one" if the player in question is in fact in the United States; prompt on "Nacirema"]

7. At convergent boundaries, the formation of magma is heavily influenced by this substance, whose presence in rocks changes the linear boundary between solid and liquid on a pressure-temperature diagram to be bowed and allows flux melting. The ratio of this substance to air is depicted on the y-axis of psychrometric charts. Maars are created by explosions due to magma coming into contact with this substance, which is known as a phreatomagmatic eruptions. The Hadley cell circulation primarily transports (*) heat and this substance away from the equator. The expansion, and thus cooling, of an air parcel as it rises causes the condensation of this substance in the atmosphere. This compound is the most abundant greenhouse gas in the atmosphere. For 10 points, name this compound whose presence in air is quantified by humidity.
ANSWER: water vapor [or steam; or moisture; or obvious equivalents]

8. A member of this family is blackmailed into giving his horse Gipsy to a character who he dubs an "imp of Satan". A character who often uses the word "flaysome" and other incomprehensible bits of Yorkshire dialect, the servant Joseph, initially appears in the employ of this family. After the death of another member of this family, the hairs of two different people end up entwined in her locket. A member of this family is bitten by a dog named Skulker and forced to recuperate at (*) Thrushcross Grange in a flashback related by Nelly Dean. That member of this family chooses to marry Edgar Linton, prompting the drawn-out revenge plotted by Heathcliff. Hareton, Hindley, and Catherine are members of, for 10 points, which family created by Emily Bronte, the original owners of Wuthering Heights?
ANSWER: the Earnshaw family

9. The 20-year anniversary of a coup in this city called "Victorious February" prompted a leader to instigate a slate of political reforms called the Action Programme. A nearly 20-year-long period of "normalization" in this city resulted from a military incursion into it prompted by the adoption of a policy called "socialism with a human face." After a period in this city in which the manifesto *The (*) Two Thousand Words* was written, a student at its Charles University named Jan Palach was one of three to set themselves on fire in its Wenceslas Square. This city was stormed by Warsaw Pact troops after Alexander Dubcek's government initiated liberalizing reforms. For 10 points, what Eastern European city, which experienced an anti-Soviet "Spring" in 1968, was the capital of Czechoslovakia?
ANSWER: Prague [or Praha; accept Prague Spring]

10. Edward Gibbon's *Decline and Fall of the Roman Empire* hypothesizes that this book's second ending was written and added during the Middle Ages. A Bart Ehrman essay presents this book's central character's anger is fundamental to his power. This book is the extant source in the two-source hypothesis. This book includes a two-part version of the encounter with the fig tree and is the only one to directly describe its central figure as "a (*) carpenter". This book opens by quoting the prophecy of a voice crying in the wilderness and its first chapter describes John baptizing someone in the River Jordan. Its original ending stops with disciples discovering the empty tomb, and it is the only synoptic gospel that lacks a birth narrative of Jesus. For 10 points, name this shortest canonical gospel, the source for Matthew and Luke.

ANSWER: Gospel of Mark [or Gospel According to Mark; accept "Good News" in place of Gospel]

11. WARNING: TWO ANSWERS REQUIRED. In a 1972 game between these two teams, two consecutive punt blocks by Bill Newton, which created touchdown returns by David Langner, gave the lower-ranked team a 17-16 victory. Pat Dye's first victory in games between these two teams came in a game whose winning touchdown was scored thanks to the high-jumping skills of Bo Jackson. A more recent game between these teams ended with a missed Adam Griffith (*) field goal being returned 109 yards for a touchdown by Chris Davis. In the most recent game between them, Nick Marshall and Blake Sims combined for seven touchdown passes. Games between these teams now alternate between Jordan-Hare and Bryant-Denny stadiums. For 10 points, the "Iron Bowl" is contested by which two SEC West teams?

