

Tossups

1. Domenico Morelli's version of this scene depicts a pale, red-haired female corpse under a blanket to the left of a man in a white hood. In Diego Rivera's version, a turnip with humanlike breasts appears next to a larger, supine turnip. A nude woman clutching her breasts and a nude female torso framed by the door of an ornate building on top of an elephant appear in Dali's version of this scene. According to the *Lives of the Artists*, a print by Martin Schongauer was the basis for Michelangelo's version, his first known painting. Bosch's rendition has a pig lying next to its central figure. A screaming birdlike creature brandishing a stick appears in this scene in the Isenheim Altarpiece. For 10 points, name this scene which shows the supernatural struggles of a saint in the desert.

ANSWER: the temptations of Saint Anthony [accept anything describing Saint Anthony's torment by evil supernatural beings]

2. Every finitely generated projective module of a ring of these objects is free, according to the Quillen-Suslin theorem. Classically, an algebraic variety consists of a set of solutions to a system of these functions. Computation over these objects is simplified by the use of Gröbner bases. Concatenating multiple instances of these functions together piecewise yields a spline, which is used for interpolation. The eigenvalues of a matrix are equal to the roots of one of these, called the "characteristic" one. A truncated Taylor series is one of these functions, and quotients of them are called rational functions. For 10 points, name these functions that consist of sums of variables multiplied by coefficients and raised to integer exponents, an example of which is "x squared plus two".

ANSWER: polynomials [or polynomial functions]

3. This character argues that, because he had many bickering wives and proposed to cut a baby in half, Solomon was not wise. This character wears a five-cent piece around his neck, which he claims was given to him by the Devil. He also claims to own a magical hairball from the stomach of an ox. A quote from this character titles an essay about homoeroticism in American literature by Leslie Fiedler. Another character proclaims "All right then, I'll go to hell!" when he decides to protect this character, and tears up a handbill for this character's capture. He is imprisoned on the Phelps farm, but Miss Watson's will reveals that he is now a free man. For 10 points, name this slave who journeys down the Mississippi with Huck Finn.

ANSWER: Jim

4. The rule of a dynasty in this modern-day country was interrupted for more than sixty years by a revolt started by the Mac family. Christoforo Borri observed the dynamic in this country between two rival ruling families, which both agreed to a 100-year truce in 1673. Both of those families in this country were defeated a little over a century later in a rebellion started by three brothers. The Jesuit missionary Alexandre de Rhodes developed this country's Latin-based script. A dynasty in this country was ended by the Tay Son rebellion. During China's Han Dynasty, Ma Yuan defeated an uprising in this country led by the Trung sisters. For 10 points, name this Southeast Asian country where Bao Dai served as the final emperor of the French-supported Nguyen Dynasty.

ANSWER: Socialist Republic of Vietnam [or SRV; or Cong Hoa Xa Hoi Chu Nghia Viet Nam]

5. The bite angle and the cone angle are usually defined for metals bonded to this element. An atom of this element attacks the azo functionality of DEAD in a substitution reaction of alcohols. Rhodium bonds to three atoms of this element in Wilkinson's catalyst. The most common dative ligands for cross-coupling reactions have this element bonded to palladium. In another reaction, this element displaces a halide to form a quaternary, positively-charged center, which is subsequently deprotonated at the alpha carbon. The strong bond this element forms to oxygen leads to the formation of alkenes from carbonyls in the Wittig reaction. It is usually substituted with three phenyl groups as a ligand. For 10 points, name this element located directly below nitrogen on the Periodic Table.

ANSWER: phosphorus [or P]

6. It's not the Tragic Symphony, but this symphony includes the instruction "Like a breath" at the beginning of its finale. The opening notes of this symphony's first theme are soon taken up by the trombones in unison while the trumpets play a sequence of rising notes. This symphony begins with a tonic chord on the organ along with fortissimo notes from five other instruments before the singers enter. At the end of its first movement, offstage brass

instruments repeat the “Accende lumen sensibus” theme. At the end of this symphony, the chorus sings “Eternal womanhood draws us on high,” quoting the final scene from Goethe’s *Faust*. Its first part sets the Pentecost hymn *Veni creator spiritus*. For 10 points, name this massive symphony by Gustav Mahler.

