

2016 MYSTERIUM: "I quiz all sounds, all thoughts, all everything"

Packet 12 – lyapunov

Questions by Yale (Jacob Reed, Stephen Eltinge, Laurence Li, Adam Fine, Isaac Kirk-Davidoff) and Maryland (Jordan Brownstein, Weijia Cheng, Ophir Lifshitz, Naveed Chowdhury, Ani Perumalla), with Sriram Pendyala

Tossups

1. **In one essay, this author produced an argument "that is not flatly circular, but... has the form of a closed curve in space." That essay builds on the work of Morton White, and describes "total science" as a "field of force whose boundary conditions are experience." One of his books puts forth concepts like "stimulus meaning" and "occasion sentences." This philosopher argued for the reality of sets and numbers from "indispensability," along with (*) Hilary Putnam. He used the sentence "*bachelor* has less than ten letters" to show that its synonymy with "unmarried man" does not mean they are interchangeable. This philosopher attacked the verification theory of meaning and reductionism and collapsed the analytic/synthetic distinction in a 1951 essay. He argued for the "indeterminacy of translation" in *Word and Object*. For 10 points, name this American philosopher, who wrote "Two Dogmas of Empiricism."**

ANSWER: W.V.O. **Quine** [Willard Van Orman Quine]

<JR Philosophy>

2. **This effect explains why ortho-nitrophenol has a lower melting point than meta or para-nitrophenol. In its mechanism of action, the antibiotic vancomycin forms these interactions with the side-chains of peptidoglycan cell-wall precursors, preventing cross-linking. Two of the Lipinski rules of five place constraints on the amount of these interactions in which a candidate drug can participate. This phenomenon explains the (*) broad absorption spectrum of alcohols in IR spectroscopy. Beta-diketones exhibit an intramolecular form of this interaction. This strongest interaction of this type occurs in the bifluoride ion, where protons are fluxionally shuttled between HF and F minus. Differences in the number of these interaction account for differences in DNA melting temperatures. For 10 points, name these interactions, two of which form between A and T and three of which form between G and C.**

ANSWER: **hydrogen bonds**

<SP Chemistry>

3. **This character uses his contacts to learn of the Eulalie women's underwear brand, which another character uses to blackmail a black shorts-wearing fascist. This character successfully bets on Bates during a competition on which of the local ministers will give the longest Sunday sermon. This character is brought to Totleigh Towers after his employer's aunt uses the cook Anatole to force him to steal a silver (*) cow-creamer. This character is called "Inimitable" and told "Right Ho" and "Very Good" in the titles of three novels. This character's employer hangs out with Gussie Fink-Nottle in the Drones Club. For 10 points, name this character who often has to get Bertie Wooster out of trouble, an archetypal valet and butler created by P. G. Wodehouse.**

ANSWER: **Jeeves**

<JB British Literature>

4. A leader virtually justified violence in this event's aftermath by stating that "When a big tree falls, the earth shakes." Immediately after this event, a perpetrator declared "I have done what I had to do. You do what you want to do." It took place just before its target could be interviewed for BBC by Peter Ustinov. A few years before this event, supporters of the separatist (*) Khalistan movement began an occupation under the leadership of Jarnail ("jur-NEL") Singh Bhindranwale. This event was carried out by Satwant and Beant Singh in retaliation for its target's authorization of Operation Blue Star, a raid on the Golden Temple in Amritsar. For 10 points, name this event, during which an Indian prime minister was killed by her Sikh bodyguards.

ANSWER: assassination of Indira Gandhi [accept 1984 anti-Sikh riots during the first sentence; accept equivalents for "assassination" like killing, shooting, etc.; prompt on "assassination of Gandhi" or equivalents]
<WC World History>

5. A film from this country depicts a slow-motion children's race around a lake, whose winner cries after not getting third. That film revolves around a boy trying to get his sister's shoes and is titled *Children of Heaven*. A director from this country filmed an actual trial but scripted the judge's verdict in a film that ends with the audio cutting out during a motorcycle ride. The minimalist films *Taste of Cherry* and *Close-Up* were made in this country. The 2012 Best Foreign Language Film Oscar went to a movie about a divorce in this country called (*) *A Separation*. The protagonist of a film from this country has a dream where God and Karl Marx tell her not to commit suicide, after which she sings an out-of-tune cover of "Eye of the Tiger." The protagonist of that animated film from this country buys illegal punk rock cassettes on the street. For 10 points, name this home country of Abbas Kiarostami and Marjane Satrapi, who co-directed the film adaptation of her graphic novel *Persepolis*.