ANSWER: University of Alabama and Auburn University [accept "Crimson Tide" for Alabama but prompt on "Tigers" for Auburn]

12. Twice in this movie, the protagonist asks for bourbon, but is instead given scotch. This movie's protagonist accidentally crashes the Singleman wedding in the Taft Hotel, and he receives a diving suit for his 21st birthday. A character in this movie meets Carl Smith for a date in front of the monkey house at the zoo. In its opening scene, the protagonist lands in Los Angeles to (*) "The Sounds of Silence," part of this movie's Simon & Garfunkel soundtrack. The protagonist starts dating Elaine despite her mother's wishes, and goes to Berkeley to find her. Elaine's mother earlier undresses in front of the protagonist after he asks, "You're trying to seduce me, aren't you?" For 10 points, name this comedy starring Dustin Hoffman as Benjamin Braddock, who has an affair with Mrs. Robinson.

ANSWER: *The Graduate*

13. These compounds are produced using DCC as a coupling reagent and DMAP as a catalyst in a reaction named for Wolfgang Steglich. Therapeutic examples of these compounds can be produced by enzymes called BVMOs, which produce these compounds from ketones. In basic conditions, the hydrolysis of these compounds results in soap in the (*) saponification reaction. Cyclic examples of these compounds are called lactones. These compounds, which can be produced from an alcohol and a carboxylic acid in an acid-catalyzed reaction named for Emil Fischer, are what give apples and bananas their distinctive aromas. Glycerides are a special case of, for 10 points, what organic compounds whose namesake bonds hold fats together?

ANSWER: esters [prompt on "(tri)glyceride(s)"]

14. This name is given to a SEAT 600 automobile in which the two main characters travel in a Graham Greene novel titled "Monsignor" followed by the surname of the character who first coined this name. In the novel in which this name first appears, it is coined by combining the words for "hack" and "before" to signify that its bearer "is the first and foremost of all the hacks in the world." In John Steinbeck's (*) *Travels with Charley*, this is the name of Steinbeck's custom-made camper truck. This name is given a creature who is the counterpart to Dapple, a donkey ridden by its owner's squire. This is the name of a creature whose owner is thrown from him after charging at a group of "giants" that turn out to be windmills. For 10 points, identify this name that Miguel de Cervantes gave to Don Quixote's horse.

ANSWER: Rocinante

15. A leader from this family was gifted a wheelchair by FDR when they met on the *USS Quincy*. A leader from this family brutally suppressed a mercenary group at the Battle of Sabilla, and had earlier negotiated his dominion's borders in the Darin Pact. Another member of this family condemned a group led by Juhayman al Otaybi, who decried the excesses of this family. A member of this family came to power by consolidating tribal communities with the help of the (*) Ikhwan. A leader from this family agreed to lease land near Dhahran for a military base. Later rulers of this family have made a lot of money after they nationalized Aramco. For 10 points, identify this dynasty whose modern incarnation was established by Abdul Aziz, which rules a large, oil-rich nation in the Arabian peninsula.

ANSWER: Saud family [accept "al Saud" or "House of Saud" or equivalents; accept "Saudi Royal family" or equivalents]

16. These people associated the planet Venus with a goddess of dawn, flowers, and virginity who was named Chasca. According to this people's myth system, the current race of humans replaced an earlier, stupider race of giants that had been made from stone. Their underworld is populated by a race of demons who share a collective name with their leader, Supay. Many of these people's myths survived through the writings of (*) Garcilaso de la Vega. In a myth of these people, the Milky Way was stored in a jug that produced rain when hit by the slingshot of their god Ilyapa. Their mythical first ruler, Manco Capac, was sent to earth by the sun god Inti. For 10 points, Viracocha was the creator god of which pre-Columbian civilization, which built temples at Cuzco and Machu Picchu?

ANSWER: Incans [or Incan mythology]

17. A man from this state depicted a politician wearing a nightshirt and hiding in a cattle car while passing through it. James Ryder Randall wrote a poem about this state in response to riots against militia members at Pratt Street. A hairdresser named Cipriano Ferrandini worked in this state and was accused of plotting an assassination. That murder plot named for a city here was hatched against (*) Abraham Lincoln prior to his inauguration. A battle fought in this state featured such locations as Burnside's Bridge and the Bloody Lane. This state was where the single bloodiest one-day battle of the Civil War was fought, a battle fought at Sharpsburg. For 10 points, name this border state in the Civil War that was the site of the Battle of Antietam.