ANSWER: **Symphony of a Thousand** [or **Mahler’s Symphony No. 8** in E-flat major]

7. This practice inspired the design of *otenpesha*, sacred objects among the Kakure Kirishitan of Japan. Dominic Loricatus’s engagement in this practice was used to defend it in a treatise by Peter Damian. During Lent in nineteenth-century New Mexico, this was done by the Coloradan and New Mexican confraternity Los Hermanos Penitentes. *Tatbir* and *zanjeer zani* are forms of this practice which commemorate the martyrdom of Husayn on the Shi’a Muslim holiday of Ashura. The white habit-wearing Brotherhood of the Cross did this to evoke John 19:1, a Biblical episode where Christ stood in front of a column. For 10 points, name this extreme form of religious self-punishment which wandering bands undertook during medieval plagues.

ANSWER: ritual self-**flagellation** [or **whipping** oneself; or **flogging** oneself; or **mortification** of the flesh; or striking **oneself** with a **sword**; prompt on "self-harm" or "violence" or "cutting oneself" or "penitence" or "self-punishment" or other less-specific answers]

8. In one paper, this economist discussed the interplay between monopolies which lower prices of durable goods after selling at the monopoly price and consumers who know that the lower price is coming. He and fellow professor James Buchanan were allegedly forced out of UVA because of their conservative politics. One of his papers cites a case in which a doctor was unable to listen to his patient’s hearts because of a neighboring confectioner’s kitchen. He compared airwave bandwidth to Rembrandts in arguing the FCC should auction TV and radio space. He noted that a cattle rancher who damages a farmer’s land will privately work out the most economically efficient recompense in the absence of transaction costs. For 10 points, name this economist who wrote “The Problem of Social Cost.”

ANSWER: Ronald **Coase**

9. This region’s people were divided into two classes: the common comati, or capilati, and the noble tarabostes, or pileati. Many of its towns were named with the suffix “dava,” including Sucidava and the possible one-time capital, Argedava. A ruler of this non-Gaul region started its use of a namesake style of murus, or wall. Soldiers of this region used the sickle-like falx during a war in which a bridge near the Iron Gates was built by Apollodorus. Its capital Sarmizegethusa was captured twice during the reign of its king Decebalus. A first-century CE conflict in this region is depicted in spiral reliefs on a Roman emperor’s namesake column. For 10 points, name this region north of the Danube roughly corresponding to modern Romania, which was conquered by Trajan.

ANSWER: **Dacia**

10. Corbusier designed one of these buildings for Ueno Park, Tokyo, his only building in Japan. Copper cladding intended to oxidize and turn green covers a building of this type in San Francisco designed by Herzog & de Meuron, who also converted a power station into one of these buildings. Oscar Niemeyer designed one to look like a UFO and placed it over a cliff. A white, ship-like building of this type in Milwaukee was designed by Santiago Calatrava. Louis Kahn built a pair of these at Yale University and designed one in Fort Worth named for the Kimbell family. Frank Lloyd Wright designed one of these buildings in the shape of a spiraling white shell which was criticized for its curved internal walls. For 10 points, name these buildings exemplified by the Guggenheims.

ANSWER: **art museums** [accept equivalents such as art **galleries**; accept **Western art** museums, **contemporary art** museums, prompt on “museums”]

11. In *Drosophila*, Tra promotes this process and Sxl [“S-X-L”] prevents it. Maturases are required for one form of this process to occur quickly. SR proteins bind to the ESE at its start. During this process, morpholinos can inhibit the imperfect binding of U2 to form the branch point at A. Alternative forms of it lead to the generation of different isoforms of fibronectin. Two transesterifications occur during this process, whose intermediate has a “lariat” shape. Tom Cech discovered that this process could be autocatalytic, in the case of ribozymes. It follows polyadenylation and addition of a 5 prime cap in posttranscriptional processing. For 10 points, name this process by which snRNPs (“Snurps”) catalyze the removal of introns from mRNAs.

