

2020 Terrapin Open

Packet 7

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Tossups

1. **This non-American party was opposed by a series of Moratorium Day protests that were described by one politician from it as a group of “political bikies pack-raping democracy.” This party’s electoral victories were assisted by a group that followed Catholic leader B. A. Santamaria. One leader of this party was accused of timing Soviet defections with re-election after the Petrov affair. Co-opting Alan Reid’s phrase, this party attacked its main rival as being “Mr. Calwell and the faceless men.” This party regained power after the Loans Affair presaged (“PRESS-ided”) the collapse of (*) Gough Whitlam’s (“goff WIT-lum’s”) government. During his 1967 visit to the United States, a leader of this party lost popularity domestically after declaring that he was “all the way for LBJ.” That prime minister from this party disappeared while swimming near Cheviot (“CHEV-ee-ut”) Beach. For 10 points, name this party whose members included Harold Holt and Robert Menzies.**
ANSWER: **Liberal** Party of Australia [prompt on Coalition]

<JL, British/Commonwealth History>

2. **The large sieve (“siv”) was used to prove a theorem for this type of sequence that bounds the average error of an approximation for the summatory von Mangoldt function over its terms. That result is the Bombieri–Vinogradov theorem, which is a special case of a conjecture concerning these sequences due to Elliott and Halberstam. Hillel Furstenberg used ergodic theory to prove that there are infinitely many of these sequences in the set of numbers with positive upper density. Using the fact that an *L*-function with non-trivial characters is non-vanishing, (*) Dirichlet (“DEE-ree-klet”) proved that if the first term and difference of a sequence of this type are coprime, then it contains infinitely many primes. Szemerédi’s (“SEM-eh-ray-dee’s”) theorem concerning these sequences was extended by Ben Green and Terence Tao who showed that there are arbitrarily long subsequences of this kind in the prime numbers. For 10 points, name these sequences whose successive terms differ by a fixed constant.**

ANSWER: **arithmetic** progressions [or **arithmetic** sequences; accept any answer indicating **arithmetic** sequence that contain primes]

<CK, Other Science: Mathematics>

3. **In a novel set on this geographical feature, two men wonder if a man slicing a pie was snatched up to heaven, before realizing he has been swallowed by a sinkhole. In a novel set here, the thug Harry nearly kills Richard Blake when he attempts to board *Maurice*, which is laden with stolen hair curlers. A novel set primarily on this geographical feature includes a scene in which its central characters debate whether or not they should include a dead rat in their “Irish stew.” Together with her daughters Tilda and Martha, (*) Nenna James lives on this geographical feature in Penelope Fitzgerald’s novel *Offshore*. At the beginning of a novel that is largely set here, a character reads a medical dictionary and decides that he has every illness except housemaid’s knee. In that novel, the title characters travel along it with their fox-terrier Montmorency. For 10 points, name this geographical feature on which the title characters take a boat trip in Jerome K. Jerome’s *Three Men in a Boat*.**

ANSWER: River **Thames**

<CK, British Literature>

4. The author of this essay recounts how, when bored in railway stations, he studies advertisements and imagines taking other trains to highlight the importance of “feigned hesitancy.” This essay defends a convergence view of truth, arguing that truth is “the opinion which is fated to be ultimately agreed to by all who investigate.” Its author declares that it’s “disproportionate to the occasion” to talk of “belief” and “doubt” when deciding whether to pay a bus fare with a nickel or five pennies. This essay ponders whether a diamond that is crystallized in a (*) cushion of soft cotton is “hard” to illustrate the title concept’s “third grade.” In this article’s [emphasize] *companion* piece, its author compares the methods of tenacity and authority unfavorably with the scientific method. It rejects a certain two-fold doctrine defended by René Descartes as an “ornament of logic.” For 10 points, name this essay by C. S. Peirce (“purse”), the companion piece to “The Fixation of Belief.” ANSWER: “How To Make Our Ideas Clear”

<CK, Philosophy>

5. *Description acceptable.* Hans Zender’s 1993 recomposition specifies this character as a tenor, and in his 17th song, string scratches and drum rolls replace the 16th-note D–C-sharp tremolos and 8th-note D major triads depicting dogs and chains. The second song in Reinbert de Leeuw’s (“LAY-oo’s”) collage for enlarged Pierrot ensemble recomposes this character’s strophic first song, which Barbara Sukowa (“ZOO-ko-va”) emotes in Sprechstimme (“SHPREK-shtim-uh”) as a clarinet plays the slow descending motif [read slowly] “F E D A, F, short E, D.” Grace notes precede the first two droning B–F-sharp fifths in the last song by this (*) alienated character who sees a strange old busker beyond the village and asks to join him. Piano effects depict death imagery, such as a crow, posthorn, will-of-the-wisp, and nostalgic linden tree, in 24 lieder (“LEE-der”) sung by this character, who bids his love farewell in the first one, “Gute Nacht” (“GOO-tuh nokt”). For 10 points, what character sings to a hurdy-gurdy man at the end of Schubert’s dark song cycle based on Müller poems about a cold season?