ANSWER: Islamic Republic of Iran [accept Jomhuri-ye Eslāmi-ye Irān]
<IKD Other Arts>

6. In a play, this character describes a flock of birds fighting to the death around him and entrails dissolving instead of burning. This character describes the "violet hour... when the human engine waits / Like a taxi throbbing waiting." This character notes that he has "walked among the lowest of the dead" and "foresuffered all" after describing a typist who apathetically has sex with a clerk. After drinking some (*) sheep blood from a trench, this character warns a hero about the "cattle of the sun." "The Fire Sermon" is partly narrated by this "most important personage" in *The Wasteland*, who warns Creon and Oedipus in two Sophocles plays. For 10 points, name this man who lived as a woman for seven years, a blind seer who appears in the underworld in *The Odyssey*.

ANSWER: Tiresias
<JB Other Literature>

7. The dependence of this quantity on the relaxation time, tau, is given by the Cole–Cole equation. This quantity is purely real only in perfect insulators, since its imaginary part equals the negative of conductivity divided by frequency. Causality requires that the real and imaginary parts of this dimensionful quantity be related by the Kramers–Kronig relations. For linear materials, this value equals the (*) displacement field divided by the electric field. Its relative value equals one plus the electric susceptibility and is also called the dielectric constant. In cgs units, its vacuum value equals one over 4 pi, which simplifies Coulomb's law. For 10 points, identify this ability of a material to screen out an electric field, whose value for free space is written epsilon-naught.

ANSWER: permittivity [or relative permittivity until "relative" is read; accept dielectric constant until read; prompt on "epsilon"]
<SE Physics>

8. **The obsolete Data Encryption Standard used this many S-boxes. S-boxes in AES operate on this many bits. This many Choctaw men were the first US code talkers in WWI. Enigmas in Germany’s Abwehr spy service had four rotors, so their message headers had this many letters. Germany’s navy selected three out of this many rotors for their Enigmas, more than the air force or army. Joan Clarke used Banburismus to decrypt naval Enigma messages in the Alan Turing-led (*) Hut of this number at Bletchley Park. This number partially names the most popular variable-length Unicode encoding. The ISO 8859 series of standards encode text with this many bits per character, one more than in ASCII. A one in the ones place of an Incan *kipu* is represented by a knot shaped like this number. In a Caesar shift by this number, the ciphertext I is produced from the plaintext A. For 10 points, give this number of bits in a byte.**

ANSWER: **eight** [or **8**]

<OL Mythology/Other>

9. **The title character of a novel by an author with this surname steals a baby Jesus statue from a shrine in order to force Mary to heal her child, Eyes of the Sky. In a novel by an author of this surname, a woman realizes the lights are on and yells “God God—whose hand was I holding?” The title character of a novel by an author with this surname falls in love with the mission Indian Alessandro. A saying predicting “corn be coming soon” is said by (*) Old Man Warner in a story by an author with this surname that is set on June 27th. An author with this surname wrote a novel in which Eleanor drives her car into a tree while leaving a haunted house and a story in which Tessie gets the black slip and is stoned to death. For 10 points, give this surname of the author of *Ramona*, Helen Hunt, and the author of “The Lottery,” Shirley.**

ANSWER: **Jackson** [or Helen Hunt **Jackson**; or Shirley **Jackson**; prompt on “Hunt”]

<JB American Literature>

10. **A member of this group gave a dramatic nominating speech that featured him leaping on the reporter’s table and sucking a lemon. That member of this faction was ridiculed for his “haughty disdain” and “turkey-gobbler strut,” and had earlier declared that the president had “treacherously betrayed a sacred trust” when he nominated Judge William Robertson to a certain position. A man from this group fought with Rutherford Hayes after Hayes fired the collector of the (*) New York Customs House, Chester Arthur. Charles Guiteau proclaimed that he was a member of this faction after killing James Garfield. Roscoe Conkling was leader of this faction, which supported political patronage. For 10 points, name this Gilded Age faction of the Republican Party, which opposed the Half-Breeds.**

ANSWER: **Stalwarts** [accept **Stalwart** Republicans]