ANSWER: mRNA **splicing**

12. The dismissal of a politician from this modern-day country led to the Jeltoqsan riots. This country spent three

years as the Alash Autonomy. A plane crash was originally given as the reason for Mitrofan Nedelin's death, rather than an explosion in this modern-day country that was caused by the failure of an R-16. William T. Vollmann's *Poor People* described the Tengiz oil field in this country, where many women were sent to the Alzhir gulag camp. A plan to cultivate land in its north was called the Virgin Lands Campaign. Since 1989, this location of the Baikonur Cosmodrome has been led by Nursultan Nazarbayev, who moved its capital in 1997 from Almaty. For 10 points, name this former Soviet Republic that, along with Uzbekistan, has suffered from the shrinking of the Aral Sea.
ANSWER: Republic of Kazakhstan [or Qazaqstan Respublikasy]

13. In John Irving's *In One Person*, Elaine asks if the name of this country is a type of blowjob, and Billy meets his father at a gay nightclub in this country. In a non-fiction book, Richard Wright argued that this country is too pagan to be Catholic. An author from this country wrote a novella about a priest who loses his faith but keeps up appearances for his parishioners, and updated the Cain and Abel story in his novel *Abel Sánchez*. An author who claimed that this country's people "have an interest in death" wrote a novel set here that ends with the line, "Isn't it pretty to think so?" In that novel, the impotent protagonist fights with the boxer Robert Cohn when he has an affair with Lady Brett Ashley. For 10 points, name this setting of *Death in the Afternoon* and *The Sun Also Rises*.
ANSWER: Kingdom of Spain [or Reino de España]

14. This man's ethics were expanded by American thinker Charles Leslie Stevenson. In one book, he discussed the "shape and thickness" of two exclamation points after the words "Stealing money!!" Prior to Turing, this man said only perceived behavior can set a "conscious man" and "unconscious machine" apart. He used the example "Queen Anne is dead" to argue that saying '*p* is true' adds nothing beyond saying just *p*. Like Plato and Chisholm, his view that knowledge equals "justified true belief" was attacked by Gettier, and he said that all ethical statements are merely emotive judgments. Like Carnap, this man tried to eliminate metaphysics; unlike the Vienna Circle, he did so using his verification principle. For 10 points, name this British logical positivist who wrote *Language, Truth, and Logic*.
ANSWER: Alfred Jules "Freddie" Ayer

15. This ingredient is slathered with a mayonnaise-like tuna sauce in a Piedmontese antipasto that is eaten at Christmas in Argentina. Variations in its production can lead it to be classified as "bob" or "rose." This food is thinly sliced and coated with Mornay sauce in a dish named for Prince Orloff. It is fried and wrapped in prosciutto and sage in the Roman specialty *saltimbocca*. *Gremolata* is the traditional condiment to a Milanese dish centered around this ingredient. The centerpiece of *blanquette*, it is breaded and fried to produce *cotoletta*, which is often made from its "milk-fed" variety. *Escalopes* and wiener schnitzel are classically made from this meat, whose shanks are the centerpiece of *ossobucco*. For 10 points, name this tender meat made from young cattle.
ANSWER: veal [prompt on cow meat, prompt on calf meat]

16. This man's opponents mocked him for only giving a cent to a boy in "The Ballad of the Stick of Candy." He was also mocked by a miniature book titled for his *Military Service*. His reaction to being thrown from his horse in the Battle of Contreras led to his nickname, the "Fainting General." This dedicatee of *Our Old Home* was called the "archtraitor" by Harriet Beecher Stowe. He was supported in his presidential campaign by groups known as "Granite Clubs." This president, who defeated Winfield Scott in an election, distanced himself from Pierre Soule and the Ostend Manifesto, and he signed the Kansas-Nebraska Act. For 10 points, name this president who was succeeded by the equally ineffective Democrat James Buchanan and is the only president to come from New Hampshire.
ANSWER: Franklin Pierce

17. Three of this poem's sections were originally published as individual poems, with titles like "Salutation" and "Som de l'escalina." The final section of this poem describes "the bent golden-rod," "the lost sea smell," and "the cry of the quail and the whirling plover," and discusses how "the lost heart stiffens and rejoices in the lost lilac and lost sea voices." This poem's fifth section repeatedly speaks of a "veiled sister" to pray for "those who walk in darkness." The second section of this poem begins by describing "three white leopards" sitting "under a juniper-tree." This poem, which begins "Because I do not hope to turn again," was written upon its author's conversion to Anglicanism. For 10 points, name this poem by T. S. Eliot named after the first day of Lent.
ANSWER: "Ash-Wednesday"