ANSWER: Maryland

18. One scene named for these items inspired two Georges de la Tour paintings in which a man touches two of them to his belt. A specific one of these items was the namesake of a group of artists with whom Kasimir Malevich exhibited before founding Suprematism. One of a series of works showing two or three men using these objects was sold to the royal family of Qatar in 2011 for around \$250 million, which at the time was the most expensive painting ever sold. In a (*) *chiaroscuro* painting, a boy on the left holds two of these objects in his hand, while a boy on the right with a dagger at his side has two of them secretly tucked into his belt. Paul Cezanne depicted "players" of these items, and Caravaggio depicted "sharps" of them. For 10 points, name these objects that canines are shown holding in C.M. Coolidge's series *Dogs Playing Poker*.

ANSWER: playing cards [accept *The Card Players* or *Cardsharps*; prompt on "jack(s)" or "jack of diamonds"]

19. *Sinoconodon* is an ancestor of this clade with many of its synapomorphies. Revising George Gaylord Simpson's 1945 classification, Malcolm McKenna and Susan Bell produced a comprehensive higher-level classification of this clade, which contains the only extant synapsids. In this clade, the dentary and squamosal bone form the jaw joint, while the articular and the quadrate moved up to the (*) middle ear. The vast majority of this class has seven cervical vertebrae. This class is also distinguished by the presence of a neocortex, and its extant members are all therians or monotremes. It evolved endothermy independently from birds, and mothers in this class nurse their young with milk from namesake glands. For 10 points, name this class of hairy vertebrates whose orders include Rodentia and Primates.

ANSWER: mammals [or Mammalia]

20. This character is told “up your arse” at the beginning of a poem by Guyanese-Canadian poet Cyril Dabydeen. He claims that “dreams were the worst” and describes “fifty-two miserable, small volcanoes” in an Elizabeth Bishop poem about him “in England”. An author is initially uninterested in tales of this character, preferring instead to hear about the protagonist’s time searching for her daughter in Brazil, in a novel about Susan Barton by J.M. (*) Coetzee. In his first appearance, he is captured by pirates and taken to Saltee, but escapes along with a boy named Xury. He fights off wolves while crossing the Pyrenees with a character he’d initially encountered after finding a single footprint on a beach. For 10 points, name this character who meets the cannibal Friday after surviving a shipwreck in a Daniel Defoe novel.

ANSWER: Robinson Crusoe [accept either underlined portion]

TB. One of these two things is required in Napoleon’s problem, while the Mohr-Mascheroni and Poncelet-Steiner theorems suggest that, under certain conditions, only one of them is necessary. Pierre Wantzel provided proofs determining the solvability of several problems involving these two things. One of these things can be made more robust by replacing it with a *neusis*. If the odd prime factors of a number n are distinct Fermat primes, then these things can be used to produce a (*) polygon with n sides. The fact that these two things cannot generate the square root of π means that one cannot use them to produce a square with the same area as a given circle. They also cannot be used to double a cube or trisect an angle. For 10 points, name these two physical objects used in construction problems from classical Greek geometry.

ANSWER: compass and straightedge [or compass and idealized ruler; prompt on “compass and ruler”; accept answers in either order]

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Packet 05: Bonuses

1. Answer the following about John Bull, the national personification of Great Britain, for 10 points each.

[10] John Bull appeared on various recruiting posters. An actual person to appear on posters was this man, who was depicted on World War I posters saying he "WANTS YOU." He died in 1916 when his ship was hit by a mine.

ANSWER: (Horatio) Herbert Kitchener [or 1st Earl Kitchener]

[10] An actual person named John Bull is a composer sometimes credited with writing this British national anthem, whose title changes depending on if the monarch is male or female.

ANSWER: "God Save the King" [or "God Save the Queen"]

[10] Traditionally, the first performance of "God Save the King" was in 1745 after George II's army lost this battle to Bonnie Prince Charlie during the Jacobite Rising. Sir John Cope's defeat by the Jacobites during this battle was described in Walter Scott's *Waverley*.

ANSWER: Battle of Prestonpans

2. During *Romer v. Evans*, this philosopher argued against John Finnis and Robert George that the use of the words *tolmema* and *para phusin* in Plato's *Laws* did not constitute a condemnation of homosexuality. For 10 points each:

[10] Name this philosopher who helped develop the capabilities approach in works like *Women and Human Development* and *Sex and Social Justice*.