<LL American History>

11. *Description acceptable.* **Several of these disorders are caused by mutations to the FOXP2 gene. These disorders were the main focus of Norman Geschwind, who discovered one resulting from damage to the arcuate fasciculus. Two somewhat rare disorders of this kind are classified as “transcortical motor” and “transcortical sensory.” These disorders were first studied in Lelong and Leborgne. One set of these disorders are usually classified as global, conduction, expressive, or receptive. Patients with these disorders often exhibit (*) echolalia. These disorders are usually caused by damage to the left hemisphere of the brain. An early patient with one of these disorders was nicknamed “Tan.” They include anomia and alexia, and they can be caused by damage to Broca’s or Wernicke’s areas. For 10 points, name these disorders that include aphasias, in which patients have difficulty producing words.**

ANSWER: **language** disorders [or **speech** disorders; accept **aphasias** until it is read]

<JR Economics/Psychology>

12. Adorno described one piece in this genre as an “Alienated Masterpiece.” That piece, started in 1819 for Archduke Rudolf, wasn’t finished until 1824. Schubert’s last two pieces in this genre are No. 5 in A-flat major and No. 6 in E-flat major. Another piece in this genre was recycled as its composer’s *Daivide penitente*. A piece in this non-symphony genre is nicknamed for its dramatic use of the timpani. One piece in this genre includes a difficult fugue on the (*) words “et vitam venturi.” Haydn wrote one without woodwinds titled for “troubled times” or “In Angustiis.” Mozart left his “Great C minor” one unfinished, and Haydn wrote pieces in this genre named “In Time of War” and “Nelson.” Thomas Mann wrote that Beethoven’s “Solemnis” one had “The Credo, the Credo with the Fugue.” These pieces begin with a *Kyrie* and include the *Gloria* and *Agnus Dei*. For 10 points, name these sacred choral pieces that set the five basic components of the liturgy in Latin.

ANSWER: Latin masses [or missae; accept mass ordinary settings or equivalents; accept *Missa Solemnis*]
<JR Auditory Arts>

13. Touchet beds, which consist of distinct rhythmite deposits with an approximately 55-year periodicity, are evidence for the existence of one of these features in the late Pleistocene. Geologist J. Harlen Bretz was the first to hypothesize that one of these phenomena was responsible for unusual erosional features in the Grand Coulee. Diluvium is the name given to deposits by these phenomena. These phenomena generate kolks, which in turn leave evidence of lakes in plucked-rock basins, such as those at the region below Dry Falls. A (*) jökulhlaup (“YO-kul-hloip”) is one of these phenomena that results from a subglacial volcanic eruption. The barren and soil-free nature of the “channeled scablands” in the Columbia river plateau is due to a series of these events, which were caused by the rupturing of an ice dam in the Cordilleran ice sheet. That led to the outflow of glacial lake Missoula across eastern Washington. For 10 points, name these catastrophic events in Quaternary history, overflows of water that submerged dry land.

ANSWER: floods
<SP Other Science>

14. This policy prompted the creation of factories to implement Franz Achard’s theories of sugar beet production. Non-compliance with this policy forced John VI and Maria I to flee with their 15,000 person court to Salvador, Brazil. The initiator of this policy claimed that its target was a “nation of shopkeepers.” The immediate response to this policy included Lord Cathcart’s bombardment of (*) Copenhagen and the issuance of the Orders of Council. This policy was begun by the Berlin Decree and strengthened by the Milan Decree. After joining it by the Treaty of Tilsit, Russia withdrew from this system in 1812, prompting a disastrous invasion. For 10 points, name this system by which Napoleon tried to keep Britain out of Europe’s trade.

ANSWER: Continental System [or Continental Blockade; or Blocus continental; prompt on “Napoleon’s blockade of Britain” or similar answers]
<JB European/Ancient History>

15. At the end of one of this man’s passionate letters to Nietzsche, he declared, “Read Nietzsche! That is my Carthago est delenda!” In a preface to one of this man’s plays, he criticized playwrights “who make stupid questions in order to call forth witty answers.” After a series of psychotic attacks known as his “Inferno Crisis,” this man created a play which features an officer “in a very unusual yet modern uniform” beating a table with a sabre. In a play by this author, a woman nervously claps her hands and powders her face after servants pantomime a wedding party. A play by him includes the settings of (*) Foulstrand, Fairhaven, and Fingal’s Cave. A woman created by this author wishes to open a hotel and build a “villa by Lake Como.” This author wrote a play that features Jean decapitating a canary and ends with the title character contemplating suicide with a razor. For 10 points, name this author of *A Dream Play* and *Miss Julie*.