ANSWER: the wanderer from *Winterreise* [or the protagonist or main character or narrator (or equivalents) of *Winterreise*; or the singer or speaker of *Winterreise*; or the traveller or voyager or journeyman (or equivalents) from *Winterreise*; or the rejected lover from *Winterreise*; prompt on the man from Winterreise or similar by asking “which one?”; prompt on *Winterreise*; accept Winter Journey in place of “*Winterreise*”]

<OL, Classical Music>

6. This figure blames the food that he was given by some members of his family for having prevented him from interfering in a sexual assault. After seeing a man running towards him in rage while holding the wheel of a chariot, this figure lays down his weapons and begs that man to kill him. This figure pleads with a fisherman to allow a royal marriage to take place. After being confronted by a transgender man who was a princess in his past life, this figure is (*) pierced with so many arrows that they form his “deathbed.” Seven of this figure’s siblings are drowned in a river after their birth by his mother Ganga. This figure, who is often called *pitāmah* (“pih-TAH-muh”), gains the power to choose his time of death following a vow of celibacy in which he relinquishes his heirship to the Kuru throne. For 10 points, name this son of Śāntanu (“SHAHN-tuh-noo”) and grand-uncle of the Pāndavas (“PAHN-duh-vuhs”).

ANSWER: Bhīshma (“BEESH-muh”) [or Devavrata; or Bhīshmapitāmah; or Bhīshmāchārya] (The first line refers to the disrobing of Draupadi, and the man in the second line is Krishna.)

<NH, Mythology>

7. Zhang, Li, and Liu et al. became the first researchers to use the term “single-atom catalyst” in a publication on the activity of single atoms of this element on an iron oxide framework. Ilya Chernyaev first described the trans effect while studying square planar complexes of this element. It’s not uranium, but a green salt featuring a long chain of atoms of this element is named after Heinrich Gustav Magnus. This element’s hexafluoride was used by Neil (*) Bartlett in a reaction with xenon that generated the first noble gas salt. The standard hydrogen electrode is defined as having the redox reaction taking place on a surface made of this

element's "black" form. This metal is bonded to two cis-oriented chloride ligands ("LIG-unds") and two ammonia ligands in a square planar complex in chemotherapy. For 10 points, name this nickel-group metal whose symbol is Pt.

ANSWER: **platinum** [accept **Pt** until read]

<EM, Chemistry>

8. *Description acceptable.* **It's not North American, but followers of this belief system ward off evil spirits by erecting totem poles with grotesque laughing faces in pairs, with a male representing the world and a female representing the underworld. In the 1970s, a politician waged a campaign against this religion called the "movement to overthrow the worship of gods" as part of his New Community Movement. In this religious system, brightly-dressed women perform rhythmic dances with sharp knives in elaborate (*) gut rituals. Dangun ("DAHNgoon") is venerated as one of the three aspects of Haneullim ("ha-null-eeem") in this religion, which is syncretized with neo-Confucianism in Cheondoism ("chun-doh-ism").** For 10 points, shamans known as *mudang* play an important role in what religion indigenous to an Asian peninsula?

ANSWER: **Korean religion** [or **Korean folk religion**; or **Korean shamanism**; or **Korean animism**; or **Shinism**; or **Shingyo**; accept **Muism** or **Mugyo** until "*mudang*" is read; accept any answer mentioning **Korea** AND a synonym for **indigenous spiritual beliefs**; prompt on **Shindo**; do not accept or prompt on "Shinto"]

<CK, Religion: Other>

9. **Spain ceased diplomatic relations with a country home to these people after its embassy in that country was burned by a rebel group made up of these people, the Guerrilla Army of the Poor. Operation Sofia was part of a campaign that targeted the non-Jewish *ladinos* and these people, many of whom were killed in the Dos Erres massacre. Many of these people were forcibly relocated to allow the construction of a hydroelectric dam as part of the Rio Negro Massacres. Rebels among these people were offered amnesty if they submitted to government rule under a leader's scorched earth (*) "beans and guns" policy. The left-wing Winaq party was founded by an activist who long pressed for charges against Efraín Ríos Montt for genocide of these people. Rigoberta Menchu won the Nobel Peace Prize for advocating on behalf of these people during the Guatemalan Civil War.** For 10 points, name these Central American people whose ancestors built cities such as Chichen Itza.

ANSWER: **Mayans** [accept **K'iche'** or **Ixil**; accept **indigenous Guatemalans** or equivalents until "Guatemalan" is read; prompt on **indigenous** or **natives** until "Guatemalan" is read by asking "from what country?"]