ANSWER: Martha Craven Nussbaum

[10] In *The Fragility of Goodness*, Nussbaum defends the earthliness of Alcibiades's drunken speech in this work. Nussbaum is more skeptical of Diotima's metaphor of a staircase ascending toward perfect, abstract love.

ANSWER: Symposium

[10] Like other Platonic dialogues, the *Symposium* features this Athenian gadfly who makes up Diotima's speech. He was the object of Alcibiades's love and the teacher of Plato.

ANSWER: Socrates

3. Edwin T. Jaynes introduced the principle which states that the right probability distribution, among some that fit known data, is the one that maximizes this quantity. For 10 points each:

[10] Name this quantity that is defined as the expected value of the negative log of the probability mass function.

ANSWER: information entropy [or H]

[10] This father of information theory created the idea of information entropy. He also did important work on sampling with Harry Nyquist.

ANSWER: Claude Shannon [or Claude Elwood Shannon]

[10] Shannon and Edward Thorp made a fortune playing blackjack in Vegas by developing a couple methods in this field and creating a wearable computer. This branch of math was advanced greatly by von Neumann and deals with strategies for situations whose outcome depend on the actions of other participants, such as the prisoner's dilemma.

ANSWER: game theory

4. This man fought an epic battle to convince Thomas Wolfe to cut 90,000 words from the original draft of *Look Homeward, Angel* and defended the profanity in Hemingway's *The Sun Also Rises*. For 10 points each:

[10] Name this famous Charles Scribner's Sons editor, who also advised Marjorie Kinnan Rawlings to write *The Yearling* and discovered and published Alan Paton's *Cry, The Beloved Country*.

ANSWER: Maxwell Perkins [or William Maxwell Evarts Perkins]

[10] Max Perkins was also instrumental in the publication of this 1920 novel, which features the first appearance of the poet Thomas Parke d'Invilliers. Its protagonist, Princeton student Amory Blaine, falls in love with Rosalind Connage, who is based on Zelda Sayre.

ANSWER: This Side of Paradise

[10] *This Side of Paradise* was the first novel by this Minnesota-born author, who used a poem attributed to Parke d'Invilliers as the epigraph for his most famous novel, *The Great Gatsby*.

ANSWER: F. Scott Fitzgerald [or Francis Scott Key Fitzgerald]

5. The carvings on a late Roman object of this kind include St. Peter being arrested by soldiers wearing Pannonian caps, and that object uses three bearded men to reflect the Trinitarian doctrine of the Council of Nicaea. For 10 points each:

[10] Name this kind of object. Another late Roman example is one made for Junius Bassus with high relief carvings on three sides, including the first dated depiction of Christ as a lawgiver.

ANSWER: sarcophagi [or sarcophagus]

[10] Both the Dogmatic Sarcophagus and the Sarcophagus of Junius Bassus are currently found in St. Peter's Basilica in this nation, where Bernini created two half-circle colonnades for St. Peter's Square.

ANSWER: Vatican City [or Holy See; do not accept "Italy"]

[10] Fresco-covered plaster adorns the Hagia Triada sarcophagus from this island, which depicts funerary customs like animal offerings. Arthur Evans studied the *Bull-Leaping Fresco* from this island, also home to the Boxer rhyton.

ANSWER: Crete

6. The Kelvin equation gives the effect of one of these things with radius R on the vapor pressure. For 10 points each:

[10] Name these manifestations of capillary action. The one produced by mercury is convex because mercury atoms are more attracted to each other than to the walls of a glass container.

ANSWER: meniscuses [or menisci]

[10] Meniscuses are caused by this physical phenomenon, which also allows bugs like water striders to walk on water.

ANSWER: surface tension [prompt on "tension"]

[10] At constant temperature and pressure, surface tension equals this quantity per unit surface area. Thus, surface tension can be conceptualized as resulting from a surface's tendency to minimize this quantity per unit area.

ANSWER: Gibbs free energy [or Gibbs energy; or Gibbs function; or free enthalpy; prompt on "Gibbs" or "(free) energy"; do not accept or prompt on "enthalpy"]

7. An oft-parodied advertisement preceding episodes of this podcast involves a girl who is inexplicably unable to pronounce "Mailchimp." For 10 points each:

[10] Name this podcast narrated by Sarah Koenig, whose first season covered the controversy surrounding the arrest and trial of Adnan Syed for the murder of his girlfriend Hae Min Lee.