ANSWER: August Strindberg
<LL European Literature>

16. A “version” of this book is the bestselling translation of Stephen Mitchell, who, of course, can’t read a word in its original language. This text describes a succession from people not knowing their rulers, then loving them, then fearing them, then despising them. It says that a wise governor will “fill bellies and empty minds, strengthen bones and weaken ambition.” This text notes that doors and jars are only useful because of (*) absence. This text claims that if you call its title entity by its normal name, you’re not actually talking about it, since “A name that names isn’t the perennial name.” Its title entity is an “abyss so deep it seems ancestor to the ten thousand things.” This 81-chapter text is named for a charismatic, moral “power” and a mysterious “way.” For 10 points, name this text, which advocates “non-action,” or *wú wéi*, by Lǎozǐ (“lao-tzuh”).

ANSWER: Tao Te Ching [or Dào Dé Jīng; accept Lǎozǐ until mentioned]

<JR Religion>

17. Treatment of leukemias or autoimmune diseases often causes the iatrogenic form of this condition, whose manifestation is the avascular necrosis of the femoral head due to the frequent formation of fat emboli. Metyrapone is used to treat this condition. This syndrome can be a paraneoplastic syndrome resulting from pancreatic carcinoma or small-cell carcinoma of the lung. This condition can arise from the overproduction of a peptide synthesized from POMC. This syndrome is characterized by hirsutism, osteoporosis, and immune suppression. This condition can be diagnosed using a (*) dexamethasone suppression test. Sufferers of this syndrome present with abdominal obesity, reddish stretch marks, and a moon face. Most commonly, this syndrome is caused by a disease of the same name, which is characterized by a pituitary adenoma. For 10 points, name this syndrome discovered by an American neurosurgeon, which is characterized by too much cortisol in the body.

ANSWER: Cushing’s syndrome [accept Cushing’s disease, but know that Sriram really doesn’t want you to]

<SP Biology>

18. In a decoration for one of these buildings, the 13th-century sculptor Nicola Pisano depicted a nude Hercules, supposedly presaging the Renaissance. Jacopo della Quercia (“kwair-cha”) made *Annunciation to Zacharias* for a hexagonal structure at the center of one of these buildings. A 440 AD “Lateran” one of these buildings started the tradition of making them octagonal. Drawings of one of these buildings from multiple angles sparked Brunelleschi’s “discovery” of perspective. Donatello’s (*) *Feast of Herod* was made for one in Siena. Andrea Pisano is most famous for his decorations of one of these buildings, which also includes ten panels with scenes from the Old Testament on its East side. Two artists made versions of the *Sacrifice of Isaac* for one of these buildings. These buildings are usually dedicated to St. John. Brunelleschi lost a contest to design doors for one in Florence, for which Ghiberti made *Gates of Paradise*. For 10 points, name these buildings that house a font used to immerse Catholic babies.

ANSWER: baptistery [accept battistero or battisteri]

<JR Visual Arts>

19. *Description acceptable.* George Booth led an uprising in Cheshire in support of this event. A man who opposed this event was captured by Richard Ingoldsby and imprisoned on Drake’s Island. After this event, Edward Hyde became Chief Minister, and this event was once celebrated on Oak Apple Day. This event’s main military instigator was George Monck, and it led to the fall of John (*) Lambert. A man became known as “Tumbledown Dick” because of this event, and after this event the monarch promulgated the Declaration of Breda. The central figure in this event left from The Hague and arrived at Dover, and this event ended the Interregnum. For 10 points, name this 1660 event that saw the replacement of Richard Cromwell with a Stuart monarch.

ANSWER: Restoration of Charles II [accept answers such as Charles II becoming king, Charles II returning to England, or answers that use synonyms for “return” and “England,” like “Britain” or “Great Britain”]

<LL European/British History>

20. An essay by this man was the basis for the first section of John Berger's *Ways of Seeing*. The image of a "little hunchback" was used to structure a biographical sketch of this man by Hannah Arendt, which was later used as the introduction for his most famous collection. This author introduced the image of a "constellation" of seemingly unrelated ideas in his book *The Origin of German Tragic Drama*. His most famous essay begins with a quotation of the line "For the last twenty years neither matter nor space nor time has been what it was," by Paul Valéry. In works like "On Some Motifs in (*) Baudelaire," he used the persona of the *flâneur* to analyze the city. This author of "The Task of the Translator" criticized photography in an essay about the diminishing "aura" of art objects. For 10 points, name this Frankfurt School author of *Illuminations*, which includes "The Work of Art in the Age of Mechanical Reproduction."