<EL, World History>

10. **This author wrote a poem describing how anemone and the flower that weeps have "grown in the garden plain / where Melancholy sleeps." A collection by this author ends with a poem whose speaker declares "I am before all a man of sense," before describing how a woman with hair like gold attracts him "as a magnet iron." His best-known collection includes the poems "Clotilde" and "The Pretty Redhead" as well as a poem whose speaker notes "All love goes by as water to the sea," which repeats the two-line refrain: "Let night come on bells end the day / The days go by me still I stay." A poem by this author proclaims, "The most (*) modern European is you Pope Pius X," and ends with the cryptic command "sun slit throat." He included a depiction of the Eiffel Tower in a collection of concrete poems, while his best-known collection includes the poems "Le Pont Mirabeau" and "Zone." For 10 points, name this French surrealist who wrote *Caligrammes* and *Alcools*.**

ANSWER: Guillaume **Apollinaire** [or Wilhelm Albert Włodzimierz Apolinary **Kostrowicki**]

<VS, European Literature>

11. **Current models predict that for a core-collapse supernova, this variable will increase starting a few hundred milliseconds after the core bounce. This quantity is raised to the eleven-thirds power in a differential equation for its time evolution based on a post-Newtonian expansion. This quantity is plotted on the x-axis of sensitivity diagrams including curves for detectors like LISA, a space-based detector that will be sensitive to**

signals with lower values of this quantity than ground-based (*) interferometers. Continuous sources have a constant value for this quantity, unlike inspiral events, where this quantity increases along with amplitude as the orbital distance decreases, leading to a characteristic chirp signal. For 10 points, name this variable for a gravitational wave that is inversely related to the oscillation period of its source and measured in hertz.

ANSWER: gravitational wave frequency [accept orbital rate or orbital frequency after “inspiral” is read]
<GR, Physics>

12. In a scene from this film, characters expecting a shipment of caviar and vodka instead receive a crate of books, which they angrily set on fire. During a Christmas scene, a character in this film repeatedly practices saying “Lotte hat blaue Augen” (“LOT-tuh haht BLAO-uh AO-gun”) in halting German. To create a diversion, characters in this film noisily play flutes, and, after they’re confiscated, bang pots and pans. In this film, after a character interrupts a vaudeville show with news that Fort (*) Douaumont (“doo-oh-MAWN”) has fallen, characters dressed in drag sing “La Marseillaise” (“la mar-say-YEZ”). This film ends with border guards shooting at Maréchal (“mah-ray-SHAHL”) and Rosenthal, who trudge through the snow into Switzerland. In this film, Erich von Stroheim plays the neck-brace-wearing Major von Rauffenstein, who befriends, and later shoots, the aristocratic Captain de Boeldieu (“bwell-DYOO”). For 10 points, name this film by Jean Renoir about French POWs (“P-O-W’s”).

ANSWER: *La Grande Illusion* [or *The Grand Illusion*]
<CK, Other Arts: Film>

13. The rule that only cardinals under the age of 80 could participate in the conclave to elect the pope was first announced by this pope. This last pope to be formally crowned in a coronation ceremony published the encyclical *Sacerdotalis caelibatus* (“sa-chair-do-TAH-lees chay-lee-BAH-toos”) defending the importance of priestly celibacy. This pope established the Synod (“SIN-ud”) of Bishops as an advisory council to the papacy, and wrote a letter to the Red Brigades asking them to release Aldo Moro. He’s not John Paul II, but this pope gave Mary the title (*) “Mother of the Church” at the [emphasize] *closing* of a church council that produced three “Dogmatic Constitutions” and permitted services in the vernacular. This man, who served as archbishop of Milan before being elected pope, confirmed the Catholic Church’s position against contraception and abortion in the encyclical *Humanae vitae*. For 10 points, name this pope who succeeded John XXIII (“the twenty-third”) and closed the Second Vatican Council.

ANSWER: Pope Paul VI [or Giovanni Montini; prompt on Paul]
<AE, European History>

14. One of these structures built with Chinese funding near the town of Oyem in Gabon in 2017 had been abandoned to the jungle by 2019, according to a book by David Goldblatt. Viktor Orbán probably had a hand in the construction of a magnificent timber-framed one of these structures in his home town of Felcsút (“FEL-choot”). Several of these structures in the UK were designed by Archibald Leitch, including one that was the subject of the Taylor Report after a 1986 incident that led to a boycott of (*) *The Sun* newspaper by the people of Liverpool. A proposed air-conditioned one of these structures in Al-Bayt will resemble a tent city, but the lax approach to its builders’ safety has led to criticism of the Qatari government in the lead up to a 2022 event. For 10 points, name these venues such as Anfield and Old Trafford where teams like Liverpool and Manchester United play.

ANSWER: soccer stadiums [or football stadiums; or football grounds; prompt on stadiums by asking “of what sport?”]
<EM, Modern World>

15. A poet from this country wrote “living from memory, suckling from memory” in “The Old Man’s Song,” which is part an elegy for his wife Winétt. An author from this country wrote an ode to Woman in the second

canto of a seven-canto epic about a wise poet falling with a parachute; that poet wrote “The Poet is a Little God.” The author of *Los Gemidos*, Pablo de Rokha, and the author of *Altazor*, who founded the *creacionismo* movement, are from this country. An author from this country wrote, “it would be delightful... to kill a (*) nun with a blow to the ear” in a poem that begins “It so happens I am tired of being a man.” That poem has the English title “Walking Around” and is collected in *Residence on Earth*. An author from this country wrote “rise to be born with me, brother” in a poem from his *Canto General* (“heh-neh-RAHL”). For 10 points, name this home country of Vicente Huidobro (“wee-DOH-bro”) and Pablo Neruda.