ANSWER: Serial

[10] This Muslim-American activist and lawyer brought Koenig's attention to Adnan's case. As a friend of the Syed family, she leads the campaign to free Adnan.

ANSWER: Rabia Chaudry [accept either underlined portion]

[10] Koenig produced episodes like "Habeas Schmabeas" for *This American Life*, whose producer, WBEZ, is a member organization of this non-profit media group. It broadcasts *Morning Edition* and *All Things Considered*.

ANSWER: National Public Radio [or NPR]

8. The *Arthashastra*, a treatise on statecraft, was written by a scholar of this empire. For 10 points each:

[10] Name this ancient empire which arose after defeating the Nanda Dynasty. It fought an extremely bloody war to conquer Kalinga.

ANSWER: The Mauryan Empire

[10] This leader of the Mauryan Empire fought the Kalinga War, but apparently repented after grieving for all of the bloodshed caused during the war. He converted to Buddhism and began working for peace.

ANSWER: Ashoka Maurya

[10] This father of Ashoka got his name from being born with a bluish spot on his forehead, thanks to the poisoning of his mother. He enjoyed strong relations with the Seleucid Empire.

ANSWER: Bindusara Maurya [or Amitrochates]

9. Answer the following about varying accounts of the infancy of Zeus, for 10 points each.

[10] Most stories agree that for at least some time, he was hidden in a cave on Mount Ida by this Titaness, his mother, who had earlier tricked her husband Cronus out of eating him.

ANSWER: **Rhea**

[10] Some stories claim that the Kouretes danced and banged their shields to cover Zeus's cries while he was being raised by this she-goat, whose horn later became the cornucopia.

ANSWER: **Amalthea**

[10] In other stories, a nymph named Adamanthea did this to Zeus to hide him from Cronus, who had power over earth, the sea, and the sky and would thus have been able to see anything technically on or in those places.

ANSWER: she **suspended** him from a **tree** with a rope [accept equivalents that mention a form of **hanging** and a **tree**; or descriptive metaphors like "she **bear-bagged** him"]

10. This poet described a "Violet by a mossy stone / Half-hidden from the Eye!" in "She Dwelt Among the Untrodden Ways", the fifth and last of his "Lucy" poems. For 10 points each:

[10] Identify this poet of "Tintern Abbey" and "I Wandered Lonely as a Cloud", who collaborated on *Lyrical Ballads* with Samuel Taylor Coleridge.

ANSWER: William **Wordsworth**

[10] Wordsworth claimed that he would "rather be / A Pagan suckled in a creed outworn" than deal with the materialism of the Industrial Revolution in this sonnet, whose title is followed by the words "late and soon".

ANSWER: "The **World is Too Much With Us**"

[10] The only one of Wordsworth's "Lucy poems" not to mention Lucy's name is this one, which notes that "no motion has she now, no force" and says that after Lucy's death, the speaker "had no human fears".

ANSWER: "A **Slumber Did my Spirit Seal**"

11. Answer some questions about the metagenomics of microbes, for 10 points each:

[10] Microbial metagenomics often uses the conserved 16S segment of this kind of nucleic acid, which Carl Woese used to discover Archaea. They fold into a complicated 3D stem-looped structure and bind with proteins to form a structure with E, P, and A sites.

ANSWER: **ribosomal RNA** [or **ribosomal ribonucleic acid**; or **rRNA**]

[10] Metagenomic studies often use platforms from this most popular next-generation sequencing company, which uses bridge PCR on its HiSeq and MiSeq machines to get reads of around 200 base pairs.

ANSWER: **Illumina**, Inc.

[10] The most complex human microbiome is in this organ, whose flora is dominated by phyla like Bacteroidetes and Firmicutes, and may be studied by sequencing from feces. Among many herbivores, the cecum in this organ contains cellulose-digesting bacteria.

ANSWER: **large intestine** [or **colon**]

12. The first person to do this, albeit in incomplete form, was Suematsu Kencho, while Royall Tyler's 2001 version of this accomplishment replaced proper names with ceremonial titles. For 10 points each:

[10] Identify this task most famously accomplished by Arthur Waley and Edward G. Seidensticker, which in the latter case produced a work with such chapter titles as "Bridge of the Floating Dreams" and "Vanished into the Clouds".