18. A gas of these non-photon things with a temperature of less than 2 kelvins is thought to permeate the universe. A

hypothetical right-handed one of these things may be a significant contributor to dark matter if it is “sterile.” The width of the Z boson decay provides the tightest bounds on the number of types of these things, and elastic scattering among them is also mediated by the Z boson. The Standard Model fails to account for one non-gravitational behavior of these leptons, in which their flavors vary over time; that phenomenon, characterized by the PMNS matrix, is called “oscillation.” An “anti” version of one of these elementary particles is emitted in beta decay. For 10 points, name these incredibly light uncharged particles that barely interact with anything.

ANSWER: neutrinos [accept electron neutrinos; accept muon neutrinos; accept tau neutrinos]

19. In Book 5 of the *Iliad*, this is the oldest deity who heals Aeneas. This deity struggled in the place to which Callimachus's fourth hymn is dedicated, after which the Inopus river turned gold. This goddess was attacked by a giant who is now pecked at by two vultures in Tartarus, named Tityos. This goddess received more help after a necklace bribed Eileithyia. This sister of Asteria, who was seduced in the form of a quail, stayed for nine days and nights on a floating island now anchored by pillars, usually identified as Delos. A boast about having more children than this goddess, made by Tantalus's daughter, resulted in the slaying of Niobe's children. She was hounded by the Python during her wanderings while pregnant. For 10 points, name this Titaness who bore Artemis and Apollo.

ANSWER: Leto [or Latona; do not accept "Leda"]

20. Brian Hooker's translation of this play is written in blank verse and unusually does not use a word which was popularized in English by Anthony Burgess's translation. One character in this play catches a pickpocket, who tells him that a bunch of hired goons are coming to attack Lignière. The main character of this play composes a ballade in which each refrain ends with the phrase “Thrust home” while dueling with Valvert. In this play, which introduced popularized the word “panache,” the villainous De Guiche sends two of the main characters off to war with Spain. Its protagonist uses his rhetorical skill to help Christian woo the woman he himself is in love with. For 10 points, name this play whose large-nosed title character loves Roxane, a work by Edmond Rostand.

ANSWER: Cyrano de Bergerac

TB1. During synthesis of Sonic hedgehog, this compound is added post-translationally to the N-terminus. ABCA1 transports this compound out of cells and is defective in Tangier disease. At high cellular levels of this compound, SCAP binds to SREBPs, transcription factors that activate its synthesis. Receptor-mediated endocytosis of this compound requires ApoB to bind its receptor. Lipid rafts mostly contain sphingolipids and this compound. The rate-limiting step of its biosynthesis is the reduction of HMG-CoA to mevalonate. That step can be inhibited by statins like Lipitor. Bile acids and vitamin D are formed from this compound. For 10 points, name this compound which normally maintains the fluidity of the cell membrane, but clogs arteries in atherosclerosis.

ANSWER: cholesterol [or LDL or HDL or high-density lipoprotein or low-density lipoprotein before mention]

TB2.. Mark Auslander documented a 1988 campaign against this practice that swept the Ngoni of Zambia. People who engage in this practice have an *ausulubo* surrounded by a *moropa* according to the Etoro. The beer-loving informant Tupoi gained social prestige from his reputation for performing this practice, which involves pronouncing *motiwa*. This practice entails creating powder from corpses among the Navajo. Monica Hunter Wilson defined this practice as the “standardized nightmare of a group.” One people used the *benge* system of poisoning chickens to determine who engaged in this practice, which is the main subject of the *Malleus Maleficarum*. For 10 points, name this practice that Evans-Pritchard studied along with oracles and magic among the Azande, allegedly performed by several women of Salem.

ANSWER: witchcraft [accept black magic or sorcery before “magic” is read]

Bonuses:

1. This region's abbey at Jumieges was led by the eleventh-century clergyman Robert before he became Archbishop of Canterbury. For 10 points each:

[10] Name this region that was given to Rollo as a fiefdom after he besieged Paris. A duke from this region married Matilda of Flanders.

ANSWER: **Normandy**

[10] Rollo was granted Normandy by a ruler of this name known as the "Simple." A mayor of the palace with this name defeated Abd al-Rahman at the Battle of Tours and was known as the "Hammer," or "Martel."