ANSWER: **Chile** [or Republic of **Chile** or República de **Chile**] (The line “Rise to be born with me, brother” is from “The Heights of Macchu Picchu.”)

<JF, World/Other Literature>

16. Many proposed vaccines for these conditions target cell-associated glucosyltransferases from a certain pathogen’s GS-5 strain. Temporal pH changes that promote these conditions can be plotted with the Stephan curve. They’re not vaginal, but susceptibility to these conditions corresponds to a change from green to yellow in the colorimetric Snyder test, indicating elevated *Lactobacillus* colony counts. These conditions are often preceded by white spot lesions. They are mainly caused when mutans group streptococci form undisturbed dextran biofilms under repeated exposure to (*) carbohydrates, which get fermented into lactic acid. The most common type of these lesions occurs in pits and fissures. They can affect the cementum when gingival recession allows it to accumulate plaque. For 10 points, name these lesions arising from demineralization of enamel that sometimes warrant a root canal.

ANSWER: **cavities** [or dental **caries**; or **tooth decay**]

<JS, Biology>

17. Nancy Isenberg argued that the use of the word “offscourings” to describe the participants in this event showed that class divisions always existed in America in her book *White Trash*. To protect her husband during this event, a woman tricked an official inquiry by having the common hangman lead them to the wrong house. Troops led by Robert Morris ended this event after capturing the “Arthur Allen House.” Following the death of her husband in this event, Lady Frances became the leader of the Green Spring Faction. The leader of one side during this event attempted to ally with Cockacoeske (“ka-ka-ko-ESS-kee”), the “Queen of (*) Pamunkey.” One side in this conflict issued the “Declaration of the People,” which criticized a beaver trade monopoly. Prior to this event, tensions were stoked by Doeg (“dohg”) raids. For 10 points, name this 17th-century rebellion against Governor William Berkeley (“BARK-lee”) that resulted in the burning of Jamestown.

ANSWER: **Bacon**’s Rebellion

<JH, American History>

18. In Arthur Lewis’s dual-sector model, this value increases when workers switch from the subsistence sector to the modern sector, causing growth. In models of growth proposed by Kaldor and Pasinetti, this value is split into two different variables: one for capitalists that drives economic growth and one for workers. According to the Harrod–Domar model, countries with higher levels of this variable will have faster growth. In a modification to the (*) Solow (“solo”) model, this value is endogenized by looking at the interactions of household supply and industrial demand; that model is named for Ramsey, Cass, and Koopmans (“COPE-mahns”). The “golden rule” value of this variable is defined as the value of this rate that maximizes the steady-state value of consumption. For 10 points, name this economic value often considered as “deferred consumption,” defined as the difference between income and expenses.

ANSWER: **savings** rate

<AE, Social Science: Economics>

19. After reading a story about a diamond heist, the protagonist of a play titled for this kind of object imagines disembodied voices chanting the word “stones.” In a scene from a play titled for this kind of object, an attorney exposes that the protagonist was given a lily by her lover Richard, undermining her story about an intruder armed with a pebble-filled bottle. This kind of object titles a play whose protagonist has a nervous breakdown, muttering “God Mary Mary God Mary,” after giving birth, and dies in the electric chair after killing (*) her husband, the president of the George H. Jones Company. This kind of object titles a play whose protagonist, after dying, talks to the corpses Shrdlu (“SHURD-loo”) and Daisy in Elysian Fields. Sophie Treadwell’s best-known play is titled for this kind of object, which also titles a play whose protagonist murders his boss after he is replaced by one of these objects. For 10 points, name this type of object that titles a play about Mr. Zero written by Elmer Rice.

ANSWER: machines [or Machinal; or The Adding Machine]

<CK, American Literature>

20. A poem muses that the object made of this material on which it is written was meant as a bowl stand, hence why it is matched with a much newer ceramic bowl. The sun god Kinich Ahau is depicted in a large head made of this material that was found near Altun-Ha. “Slit rings” made of this material likely lent their shape to sculptures with pig heads and serpentine bodies, which were also made of this material, and which are curled up as if in the fetal position. Either bone or this material is most commonly used in *hei matau* pieces shaped like (*) fish hooks. A katydid and locust appear inside a sculpture of a cabbage head made of this material, which is the most common one referred to by the Māori term *pounamu* (“PO-oo-na-moo”). A translucent bluish form of this material was used for masks by the Olmecs. Flat disks with a hole through the center, called *bì* disks, are one of the “6 ritual” objects made of this material. For 10 points, name this highly valued green stone, which is found in many works of Chinese art.