ANSWER: **translating** the *Tale of Genji* into English [accept wordforms and synonyms for **translating**; accept **Genji Monogatari** for "the *Tale of Genji*"]

[10] The *Tale of Genji* was translated into modern Japanese by this Japanese author of the aesthetic treatise *In Praise of Shadows* and novels like *The Makioka Sisters*.

ANSWER: Jun'ichiro **Tanizaki** [accept names in either order]

[10] In Tanizaki's novel *Some Prefer Nettles*, the Western culture-obsessed Kaname enjoys reading the erotic passages in this book of stories told to Shahryar by Scheherazade. It was famously translated by Richard Burton.

ANSWER: *The Arabian Nights* [or *The One Thousand and One Nights*; or *The One Thousand and One Arabian Nights*; or the *Kitab alf laylah wa-laylah*]

13. The second of this composer's six sonatas for solo violin mashes up the Prelude of Bach's *Partita No. 3* with the "Dies Irae" in its first movement, "Obsession." For 10 points each:

[10] Name this Belgian "tsar of the violin" who wrote those six sonatas in the style of six of his violinist friends. Among other things, he was noted for his tasteful rubato.

ANSWER: Eugène Ysaÿe

[10] This other Belgian composer wrote his cyclic form *Violin Sonata in A* as a wedding present for Ysaÿe. This composer of a *Symphony in D minor* set "Panis angelicus" for tenor voice in his mass.

ANSWER: César-Auguste-Jean-Guillaume-Hubert Franck

[10] As organist at Sainte-Clotilde, Franck was noted for his skill at this activity, in which performers extemporaneously compose music while playing.

ANSWER: improvisation [accept word forms like improvising]

14. This man promoted his political views in the book *Why Not the Best?* For 10 points each:

[10] Name this politician who gave a speech officially titled "Crisis of Confidence," in which he described an inward problem plaguing America. In the so-called "malaise speech," this man urged citizens to use carpools and public transit.

ANSWER: James Earl "Jimmy" Carter Jr.

[10] Besides the energy crisis that was the subject of the malaise speech, Carter also grappled with a hostage crisis involving fifty two Americans taken prisoner in this Middle Eastern country.

ANSWER: Iran [or Islamic Republic of Iran; or Persia]

[10] Carter lost the presidency in 1980 after a campaign that featured a contentious debate with Ronald Reagan. During one debate, Reagan gave a response beginning with this four-word phrase as a devastating way of disputing Carter's allegations that Reagan opposed Medicare.

ANSWER: "There you go again" [do not accept other answers]

15. Every surah of the Qur'an except one begins with the phrase referred to by this term. For 10 points each:

[10] Give either the common name or the first word of the oft-used Islamic phrase that translates as "In the name of God, the Most Gracious, the Most Merciful".

ANSWER: basmala [or bismillah]

[10] Give either the ordinal number or the name of the surah that does *not* begin with the basmala. Its 30th verse mentions the mysterious Uzair, while its 37th documents the prohibition of Nasi. It also contains the "Sword Verse".

ANSWER: the ninth chapter/surah [or nine] or "at-Tawbah" [or the Repentance surah; or al-Bara'ah; or the Ultimatum surah]

[10] The "Sword Verse" obliges Muslims to "fight and slay the pagans wherever ye find them", and can thus be used as justification for the "sword" version of this concept. It directly translates as "struggle", but is often interpreted by non-Muslims as meaning "holy war".

ANSWER: jihad

16. This author wrote some of his early journalistic work under the pseudonym "Litwos" (LIT-fose). For 10 points each:

[10] Name this Nobel Prize-winning author who wrote a trilogy of historical novels about his country titled *With Fire and Sword*, *The Deluge*, and *Sir Michael*.

ANSWER: Henryk [Adam Aleksander Pius] Sienkiewicz

[10] Sienkiewicz was an author from this modern-day Eastern European country. Other Nobel-winning authors from this country include Czesław Miłosz and Wisława Szymborska,

ANSWER: Republic of Poland [or Rzeczpospolita Polska]

[10] A young Christian woman with this name falls in love with the Roman patrician Vinicius in Sienkiewicz's *Quo Vadis*. In an Edgar Allan Poe short story that uses a slightly different spelling, this is the name of a title character who comes back from the dead after the narrator marries Lady Rowena.