ANSWER: **Charles** [or **Karl**; or **Carolus**]

[10] Rollo's descendants included this man, who conquered Palermo alongside his brother Robert Guiscard in 1072. According to legend, this man gave part of his own flag away in 1090, leading to the red-and-white flag of Malta.

ANSWER: **Roger I** of Sicily [or **Roger the Great Count**; or **Roger Bosso**; prompt on "Roger"]

2. During the late Pliocene and Pleistocene, these two landmasses experienced a "Great" biotic exchange. For 10 points each:

[10] Name these *two* landmasses between which an isthmus formed roughly 5 million years ago. One of them was colonized by glyptodonts and giant ground sloths, while the other was colonized by saber-toothed cats and bears.

ANSWER: **North America** and **South America** [both answers required; accept in either order; prompt on "the Americas"]

[10] Some of these flightless birds also crossed over into North America. Until they went extinct, they were probably the largest apex predators in South America, and they may have killed their prey by grasping them with their enormous jaws and repeatedly bashing the prey against the ground.

ANSWER: **terror** birds [or **Phorusrhacidae**]

[10] North America was also colonized by Eurasian species such as bison, mammoths and humans during the Pleistocene. Their main migration route was across this now-submerged landmass between the two continents.

ANSWER: **Beringia** [or **Bering land bridge**; accept any answer that refers to **land** spanning the **Bering** strait; prompt on partial answer]

3. One character in this play claims that "anyone who's never watched somebody die is suffering from a pretty bad case of virginity" before describing his father's death. For 10 points each:

[10] Name this play in which Cliff attempts to mediate the arguments of a couple that describe themselves as a squirrel and a bear. In this play, Helena temporarily moves in with Jimmy after Alison returns to her parents.

ANSWER: **Look Back in Anger**

[10] *Look Back in Anger* was written by the Angry Young Man John Osborne, a contemporary of this author of *Colonel Sun*, *The Old Devils* and *Lucky Jim*. His son Martin wrote *The Rachel Papers* and *Time's Arrow*.

ANSWER: Sir Kingsley William **Amis**

[10] The Moreau-loving Chris claims to be a member of the Angry Generation in *Metroland*, a novel by this contemporary author, who also wrote a novel in which Geoffrey Braithwaite tries to track down the title animal.

ANSWER: Julian Patrick **Barnes**

4. Name some things about Henry Laurens, the only American ever imprisoned in the Tower of London. For 10 points each.

[10] Henry Laurens was born in this state, where, during the Revolutionary War, Christopher Gadsden designed his namesake flag with the words "Don't tread on me." This state later sent Pierce Butler to the Constitutional Convention.

ANSWER: **South Carolina**

[10] Laurens supported George Washington in Congress against the aims of this cabal, which included Horatio Gates and a namesake general.

ANSWER: **Conway** Cabal

[10] Laurens was succeeded by this man as president of the Continental Congress. This man was sent to negotiate what would become his namesake treaty with Britain while he was also serving as the first Chief Justice.

ANSWER: John **Jay**

5. William Muir coined the English term for these passages, which emerged during an attempt to convert the

Quraysh tribe according to Muhammad's biographer ibn Ishaq. For 10 points each:

[10] Name these false revelations which allegedly allowed Muslims to seek the intercession of pagan deities likened to "high-flying cranes." These passages are no longer in the Qur'an.

ANSWER: the "**Satanic verses**"

[10] Sura 53, which the "Satanic verses" affected, is named for one of these objects. A poisonous one named Wormwood falls in the book of Revelation. Mormons believe one of these named Kolob is physically close to God.

ANSWER: **stars** [or Surat al-**Najm**; do not accept "planets"]

[10] Name any one of the three pagan goddesses mentioned in the Satanic Verses, who were worshipped along with the male god Hubal by pre-Islamic Arabs.

ANSWER: **al-Lat** OR **al-Uzza** OR **Manat**

6. This painter of *The Prophet Elisha* depicted Mary above a winged, serpent-tailed devil rising from a group of recoiling people in his *Allegory of the Immaculate Conception*. For 10 points each:

[10] Name this artist from Arezzo, who also designed a corridor that connects the Uffizi to the Palazzo Pitti and the Palazzo Vecchio.

