

2020 ACF Fall

Packet D by MIT A, Waterloo A

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Tossups

1. A poem by this author compares sharpened knives to “a river of buried tigers” and “a river of yellow lightning.” That poem by this author ends “Speak through my words and my blood” and encourages the reader to “arise to birth with me, my brother” in its evocation of a title landmark. This author wrote a collection of poems dedicated to everyday objects like artichokes, “socks as soft as rabbits” and a “large tuna in the market.” A poem by this author of *Elemental Odes* repeats the line “In you everything sank!”, while another begins “Tonight I can write the saddest lines.” *Twenty Love Poems and a Song of Despair* is a collection by, for 10 points, what Chilean poet?

ANSWER: Pablo **Neruda** [or Ricardo **Basoalto**]

<World/Other Literature>

2. One of these organisms uses a structure called a “spiny ball” to pierce its prey before immobilizing them with toxins. A process called anastomosis (“uh-nass-tuh-MO-siss”), in which parts of these organisms fuse together, is necessary to initiate sexual reproduction. Some of these organisms create a structure called a shmoo during mating. Mutualistic associations formed between plants and these organisms are known as mycorrhizae (“my-ko-RY-zee”). These organisms create structures called hyphae (“HY-fee”) that are covered by a chitinous (“KYE-tin-us”) cell wall and aggregate to form mycelia (“my-SEE-lee-uh”). For 10 points, name this kingdom of organisms that includes yeasts, morels, and shiitakes (“shih-TAH-kees”).

ANSWER: **fungi** [accept **Basidiomycota** or **basidiomycetes** until “shmoo” is read]

<Biology>

3. This character sings that he will foil his employer’s plans in the cavatina “Se vuol ballare” (“say vwahl bal-LAH-ray”). In that opera, a birthmark on this character’s right arm reveals that Marcellina is this character’s long-lost mother. In another opera, this character wakes Doctor Bartolo from being “still like a statue” and gives the idea of dressing up as a drunken soldier to Count Almaviva. In that opera, this character first appears onstage to sing the aria “Largo al factotum” (“LAR-go all fahk-TOH-toom”), which frequently repeats his name. For 10 points, name this title character of Rossini’s opera *The Barber of Seville*, and an opera by Mozart about his marriage.

ANSWER: **Figaro** [accept **Raffaello**; accept *The Marriage of Figaro*; prompt on The **Barber** of Seville until read]

<Other Arts>

4. Based on whether they are induced by heat or light, reactions that produce compounds with this property can be classified as either disrotatory or conrotatory. Because of the 120-degree angle of sp²-hybridized atoms, Bredt’s rule states that double bonds can’t be placed at the bridgehead of compounds with this property. Flagpole interactions cause steric strain in the boat conformation of a compound with this property, making it less stable than its chair conformation. Compounds that have this property, a coplanar structure, and resonant pi bonds are called “aromatic.” For 10 points, name this property possessed by cyclohexane and benzene, or any compound that contains a ring.

ANSWER: **cyclic** [accept descriptions like containing a **cycle** or **ring** until read; anti-prompt (ask “can you be less specific?”) on **aromatic** until it is read]

<Chemistry>

5. This ruler was secretly sent to France after the Battle of Pinkie Cleugh (“kluff”). This ruler’s secretary David Rizzio was stabbed to death in front of her by Lord Darnley. A failed attempt to wed this child of Mary of Guise (“gheez”) led to the War of the Rough Wooing. This ruler supposedly wrote a series of love sonnets to the Earl of Bothwell known as the Casket Letters. The Rising of the North attempted to place this ruler on the English throne, while the Babington Plot was another failed attempt to have this Roman Catholic ruler replace her Protestant cousin. For 10 points, name this Scottish Queen, the mother of James I of England, who was beheaded by her cousin Elizabeth I.

ANSWER: **Mary, Queen of Scots** [or **Mary I of Scotland** or **Mary Stuart**; prompt on Mary; do not accept or prompt on “Mary I”]

<Other History>

6. In this state, a security guard working at Family Dollar was shot and killed after denying entry to a woman who would not wear a mask. Protests called “Operation Gridlock” opposed a stay-at-home order in this state, where armed demonstrators repeatedly entered its capital building in April and May 2020. In this state, John James is an underdog to unseat incumbent senator Gary Peters. In October 2020, the FBI revealed a right-wing plot to kidnap this state’s governor, Gretchen Whitmer. For 10 points, what midwestern state, where COVID deaths have been concentrated in Wayne County, contains Detroit?

ANSWER: **Michigan**

<Current Events/Geography/Other Academic/Pop Culture>

7. This author, who set *The Festival of Insignificance* in Paris, argues that his work should be classified as French literature. A character created by this author writes “Optimism is the opium of mankind” on a postcard: that character, Ludvík Jahn, is the protagonist of *The Joke*. In a novel by this author, a dog named after an *Anna Karenina* character dies of cancer; that novel often features the repetition of a German phrase from Beethoven’s last string quartet, “es muss sein” (“ess moose zyne”). Tomas and his wife Tereza die in a car crash in a novel by this author set during the Prague Spring. For 10 points, name this Czech author of *The Unbearable Lightness of Being*.