ANSWER: Walter (Bendix Schönflies) **Benjamin** ("BEN-yah-meen")

<JR Social Science/Thought>

Bonuses

1. A poem by this author repeats the refrain “There, there’s only order, beauty: abundant, calm, voluptuous.” For 10 points each:

[10] Name this French Symbolist poet who included “Invitation to the Voyage” in his *Les Fleurs du Mal*.

ANSWER: Charles **Baudelaire**

[10] *Les Fleurs du Mal* includes a song named for this time that states “It seems to me... that someone is nailing down a coffin in a hurry somewhere.” A Paul Verlaine poem titled for this time period describes how “the long sobs of... violins wound my heart.”

ANSWER: **Autumn** [do not accept “Fall”]

[10] The last section of this poem begins by exclaiming “Autumn already!” This long poem by Arthur Rimbaud includes the section “Alchemy of Words,” one of the deliriums experienced by the narrator in the title place.

ANSWER: A **Season in Hell** [or *Une Saison en Enfer*]

<JB European Literature>

2. While on a 1940 goodwill tour of the world, this man allegedly had a tryst with Soong Mei-Ling, Chiang Kai-Shek’s wife. For 10 points each:

[10] Name this lawyer and corporate president of Commonwealth and Southern Corporation who was the Republican candidate for President in 1940.

ANSWER: Wendell Lewis **Willkie**

[10] in 1943, Willkie wrote this bestselling travelogue in which he advocated for a world government. It predicted the rise and importance of China.

ANSWER: **One World**

[10] Republicans chose this man instead of Wilkie as the nominee for President in both 1944 and 1948. In a famous misprint, the Chicago Daily Tribune declared that this man “defeat[ed] Truman.”

ANSWER: Thomas Edmund **Dewey**

<LL American History>

3. Answer some questions about beta-lactam antibiotics, for 10 points each.

[10] Name this first beta-lactam antibiotic, which was isolated from its namesake mold by Alexander Fleming in 1928. Today, it is only good as a narrow-spectrum antibiotic due to widespread resistance.

ANSWER: **penicillin G**

[10] Beta-lactams are so named because they contain an active amide ring with this many atoms, which is hydrolyzed in their mechanism of action.

ANSWER: **four** [or **4**]

[10] Almost all beta-lactam antibiotics inhibit the action of this enzyme, which uses an active serine residue to cross-link the L-Lys-D-Ala-D-Ala tails of peptidoglycan monomers.

ANSWER: DD-**transpeptidase** [accept **DD-carboxypeptidase**, **D-alanyl-D-alanine carboxypeptidase**, **D-alanyl-D-alanine-cleaving-peptidase**, **D-alanine carboxypeptidase**, and **serine-type D-Ala-D-Ala carboxypeptidase**]

<SP Biology>

4. This strategy, in game theory, corresponds to the conditions of epsilon equilibrium rather than Nash equilibrium. For 10 points each:

[10] Name this decision-making paradigm in which actors attempt to find a solution which meets a given threshold, rather than the optimal solution.

ANSWER: **satisficing** [accept word forms]

[10] Satisficing was developed by Herbert Simon as a critique of this assumption, which he hoped to replace with a “bounded” form. Individuals whose actions follow this idea necessarily choose in a locally optimal manner.

ANSWER: **rationality** [accept word forms; accept **rational** choice theory]

[10] One extension of rational choice theory, instrumental rationality, was advocated for by Gary Becker, who belonged to *this* economic school. Other economists associated with this school include Robert Lucas and Milton Friedman.

ANSWER: **Chicago** school

<AF Economics/Psychology>

5. Name some Parables of Jesus, for 10 points each.

[10] This parable, found only in Luke, features a man who was travelling from Jerusalem to Jericho, and after being robbed, was passed by a Priest and Levite, only to be rescued by the title figure.