ANSWER: jade [or jadeite; accept nephrite jade; prompt on pounamu until read by asking “what type of material does that refer to?”; prompt on greenstone; prompt on yu] (The first line refers to an engraving by the Qianlong Emperor.)

<VS, Painting/Sculpture>

Bonuses

1. Foday Musa Suso popularized this instrument in the West, playing it alongside Herbie Hancock on the album *Village Life*. For 10 points each:

[10] Name this lute-and-harp-like instrument with 21 strings made by stretching a cowhide over a calabash, which is traditionally played by West African *griots* (“gree-OH”).

ANSWER: ***kora***

[10] On the Kronos Quartet’s album *Pieces of Africa*, Suso plays *kora* and Dumisani Maraire, who popularized this Bantu ethnic group’s music, plays the *mbira*, or thumb piano. Thomas Mapfumo fused electronic interpretations of *mbira* music with “deep” lyrics full of defiant double meanings in this ethnic group’s language to create *chimurenga*.

ANSWER: ***Shona*** [accept deep ***Shona*** or ***Shona*** yakadzama]

[10] On that album, Hamza El Din plays a North African instrument of this kind, called a *tar*. West African music often features hourglass-shaped instruments of this kind whose pitch can be adjusted to make them “talk.”

ANSWER: ***drums*** [prompt on percussion]

<CK, Other Arts: Music>

2. Two of Francisco Franco’s foreign ministers attempted to marry a woman in this family to Adolf Hitler to create a “fascist dynasty,” though the plan fell apart when Goebbels informed them that Hitler was infertile. For 10 points each:

[10] Name this family that included Pilar, the leader of the “Women’s Section” of Falange (“fa-LAHN-hay”). This family also included her father, who established a dictatorship in 1923 in a military coup promoted by King Alfonso VIII.

ANSWER: ***Primo de Rivera*** [accept Pilar ***Primo de Rivera*** or Miguel ***Primo de Rivera***; do not accept or prompt on partial answers like “de Rivera”]

[10] Miguel Primo de Rivera’s coup ended this political system in Spain in which the Liberals and Conservatives would alternate power. Antonio Canovas del Castillo orchestrated the inauguration of the policy.

ANSWER: ***el turno pacifico*** [or “The Peaceful ***Turn***”]

[10] The *turno* system existed in Spain following the restoration of this dynasty that ruled Spain after the Habsburgs. Philip V was the first Spanish king from this dynasty, which currently holds the Spanish monarchy.

ANSWER: House of ***Bourbon*** [accept House of ***Bourbon***-Anjou or *Casa de ***Borbón****]

<EL, European History>

3. These two economists examine tax-avoidance strategies employed by the ultra-rich in their 2019 book *The Triumph of Injustice*. For 10 points each:

[10] Name these two French economists at UC Berkeley who imagined implementing a revenue-maximizing wealth tax on the Forbes 400 in their widely-cited 2019 paper “Progressive Wealth Taxation.”

ANSWER: Emmanuel ***Saez*** (“sah-EZZ”) AND Gabriel ***Zucman*** [accept in any order]

[10] Gabriel Zucman is a leading expert on these places, which he discussed in his 2015 book *The Hidden Wealth of Nations*. The OECD divides these places into “conduits” and “sinks.”

ANSWER: corporate ***tax havens*** [or ***offshore financial centers***; or ***OFCs***]

[10] Using a quantum of funds scale, Zucman showed that this nation is the world’s largest tax haven. Paul Krugman derided this county’s strategy of inflating its GDP by becoming a tax haven as “leprechaun economics.”

ANSWER: ***Ireland***

<CK, Social Science>

4. These cells are divided into direct and indirect types according to their dopamine receptors and the anatomic route of their output to the thalamus. For 10 points each:

[10] Name these cells that comprise the vast majority of striatal neurons. Kreitzer et al. showed that optogenetic stimulation of their D1 and D2 types had opposite effects on locomotion.

ANSWER: **medium spiny neurons** [or **MSNs**; or **spiny projection neurons**; prompt on, but DO NOT REVEAL, **GABAergic** or **basal ganglia** neurons; prompt on partial answers]

[10] MSNs in the D1 pathway permit thalamic and cortical excitation by acting on the SNpr with this primary inhibitory neurotransmitter. Vitamin B6 acts as a cofactor in its biosynthesis from glutamate.

ANSWER: **GABA** [or **gamma-aminobutyric acid**]

[10] These drugs share a pharmacophore with Z drugs in their positive allosteric modulation of GABA A receptors. They are used to treat delirium tremens, and oversedation with these drugs may be reversed with flumazenil (“floo-MAZ-uh-nil”).

ANSWER: **benzodiazepines** [or **benzos**]

<JS, Biology>

5. A poem titled “Compass” opens “You asked for a little compass. Thank you!” before noting that the speaker had actually asked for a definition of this genre, lamenting “None offered the sense of disorder that feels so integral.”

For 10 points each:

[10] Give the original-language term for this hard-to-define genre, whose name is often translated as “following the brush.” It usually consists of disjointed jottings based on random observations of the writer.