ANSWER: Giorgio **Vasari**

[10] Vasari's *Lives of the Artists* discusses this painter's frescoes of Saint Philip in the Servite Basilica della Santissima Annunziata. This "faultless painter" painted the *Madonna of the Harpies*.

ANSWER: Andrea del **Sarto** [or Andrea d'Agnolo di Francesco di Luca di Paolo del **Migliore**]

[10] Andrea del Sarto was an artist from this Tuscan city, where Fra Filippo Lippi and Masaccio were also active. Other artists of this city, such as Gozzoli and Botticelli, were patronized by its Medici family.

ANSWER: **Florence** [or **Firenze**]

7. Electron microscopy is one of the most prominent areas of applied physics. For 10 points each:

[10] In this type of microscopy, an image with a topological, 3-dimensional quality is generated. This form of electron microscopy uses backscattered electrons, unlike transmission EM.

ANSWER: **scanning** electron microscopy [or **SEM**]

[10] Thin samples for electron microscopy are prepared using one of these devices, which often employ a diamond blade for high precision cuts. Lasers have started to replace physical blades in these devices.

ANSWER: **microtomes** [accept **laser microtomes**]

[10] To focus the electron beam, some electron microscopes use an electrostatic lens with this configuration of charges. In this configuration, the third term in a multipole expansion, the potential falls off as the minus three power of distance at large distances.

ANSWER: **quadrupole** [accept **electric quadrupole**; accept **electrostatic quadrupole**]

8. In this novel, the noble savage Peri falls in love with Ceci, the daughter of a white nobleman. For 10 points each:

[10] Name this novel by Jose Alencar which sparked the indianista genre of literature.

ANSWER: *O* **Guarani** [or *The* **Guarani Indian**]

[10] *O Guarani* is set in this country. Machado de Assis was another author from this country, whose literature is usually written in Portuguese.

ANSWER: Federative Republic of **Brazil** [or República Federativa do **Brasil**]

[10] The Brazilian author Oswald de Andrade wrote, "Tupí or not Tupí: that is the question" in a manifesto named for this practice. A man hopes to "save the children" from this practice in Lu Xun's "A Madman's Diary."

ANSWER: **cannibalism** [accept **eating people** or other equivalents; accept **being eaten** by people or equivalents; accept *Manifesto* **Antropófago**]

9. David Hamlin's documentary "War Elephants" concerns elephants that have developed this disorder following the Mozambican Civil War. For 10 points each:

[10] Name this disorder that can lead to persistent anxiety and disruptive flashbacks as the result of surviving a disturbing event. In the US, this disorder is particularly prominent among Vietnam veterans.

ANSWER: **PTSD** [or **posttraumatic stress** disorder, or **shell shock**]

[10] The DSM-V added a subtype of PTSD described by this adjective, which refers to conditions that result in depersonalization or derealization. It also names a class of anesthetic hallucinogens including PCP and ketamine.

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

[10] "Mean world syndrome," in which people who are exposed to this stimulus think the world is more dangerous,

has been blamed on a type of PTSD. George Gerbner's "cultivation theory" studies its long term effects.

ANSWER: television [accept violence in television]

10. Answer the following about the theory of organic synthesis, for 10 points each:

[10] It's often easiest to plan syntheses by working backward from the starting material, cleaving carbon-carbon bonds to generate common synthetic equivalents. Such an approach, pioneered by EJ Corey, is given this name.

ANSWER: retrosynthesis [or word forms; or retrosynthetic analysis]

[10] This phenomenon is the inversion of the polarity of a carbon atom. Dieter Seebach coined this German term, and with Corey, names a method of changing the polarity of a carbonyl carbon using dithianes.

ANSWER: umpolung

[10] Special reagents may be required if the target has this property, meaning that it isn't identical to its mirror image. Compounds with this property often have a carbon atom with four different substituents, generating enantiomers.

ANSWER: chirality [or word forms; prompt on stereoisomerism or word forms; prompt on isomerism or word forms; do not accept or prompt on "diastereoisomerism"]

11. Father John J. Burke assisted Ambassador Dwight Morrow in negotiating the Arreglos to end this rebellion, which occurred in the country addressed by Pius XI's encyclical *Iniquis Afflictisque*. For 10 points each:

[10] Name this conflict that was sparked by the enforcement of anticlerical provisions in the Constitution of 1917.