ANSWER: Parable of the **Good Samaritan**

[10] This parable appears in Matthew, Mark, and Luke. In it, the Kingdom of God is compared to an object that “grew, and became a large tree, and the birds of the sky lodged in its branches.”

ANSWER: Parable of the **Mustard Seed**

[10] This long, cryptic parable’s Matthew and Luke version differ greatly. The Matthew version ends with a man declaring “Many are called, but few are chosen,” and the Luke version ends with a man saying “not one of those who were invited will get a taste of” the title event.

ANSWER: Parable of the **Great Banquet** [accept Parable of the **Wedding Feast** or Parable of the **Marriage of the King’s Son**]

<LL Religion>

6. Answer some questions about the Romantic sculptor Auguste Préault (“oh-GOOST pray-OH”), for 10 points each.

[10] Préault studied with a sculptor with *this* last name, who usually called himself “[this] d’Angers” (“don-JAY”) to distinguish himself from the more famous painter of this name, who created *The Oath of the Horatii* and *The Death of Marat*.

ANSWER: **David**

[10] Most of Préault’s sculptures were portraits in *this* form. Pisanello originated the use of this form for portraits, which made him, and not Masaccio, the favorite painter of early fifteenth-century humanists.

ANSWER: **medallions** [or **medals**]

[10] Préault’s awesome sculpture *Tuerie*, or *Slaughter*, can be found in this city’s museum. This city’s cathedral has two very different towers on its West end, and was rebuilt following a 1194 fire.

ANSWER: **Chartres**

<JR Visual Arts>

7. A board of this many men was forced to abdicate after Appius Claudius attempted to force a girl named Virginia to marry him. For 10 points each:

[10] Give this number of patricians on the board which codified Roman law in the Twelve Tables.

ANSWER: **ten** [or **10**]

[10] The decemvirs were forced to give up power after Rome's plebeians performed one of these actions. The plebeians had earlier used this type of general strike to force the creation of the office of Tribune.

ANSWER: **secession** [or anything indicating that the plebeians are **leaving Rome**]

[10] Appius Claudius's descendant Appius Claudius Caecus is the namesake of the Appian Way, one of these structures which connected Rome to Brundisium.

ANSWER: **roads** [or obvious equivalents]

<JB European/Ancient History>

8. A poem describes one of these figures who sings so "wildly well" and tells him "To thee the laurels belong, Best bard, because the wisest!" For 10 points each:

[10] Identify this sort of figure. In another poem by the same author, a throng of these figures gather in a theater to see a play in which a "blood-red thing" devours the mimes, before affirming that "That the play is the tragedy, 'Man.'"

ANSWER: **angels**

[10] The author of "Israfel," Edgar Allen Poe, also wrote the aforementioned poem about a "conqueror" one of these animals, a "crawling shape" with "vermin fangs / In human gore imbued."

ANSWER: "The Conqueror **Worm**"

[10] Poe also described how the angels named a "rare and radiant" maiden "Lenore" in this poem titled for a bird that cries "Nevermore!"

ANSWER: "The **Raven**"

<JB American Literature>

9. If every one of these objects in an integral domain is generated by one element, then every nonzero element has unique factorization. For 10 points each:

[10] Name these subsets of rings that include all their multiples by elements of the ring. For instance, in the integers, even numbers form one of these objects, since the product of any integer with an even number is even.

ANSWER: **ideals**

[10] If you are working in a principal ideal domain, where each ideal is generated by one element, then you can use Bézout's ("bay-ZOO's") identity. By Bézout, you can always take a linear combination of two elements to get *this* value.

ANSWER: their **greatest common divisor** [or **GCD**; or **GCF**; or **greatest common factor**; or **HCF**; or **highest common factor**; or **greatest common measure**; or **GCM**; or **highest common divisor**; or **HCD**]

[10] If you have a function to measure the size of remainders in a principal ideal domain, then it is named for *this* mathematician, since you can use his division algorithm. This ancient Greek geometer wrote the *Elements*.

ANSWER: **Euclid** of Alexandria [or **Eukleides**]

<JR Other Science>

10. This book considers how its title concept can come from Finitude/Infinitude and Possibility/Necessity. For 10 points each:

[10] Name this “Christian Psychological Exposition for Upbuilding and Awakening.” Its title concept turns out to be “despair,” which derives from sin.

ANSWER: *The Sickness unto Death*

[10] *The Sickness unto Death* was written under a pseudonym by this Danish proto-existentialist philosopher, who also wrote *Either/Or* and *Fear and Trembling*.