ANSWER: Lygia [or Ligia; or Ligeia]

17. Emily Carr was an artist who specialized in depicting scenes from this country's west coast. For 10 points each:
[10] Name this country where the artist of *The Jack Pine*, Tom Thomson, was associated with an art movement called the "Group of Seven."

ANSWER: Canada

[10] Thomson painted a scrubby tree growing from a craggy rock in a painting titled for "wind" from this cardinal direction. Emanuel Leutze depicted "the course of empire" taking its way in this cardinal direction in a painting often said to symbolize American "Manifest Destiny."

ANSWER: west [accept *The West Wind* or *Westward the Course of Empire Takes Its Way*]

[10] The Group of Seven were advocates of this style of landscape painting, taken from a French phrase meaning "out in the open," in which painters take their easels outdoors and paint the scene "sur le motif," or as it's actually seen.

ANSWER: en plein air

18. Richard Atkinson and Richard Schiffrin developed a multi-store model of this concept, while Baddeley's model of it involves a visuospatial sketchpad and a phonological loop. For 10 points each:

[10] Name this human capacity, often divided into recognition and recall types. George Miller theorized that humans could hold seven, plus or minus two, elements in the short-term or working version of it.

ANSWER: memory [accept types like "short-term memory" or "working memory"]

[10] This German psychologist's landmark study *On Memory* introduced the spacing effect and the learning and forgetting curves.

ANSWER: Hermann Ebbinghaus

[10] Ebbinghaus built on Ewald Hering's work with a double-pyramid model explaining this other human ability, which can also be evaluated by tests that use diagrams designed by Shinobu Ishihara.

ANSWER: color vision [or color perception; or even color blindness; or anything that indicates human perception of color; prompt on "vision" or "perception" or equivalents]

19. Name the following related to QCD, for 10 points each.

[10] QCD describes the gluon-mediated strong force between these subatomic particles, which constitute hadrons such as the proton and neutron.

ANSWER: quarks

[10] This nearly massless pseudo-Goldstone boson was proposed by Peccei and Quinn to resolve the strong CP problem in QCD. These particles are a strong candidate for dark matter and may have been discovered in the Sun in October 2014.

ANSWER: axion

[10] This lightest pair of quarks formed the first generation of quarks. These two quarks are found in the proton and neutron.

ANSWER: up and down [prompt on partial answer]

20. This king's epithet is sometimes taken from his place of birth, Caernarfon Castle in Gwynedd, Wales. For 10 points each:

[10] Name this king of England from 1307 to 1327, who may have had a homosexual relationship with Piers Gaveston.

ANSWER: Edward II of England [prompt on "Edward"]

[10] A "Poem on the Evil Times of Edward II" lamented a "great" event of this type that ravaged England from 1315 to 1317. Ireland suffered a disaster of this type in the 1840s and 1850s after the failure of a potato crop.

ANSWER: [great] famines [accept potato famines]

[10] Edward lost favor after he was smacked down by Robert the Bruce of Scotland at the Battle of Bannockburn, which resulted from Edward's attempt to relieve a siege of this castle that was within sight of the combatants.

ANSWER: Stirling Castle

Extra. This author's more amusingly-titled works include the poetry collection *Sweet as a Pickle and Clean as a Pig* and the play *The Square Root of Wonderful*. For 10 points each:

[10] Name this woman who made her literary debut with a novel that opens by describing John Singer and Spiros Antonopoulos as "two mutes who were always together", and is called *The Heart is a Lonely Hunter*.

ANSWER: Carson **McCullers** [or Lula Carson **Smith**]

[10] In this McCullers novel, the young tomboy Frankie Addams desperately wants to join her brother and his new bride on their honeymoon.

ANSWER: *The **Member of the Wedding***

[10] McCullers moved to New York in 1941 and joined its literary circles; her new friends included this author who wrote his most famous novel, *The Sheltering Sky*, two years after moving to Tangier.

ANSWER: Paul **Bowles** [or Paul Frederic **Bowles**]