ANSWER: **zuihitsu** (“ZOO-ee-heet-soo”)

[10] Kimiko Hahn included “Compass” in her poetry collection *Narrow Road to the Deep Interior*, which is named after a book by this Japanese poet.

ANSWER: Matsuo **Bashō** [or **Matsuo**]

[10] Kimiko Hahn’s collection *Mosquito and Ant* refers to a “mosquito script” from Hunan with this property that essentially died out when Yang Huanyi died. During the Heian (“HAY-on”) period, the development of fluid kana calligraphy, which had this property, dramatically increased the amount of literature that was written.

ANSWER: used primarily by **women** [accept answers indicating it was either **used by** or **created by women**, or it was used **only by women**, or **taught to women**; accept **women’s script**; prompt on **Nūshu** by asking “what property does that script have?”] (The script from the Hunan region, Nūshu, is sometimes called “mosquito script” because the characters resemble mosquitoes.)

<VS, World/Other Literature>

6. Answer the following about Surrealist painters who painted self-portraits with wacky animals. For 10 points each:

[10] This artist painted a self-portrait in which she sits in a chair in front of a hyena and a rocking horse. Outside the house in that painting, a white horse symbolizing her can be seen riding around.

ANSWER: Leonora **Carrington**

[10] Though British-born, Carrington did most of her work in this country, where she was friends with the painter of *Self-Portrait with Unicorn*, Remedios Varo. Another painter from this country painted a hummingbird hanging from her necklace of thorns in a self-portrait.

ANSWER: **Mexico** [or **United Mexican States**; or **Estados Unidos Mexicanos**]

[10] This American surrealist painted a self-portrait titled *Birthday* in which she stands half-nude in front of a weird griffin-like animal as recursive doors open behind her. A large sunflower appears on the top floor of a house in her *Eine Kleine Nachtmusik* (“EYE-nuh KLY-nuh NOKT-moo-zeek”).

ANSWER: Dorothea **Tanning**

<VS, Painting/Sculpture>

7. While in this city, a general responded to two anonymous letters written by John Armstrong Jr. with a speech urging its audience to oppose those who “deluge our rising Empire in blood.” For 10 points each:

[10] Identify this city that lent its name to a planned Continental Army coup due to anger over back pay. During that attempted coup, Colonel Lewis Nicola advised the speaker of the aforementioned address to proclaim himself King of the United States.

ANSWER: **Newburgh** [accept **Newburgh** Address or **Newburgh** Letter or **Newburgh** Letter]

[10] This general delivered the Newburgh Address. He attacked Hessians in Trenton after crossing the Delaware River on Christmas, 1776.

ANSWER: George **Washington**

[10] Washington unsuccessfully dealt with this earlier mutiny, which spawned the legend of Temperance Wick, who hid her horse upstairs at Jockey Hollow during it. Soldiers successfully mutinied against Anthony Wayne during this event.

ANSWER: **Pennsylvania Line** Mutiny

<JL, American History>

8. In this novel, after Lady Dedlock swoons at the sight of handwriting on an affidavit, her lawyer discovers that that document was copied by a pauper living under the assumed name “Nemo.” For 10 points each:

[10] Name this Charles Dickens novel narrated by Esther Summerson that centers on the court case *Jarndyce v. Jarndyce*.

ANSWER: ***Bleak House***

[10] *Bleak House* satirizes this real-life poet as the immoral Harold Skimpole. In a poem by this author, the speaker commands “Time, you thief” to “Say that health and wealth have miss’d me,” but mention the title event.

ANSWER: Leigh **Hunt** (The poem is “Jenny Kiss’d Me.”)

[10] Leigh Hunt wrote an essay mocking this animal’s owner for personally buying it oysters, a task that that owner considered too degrading for his black servant, Francis Barber. A description is acceptable.

ANSWER: Samuel **Johnson’s cat** [or **Hodge**; prompt on partial answers]

<CK, British Literature>

9. Examples of this field include the density of the superconducting component and the magnetization of a ferromagnet. For 10 points each:

[10] Name this complex field. The free energy is expressed as a power series in this quantity in the Ginzburg–Landau theory of superconductivity.

ANSWER: **order parameter** [or **order parameter** field]

[10] Order parameters in Ginzburg–Landau theory describe the continuous type of these phenomena. These phenomena are discontinuous changes, such as the change from a normal metal to a superconductor and the change from liquid water to ice.

ANSWER: **phase transitions** [or **phase change**; accept continuous **phase transition** or second-order **phase transition**]

[10] Ginzburg–Landau theory introduced two characteristic quantities for superconductivity: the penetration depth and this quantity denoted ξ (“k’sigh”).

ANSWER: superconducting **coherence length**

<GR, Physics>

10. This politician led a party that was widely derided for a proposal to provide ten-thousand-pound allowances to every citizen for education and job training, called “skills wallets.” For 10 points each:

[10] Name this politician who succeeded Tim Farron to assume her highest position, where she campaigned on a platform of revoking Article 50. In 2019, she lost her seat in Parliament to the SNP’s Amy Callaghan.