ANSWER: Søren (Aabye) Kierkegaard

[10] Kierkegaard’s *The Sickness unto Death* is often seen as a continuation of an earlier book on *this* concept. This concept is exemplified by how Adam felt when deciding whether or not to eat from the Tree of Knowledge.

ANSWER: anxiety [or Angest; or dread; prompt on “angst”]

<JR Philosophy>

11. This dance is characterized by the now-pervasive rhythm “dotted eighth sixteenth, eighth eighth,” with an emphasis on the second note of each pair. For 10 points each:

[10] Name this dance that supposedly derives its “one-two, one-two” step from slaves dragging their chained legs in the fields. In its most basic form, you and a partner just walk side to side while swishing your hips.

ANSWER: merengue (“muh-REN-gay”)

[10] Like bachata, merengue originated in *this* Spanish-speaking Caribbean country.

ANSWER: Dominican Republic [or República Dominicana; do not accept “Dominica”]

[10] Bachata derived from a Latin dance with *this* name. This dance inspired and names a repetitive Ravel piece.

ANSWER: bolero

<JR Other Arts>

12. After being dubbed the “Cadillac” candidate in a leadership election, this politician refused to arrive at a press conference in a massive stretch Cadillac he dubbed the “Elvismobile” during a later election. For 10 points each:

[10] Name this politician who defeated Joe Clark in the 1983 Progressive Conservative leadership election. After becoming prime minister of Canada in 1984, he introduced the highly unpopular Goods and Services Tax.

ANSWER: (Martin) Brian Mulroney

[10] Mulroney succeeded this Liberal politician as the prime minister. During a televised debate on patronage, this politician claimed that “I had no option” before Mulroney made his famous retort, “You had an option, sir.”

ANSWER: John Napier Turner

[10] Mulroney was a negotiator of the Meech Lake Accord, which declared this French-speaking province a “distinct society” in an attempt to gain its consent for the 1982 patriation of the Canadian Constitution.

ANSWER: Québec

<WC European/British History>

13. This novel ends with a girl breaking an ancient bowl owned by her mother. For 10 points each:

[10] Name this novel whose protagonist recalls being traumatized by the sight of his father’s mistress trimming hair from a mole on her breast.

ANSWER: *Thousand Cranes* [or *Senbazuru*]

[10] This Japanese author of *Thousand Cranes* also wrote about birthmarks in his story “The Mole.” *Snow Country* is the best-known of this Nobel Laureate’s novels.

ANSWER: Yasunari Kawabata [accept names in either order]

[10] A trio of dark moles are a recurring motif in this other piece of Japanese literature, a series which follows Shigekuni Honda and includes *Spring Snow* and *Runaway Horses*.

ANSWER: *Sea of Fertility* [or *Hōjō no Umi*]

<JB Other Literature>

14. The Queen Mother of the West, Xī (“shee”) Wángmǔ, serves these objects at a banquet every 6,000 years. For 10 points each:

[10] Name these immortality-granting food items which are owned by the Jade Emperor in Chinese myth.

ANSWER: **Peaches** of Immortality [accept **xiāntáo**, **pántáo**, **sīn tòuh**, or **pùhn tòuh**]

[10] Another tree in Chinese myth is the mulberry tree, where ten of these birds personifying the sun perch. Greek myth explains this bird’s black feathers with a story about Apollo and Coronis.

ANSWER: **crows** [or **ravens**]

[10] This place is home to Wú Gāng, who has the Sisyphian task of chopping down a self-healing cinnamon tree. Another person travelled to this place after refusing to give Féng Méng (“fung mung”) the elixir of immortality.

ANSWER: the **Moon**

<JB Mythology/Other>

15. This particle may be produced on Earth via the “shining light through walls” technique. For 10 points each:

[10] Name this particle, the Goldstone boson of spontaneously broken Peccei–Quinn (“pet-CHAY kwin”) symmetry. It is theoretically attractive because it offers a solution to the strong CP problem.

ANSWER: **axion**

[10] The axion is also of interest as a potential component of the “cold” type of this stuff. This substance, which could also be composed of WIMPs or MACHOs, makes up about 27% of the mass-energy of the universe.

ANSWER: **dark matter**

[10] Cold dark matter is the “CDM” in the Lambda-CDM model, the currently accepted model for Big Bang physics. The lambda, on the other hand, stands for this quantity.