ANSWER: Cristero War [or La Cristiada]

[10] The Cristero War occurred in this country, where the adoption of the Constitution of 1917 preceded the election of Venustiano Carranza. The Ten Tragic Days occurred during this country's early twentieth-century revolution.

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

[10] In Guadalajara, this woman's name was given to "Feminine Brigades" that supplied Cristero fighters with information and ammunition.

ANSWER: Saint Joan of Arc [or Santa Juana del Arco; or Saint Jeanne d'Arc]

12. Answer the following about cryptozoology in Australia, for 10 points each.

[10] There are still alleged sightings of the thylacine, an extinct dog-like marsupial primarily native to this Australian island. This home of the Tarkine rainforests is also known for its population of namesake "devils."

ANSWER: Tasmania

[10] Though thylacines are sometimes called Tasmanian tigers, they should not be confused with the yarrri, a cat-like cryptid also called this state's "tiger." The Great Barrier Reef is located on the coast of this state.

ANSWER: Queensland

[10] Queensland's Springbrook National Park is the hotspot for sightings of these legendary hominids that are often called "Australian bigfoot." They share their name with a bay in New South Wales.

ANSWER: Yowies [accept Yahoos, Yaromas, Noocoonahs, Waweas, Pangkarlangus, Jimbras, Tjangaras, Jurrawarras, Myngawins, Puttikans, Gubbas, Doolagas, Gulagas, Joogabinnas, Quinkins or Thoolagals]

13. Many films of the French New Wave featured jazz-based scores. For 10 points each:

[10] The original score for Vadim's *Les liaisons dangereuses* was composed by this jazz pianist. This composer of "Epistrophy" and "Misterioso" included "Pannonica" on his album *Brilliant Corners*.

ANSWER: Thelonious Sphere Monk

[10] The score for Louis Malle's *Ascenseur pour l'échafaud* was allegedly improvised by this jazz musician, who also composed "Solar." This trumpeter recorded the albums *Kind of Blue* and *Birth of the Cool*.

ANSWER: Miles Dewey Davis III

[10] This bandleader's contributions to *Les liaisons dangereuses* were included on the soundtrack, unlike Thelonious Monk's. He was the first to record the Bobby Timmons standard "Moanin," releasing it on an album of the same name.

ANSWER: Art Blakey

14. This campaign's first victory came at the Battle of Calatafimi, and it defeated the forces of Francis II at the Battle of the Volturno. For 10 points each:

[10] Name this Risorgimento campaign in which Sicily and southern Italy were taken by the Red Shirts of Garibaldi.

ANSWER: Expedition of the Thousand [or Spedizione dei Mille]

[10] The Thousand sailed on the *Piemonte* and *Lombardia* out of Quarto, which is now an eastern suburb of this Italian port city.

ANSWER: Genoa [or Genova; or Zena]

[10] This prime minister of Piedmont-Sardinia was opposed to Garibaldi leading the Expedition of the Thousand. Under Victor Emmanuel II, he briefly served as the first prime minister of a unified Italy.

ANSWER: Count of Cavour [or Camillo Benso]

15. This man's theory of the cosmos includes an "overflow" from the Creator, and he wrote that human-like descriptions of God in the Bible are a non-literal aid to help ordinary people understand. For 10 points each:

[10] Name this Cordoba-born philosopher who wrote the *Mishneh Torah* and thirteen principles of the Jewish faith while bouncing about the medieval Islamic world.

ANSWER: Moses Maimonides [or Rabi Moshe ben Maimon; or Rambam]

[10] Maimonides read some work by this fellow Cordoban, a Muslim Aristotelian whose commentaries on Aristotle challenged the Neoplatonic reading. This man's *Decisive Treatise* attacked the earlier al-Ghazali.

ANSWER: Averroes [or ibn Rushd; or 'Abu l-Walid Muhammad bun 'Ahmad bin Rusd]

[10] According to *Guide for the Perplexed*, God is best described in this way, so as to avoid unintended blasphemy or placing restrictions on His unlimited nature.