ANSWER: Jo **Swinson** [or Joanne Kate **Swinson**]

[10] Before the 2019 elections, Swinson led this centrist third party, which under Nick Clegg had formed a coalition government with David Cameron’s Conservative Party.

ANSWER: **Liberal Democrats** [or **Lib Dems**]

[10] Swinson proposed aligning the Lib Dems with this group of centrist MPs formed by seven ex-Labour MPs and four ex-Conservative MPs. They collapsed after gaining no seats in the 2019 European Parliament election.

ANSWER: The **Independent Group** for Change [or **Change UK**; accept any combination of the underlined parts]
<CK, Modern World>

11. The Met houses a hippopotamus named William made of this material, three of whose legs were broken, likely so it could not chase the dead. For 10 points each:

[10] Name this material whose association with the afterlife led to its use for the wall tiles of King Djoser's tomb.

ANSWER: Egyptian **faience** ("fie-ONSE" or "FAY-onse")

[10] William was found in the burial chamber of the steward Senbi II, who lived during this period in Egyptian history in which Senusret III annexed Nubia. Worship of Osiris became popular during this period that ended with the Hyksos invasion.

ANSWER: **Middle** Kingdom

[10] Faience was frequently this color, a reference to the Nile River. This is the color of lapis lazuli, which was used to construct the Ishtar Gate.

ANSWER: **blue**

<EL, Ancient History>

12. These short character pieces are often in ternary form and gradually embellish a simple lyrical melody over broad undulating arpeggios. For 10 points each:

[10] Name this tranquil genre developed by the early Romantic Irish composer John Field. Chopin wrote 21 of them.

ANSWER: **nocturne** [or **nocturno**]

[10] Field's piano sonatas, starting from his Opus 1 dedicated to his teacher Clementi, were published with this many movements, as he usually interpolated a nocturne. Beethoven's last piano sonata has this many movements, as do all of Alberti's "Italian" sonatas.

ANSWER: **two** [or **2**]

[10] Like Adolf von Henselt, Field was a court pianist in this country, where H. J. Dalmas published his variations on its folk songs, and where he taught the composer of the nocturne *La séparation* and the "Nightingale" Variations. A late Romantic pianist from this country wrote two-part sonatas with nocturnal textures like *Night Wind*.

ANSWER: **Russia** (Field taught Mikhail Glinka, and Nikolai Medtner composed *Night Wind*.)

<OL, Classical Music>

13. This author's poem "Root Cellar" describes a "congress of stinks" that filled the title place, where "Nothing would give up life: / Even the dirt kept breathing a small breath." For 10 points each:

[10] Name this American poet who included "Long Live the Weeds" in his many gardening-themed "greenhouse poems." The speaker declares "I measure time by how a body sways" in his poem "I Knew a Woman."

ANSWER: Theodore **Roethke** ("RET-kee")

[10] Roethke wrote a "waltz" about this type of person, who came home from his job as a florist and "beat time on my head with a palm caked hard by dirt." A poem about this type of person declares, "every woman adores a Fascist."

ANSWER: **father** [or a **daddy**; or **papa**; or equivalents; accept "**My Papa's Waltz**"]

[10] This avid gardener and friend of Roethke's authored the Pulitzer-winning collection *The Testing Tree*. The speaker declares, "I have walked through many lives, some of them my own," in his poem "The Layers."

ANSWER: Stanley **Kunitz**

<VS, American Literature>

14. Answer the following about cascade reactions in total synthesis, for 10 points each.

[10] Cascading cationic cyclizations of polyenes (“poly-eens”) were used by Johnson and Corey in preparing these compounds with 17 carbons arranged in four rings, mimicking their biosynthesis from squalene.

ANSWER: **steroids** [accept **sterols**]

[10] This Cypriot-American chemist at Rice University used cascade pericyclic reactions in his preparation of endiandric acid. He included that synthesis along with much more of his own work in the book *Classics of Total Synthesis*.

ANSWER: Kyriacos Costa **Nicolaou**

[10] Dennis Curran’s total synthesis of hirsutene (“her-SUIT-een”) is a classic example of a cascade involving these species, which can be produced by homolytic bond fission and contain unpaired electrons.

ANSWER: free **radicals**

<EM, Chemistry>

15. A 1969 book argues that the Neolithic discovery of the Earth’s axial precession was encoded in early mythologies in a mytheme represented by one of these objects. For 10 points each:

[10] That book by Giorgio de Santillana is titled for Hamlet’s object of this type, which serves as the axis mundi in various Indo-European mythologies. The rotation of a “cosmic” one of these devices produces the world in that mytheme.

ANSWER: world **mills** [or **millstones**]

[10] In the *Grottasongr*, this king forces the giantesses Fenja (“FEN-yuh”) and Menja (“MEN-yuh”) to grind wealth and happiness from a magical mill. The giantesses instead produce an army from the mill, ending this king’s namesake “peace.”