ANSWER: **cosmological constant** [prompt on “dark energy”]

<SE Physics>

16. Georges Duby and Robert Mandrou wrote a history of this country’s “civilization.” For 10 points each:

[10] Name this European country home to Fernand Braudel and other historians of the *Annales* school. Its historian François Furet has written extensively on its Revolution, which began in 1789.

ANSWER: **France**

[10] To describe his “geographical” history, Braudel adopted *this* term. This term and general approach was popularized by Claude Lévi-Strauss.

ANSWER: **structural** [accept word forms like **structuralism**]

[10] This *Annales* school historian wrote a major two-volume account of *Feudal Society*, as well as the posthumously-published book *The Historian’s Craft*.

ANSWER: Marc (Léopold Benjamin) **Bloch**

<JR Social Science/Thought>

17. One of these documents states that a firefighter who is caught stealing while fighting a fire should be thrown into the blaze. For 10 points each:

[10] Name this sort of document, one of which was inscribed on a stele by the Babylonian king Hammurabi.

ANSWER: law **codes** [or **laws**; accept obvious equivalents]

[10] The first extant law code was issued by Nammu, a ruler of this city, where Leonard Woolley dug up a ziggurat.

ANSWER: **Ur** [do **not** accept “Uruk”]

[10] A law-code for this city was written by Urukagina, who was called the “first reformer” for his efforts against corruption and poverty. This city was home to many statues of its king Gudea, as well as the Stele of the Vultures, which details its conflict with neighboring Umma.

ANSWER: **Lagash**

<JB World History>

18. The protagonist of this novel is deeply moved when he sees a dwarf who can't get a view of the stage at the Opéra Comique. For 10 points each:

[10] Name this novel by Lawrence Sterne which follows Pastor Yorick, a character from the author's novel *Tristram Shandy*, on a tour of Europe.

ANSWER: *A **Sentimental Journey** Through France and Italy*

[10] The ending of *A Sentimental Journey*, which occurs after a scene between Yorick and a chambermaid in a dark inn, has this feature.

ANSWER: it ends **mid-sentence** [or obvious equivalents indicating an **unfinished** final **sentence**; prompt on "it's incomplete" or similar answers]

[10] Sterne's *Tristram Shandy* is sometimes seen as a precursor of this contemporary style of literature exemplified by Thomas Pynchon's work which often features pastiche, metafiction, and intertextuality.

ANSWER: **postmodernism**

<JB British Literature>

19. In the second chapter of *Unsung Voices*, Carolyn Abbate used this piece to demonstrate the difficulty of creating programs for instrumental music. For 10 points each:

[10] Name this "Scherzo after a ballad of Goethe" whose iconic bouncy 3/8 theme is grotesquely played by three bassoons. Leopold Stokowski recorded this piece to accompany a 1940 animated film.

ANSWER: *The **Sorcerer's Apprentice*** [or *L' **apprenti sorcier***] (The film is *Fantasia*.)

[10] Although he's best-known for *The Sorcerer's Apprentice*, many critics think that Paul Dukas's ("doo-KAHSS's") best piece is actually a somewhat obscure E-flat minor work in *this* genre. Alban Berg's Opus 1 was in this genre.

ANSWER: **piano sonata**

[10] Dukas's ballet *La Péri* was performed by the Ballets Russes ("ballet ROOS") just a year before *this* composer's "danced poem" *Jeux*. His piano pieces include "The Girl With the Flaxen Hair" and "Clair de lune."

ANSWER: Claude (Achille) **Debussy**

<OL Auditory Arts>

20. This polymer is made by polymerizing the simplest alkene. For 10 points each:

[10] Name this polymer used in plastic bags, which is basically just a really long alkane. Its high-density form is used in plastic bottles and corrosion-resistant piping, and has a recycling number of 2.

ANSWER: **polyethylene** [accept **PE**]

[10] Polyethylene is generally grown through this form of polymerization, where monomers added to the growing end of a single nascent polymer. It is contrasted with another method, where *n*-mers are formed first and then fuse.

ANSWER: **chain-growth** polymerization

[10] The kinetic chain length is the average number of monomers on a growing chain during polymerization. In the case of termination by radical combination, the ratio of the kinetic chain length to the degree of polymerization is this number.

ANSWER: one-**half**

<SP Chemistry>