ANSWER: using negative attributes [or negatively; or negative theology; or apophatic theology; or the via negativa; accept answers indicating "describing God in terms of what God is not"]

16. According to the *Voluspa*, this conflict began after a gold-haired maiden named Gullveig was burnt and revived three times, and it ended with the creation of the mead of poetry. For 10 points each:

[10] Name this conflict attested in fragmentary sources, which ended with a truce between groups of gods led by Njord and Odin.

ANSWER: Aesir-Vanir war [accept any answer indicating a fight between the Aesir and the Vanir]

[10] This male twin god of fertility was a member of the Vanir. He kills and is killed by Surt at Ragnarok.

ANSWER: Freyr

[10] This mumbling member of the Aesir was sent to the Vanir as a hostage during the war along with Mimir, letting Mimir speak for both of them. He helped Odin create humanity by giving sense to Ask and Embla.

ANSWER: Hoenir [prompt on "Vili" because Hoenir is conflated with Vili by Snorri Sturluson]

17. Nancy gets up on a moonlit night and watches her neighbor Sam kill slugs in this collection's story "I Could See the Smallest Things." For 10 points each:

[10] Name this collection that also includes "Gazebo" and "Sacks." The cardiologist Mel recalls an old couple who got in a car accident while drinking gin with Nick, Terri and Laura in the title story of this collection.

ANSWER: What We Talk About When We Talk About Love [accept Beginners]

[10] *What We Talk About When We Talk About Love* was written by Raymond Carver, who was from this state. This state is the setting of *The Lathe of Heaven*, *Sometimes a Great Notion* and *One Flew Over the Cuckoo's Nest*.

ANSWER: Oregon [or the Beaver State]

[10] This counterculture author wrote *One Flew Over the Cuckoo's Nest* and *Sometimes a Great Notion*.

ANSWER: Ken Kesev

18. The strings serve as a "halo" around this piece's *Vox Christi*, which is sung by a bass. For 10 points each:

[10] Name this oratorio that relates the story of Jesus's crucifixion with a libretto by Picander.

ANSWER: *St Matthew's Passion* [or Matthäus-Passion; accept Passio Domini Nostri J.C. Secundum Evangelistam Matthaeum]

[10] The *St Matthew Passion* was written by this Baroque composer of "Six Sonatas and Partitas" for solo violin. He also composed the Brandenburg concertos and *The Well-Tempered Clavier*.

ANSWER: Johann Sebastian Bach

[10] Peter Pears and Dietrich Fischer-Dieskau are among the soloists on this German conductor's recording of the *Matthew Passion*. After fleeing Nazi Germany, he became music director of the Los Angeles Philharmonic.

ANSWER: Otto Klemperer

19. The author of this novel felt that it was "almost instinctive" for him to transpose his preoccupation with the daily routines of city life into a military setting. For 10 points each:

[10] Name this novel about the soldier Giovanni Drogo, who guards the lonely Bastiani Fortress for four years, fails to return to his former life and goes back to the fortress. This novel is by far the most famous of Dino Buzzati.

ANSWER: *The Tartar Steppe* [or *Il deserto dei Tartari*; or alternate translations like *The Desert of the Tartars*]

[10] *The Tartar Steppe* was a major inspiration for this J.M. Coetzee novel about a town on the edge of The Empire. In this novel, Colonel Joll arrests the Magistrate after he returns an “enemy” girl to the desert.

ANSWER: *Waiting for the Barbarians*

[10] The title of *Waiting for the Barbarians* was taken from a poem written by Constantine Cavafy in this language. This language was used to write *The Last Temptation of Christ* and a novel about Zorba by Nikos Kazantzakis.

ANSWER: Greek [or elliniká]

20. Early evidence for these effects came from goldfish that survived lethal concentrations of colloidal silver when they were part of a large group. For 10 points each:

[10] Name these effects that increase fitness at higher population densities, causing inverse density dependence. They were named for an American zoologist.

ANSWER: demographic Allee effects

[10] Allee effects are important for cooperative species, such as vampire bats, which may demonstrate the reciprocal form of this behavior. This behavior is anything that improves a recipient’s fitness while decreasing the donor’s.

ANSWER: altruism [or word forms; or reciprocal altruism]

[10] Hamilton’s rule explains altruistic behavior in terms of this form of selection. This phenomenon occurs when an animal can sacrifice itself to preserve more of its genes in close relatives.

ANSWER: kin selection