ANSWER: **Frodi**

[10] Although this object’s shape is never identified, Elias Lönnrot (“ELL-ee-oss LURN-rote”) interprets it as a mill. This object grinds out flour, gold, and salt before being destroyed in the battle with Louhi in the *Kalevala*.

ANSWER: the **sampo**

<JSH, Mythology>

16. Infighting between this ruler’s sons after his death led to the collapse of the Seljuk Empire. For 10 points each:

[10] Name this Seljuk sultan, the successor of Alp Arslan. This ruler, who patronized Omar Khayyam, defeated the Karakhanids to extend Seljuk control over Transoxiana.

ANSWER: **Malik-Shah I**

[10] This friend of Omar Khayyam served as the vizier to both Malik Shah and Alp Arslan. This archetypal good vizier wrote the influential mirror for princes *Siyāsatnāmeḥ*, or the *Book of Government*.

ANSWER: **Nizām al-Mulk** [or **Abū ‘Alī Ḥasan** ibn ‘Alī ibn Ishāq al-Ṭūsī]

[10] Nizam al-Mulk founded many of these institutions, which were named *nizamiyyah* in his honor. Al-Ghazali instituted the practice of teaching logic in these Islamic religious schools.

ANSWER: **madrāsas**

<CK, World History>

17. According to legend, this figure died after a rabbi erased a letter written on his forehead to change the word *emet* (“eh-MET”), meaning “truth,” to *met*, meaning death. For 10 points each:

[10] Name this legendary clay figure whom the Maharal (“ma-ha-RALL”), Judah Loew (“layv”), created from the Vltava River to protect his congregation from Rudolf II.

ANSWER: The **Golem of Prague** [or the **golem** of the **Prague** ghetto; prompt on **golem** by asking “what city did the golem inhabit?”]

[10] According to legend, an angel stopped this man from creating a golem when he was a teenager. This Lithuanian rabbi led the Misnagdim (“meet-nog-DEEM”) who opposed the rise of Hasidism (“HOSS-id-ism”).

ANSWER: the **Vilna Gaon** (“gah-OWN”) [or **HaGra**; or **Elijah ben Solomon** Zalman; prompt on partial answer]

[10] Supposedly, you can activate a golem by writing one of these words on a piece of paper and placing it in its mouth. In Jewish belief, seven of these words are so holy that they should never be erased, and one of these words is called the Tetragrammaton because it consists of four letters.

ANSWER: **names of God** [prompt on partial answer]

<CK, Religion: Judaism>

18. High values of this quantity correlate with low UV excess. For 10 points each:

[10] Name this quantity that indicates the presence of products of stellar nucleosynthesis. Population I stars are characterized by high values for this quantity.

ANSWER: **metallicity**

[10] This hypothetical group of high-mass stars in the early universe would have very low metallicity and might explain the presence of heavy elements in quasar spectra.

ANSWER: **Population III** stars

[10] Population III stars would have a very high value for this variable, which determines stellar color. Population I stars are younger and have a higher value for this variable than Population II stars.

ANSWER: **temperature** [or **T**]

<GR, Other Science: Astronomy>

19. In this dialogue, Socrates cites jurymen who are persuaded by a skilled lawyer as an example of individuals who have a justified true belief “without an account.” For 10 points each:

[10] Name this dialogue in which Socrates calls himself the “midwife to ideas,” asking the title, talented young geometer for the definition of knowledge.

ANSWER: ***Theaetetus*** (“thee-uh-TEE-tuss”)

[10] After distinguishing between “having” and “possessing” knowledge, Socrates likens the mind to this kind of object containing knowledge. Theaetetus objects that it would also have to contain pieces of ignorance.

ANSWER: **aviary** [or **birdcage**; prompt on **cage**]

[10] A different account of knowledge from the *Theaetetus* likens knowledge to a tablet made from this substance. Descartes used the melting of this substance to illustrate how knowledge of the world can be “clear and distinct.”

ANSWER: **wax** [or **cire**]

<CK, Philosophy>

20. A character is repeatedly interrupted by events like a call to eat salep (“SAL-up”) and drink coffee while reading about one of these events that involves three white foxes atop the minaret of a local mosque. For 10 points each:

[10] Name these events that Marc-Alem studies while employed by the Tabir Sarrail, a government agency that compiles dictionaries consisting of accounts of these events.

ANSWER: **dreams**

[10] In Ismail Kadare’s (“ee-sma-EEL ka-da-RAY’s”) *Palace of Dreams*, Marc-Alem reads about a dream centering on a bellowing bull standing next to one of these structures, which foretells the demise of his own family. The shopkeeper Alihodza Muteveliç has his ear nailed to one of these structures by a rival in an Ivo Andrić (“EE-voh AHN-drich”) novel.

ANSWER: **bridge** [or *The Bridge on the Drina*]

[10] Kadare is an author from this country, whose blood feuds under the Kanun code inspired his novel *Broken April*. His novel *The Castle* centers on this country’s national hero Skanderbeg.

ANSWER: **Albania**

<VS, European Literature>