ANSWER: Milan **Kundera**

<European Literature>

8. This figure saved Boeotia (“bee-OH-shuh”) from a plague by carrying either a ram or a calf around the city walls. This figure rescued Ares from imprisonment in a bronze jar. During the battle with Typhon, Aegipan (“AY-jip-pan”) and this figure recovered the sinews of Zeus. This god lulled Argus to sleep and then killed him to free Io. This god used cow intestines to create his most famous invention. After running away from his mother Maia and stealing Apollo’s cattle, this god placated Apollo by giving him the first lyre. This god helped Odysseus resist Circe’s magic using an herb called moly, and he gave Perseus his winged sandals. For 10 points, name this Greek messenger god.

ANSWER: **Hermes**

<Mythology>

9. A leader of this country was heard discussing the murder of journalist Georgiy Gongadze (“g’YOR-ghee gon-GAH-dzeh”) in the Cassette Scandal. This country’s first female prime minister heads its Fatherland Party and helped lead the Orange Revolution in response to electoral fraud. Separatists in this country have declared an independent republic in its Donbass region. In this country, the Euromaidan protests led to the election of Petro Poroshenko. In response to this country’s president Viktor Yanukovich (“yah-noo-KOH-vich”) being forced out, a neighboring country annexed its southernmost region in 2014. For 10 points, Russia seized the region of Crimea from what country, whose capital is Kiev?

ANSWER: **Ukraine** (The leader in the first sentence is Leonid Kuchma, and the first female prime minister is Yulia Tymoshenko.)

<European History>

10. A posthumously-finished work by this artist is a massive sculpture in the atrium of the Hart Senate Office Building called *Mountains and Clouds*. This artist used wire to create miniature circus figures for a work titled for *Cirque* and this artist's name. His sculpture *La Grande Vitesse* is painted his namesake shade of red, as is a birdlike sculpture located in the Federal Plaza in Chicago. This artist of *Flamingo* featured several black, fin-like metal cutouts hanging from a red and yellow piece of metal in *Lobster Trap and Fish Tail*. For 10 points, name this American sculptor most famous for his mobiles.

ANSWER: Alexander **Calder** [accept *Cirque Calder*]

<Painting/Sculpture>

11. Canary values can be used to protect one of these structures from getting smashed. The use of a programming language oriented toward these data structures causes some types of Hewlett-Packard scientific calculators to operate using reverse Polish notation. These structures can be implemented as a pointer that references the head of a singly-linked list. One of these structures stores the return address for all active subroutines, and invoking a function that continually invokes itself can cause that one of these data structures to overflow. For 10 points, name these data structures that use “pop” and “push” operations to access information in a last-in, first-out pattern.

ANSWER: **stacks** [accept **LIFO** until “last-in, first-out” is read]

<Other Science>

12. This playwright funded the creation of a phonetic English alphabet named after him, which he used to publish a play based on an Aesop (“EE-sop”) fable. In a dream sequence in the third act of one of this author's plays, a statue of Don Gonzalo and the Devil converse in Hell with Don Juan. Another play by this author begins with the protagonist dropping her flowers in the mud at Covent Garden; that protagonist eventually marries Freddy Eynsford-Hill. In that play by this author, Colonel Pickering bets that Professor Higgins can't make the protagonist speak like a duchess. For 10 points, name this author who wrote about Jack Tanner in *Man and Superman* and Eliza Doolittle in *Pygmalion*.

ANSWER: George Bernard **Shaw**

<British Literature>

13. This politician sought to control inflation without price controls by creating the Wage Stabilization Board. Griselio Torresola and Oscar Collazo attempted to assassinate this man to promote Puerto Rican nationalism. This man's attempted seizure of steel mills in response to a strike was blocked by the Supreme Court's *Youngstown* ruling. Closed shops and other union practices were banned when Congress overrode this president's veto of the Taft-Hartley Act. This president's namesake doctrine focused on the containment of communism, and his administration organized the Marshall Plan. For 10 points, what man became president after the death of Franklin Roosevelt?

ANSWER: Harry S. **Truman**

<American History>

14. At an annual event in Manitou (“MAN-uh-too”) Springs, Colorado, people toss one kind of this food as far as they can. Johnny Carson joked that there is only one of that kind of this food in the world, and it gets passed from family to family. Duff Goldman's Baltimore shop named for this food was featured in a Food Network show called *Ace of this food*. A video shared by Tasty showed hyper-realistic sculptures made from this food using fondant, resulting in an Internet meme in which objects are cut open to reveal this food. Graffiti in a secret room in *Portal* claims that this food “is a lie.” For 10 points, name these baked goods that are usually layered and decorated with icing.

ANSWER: **cake** [accept **fruitcake**; prompt on **baked goods** or **dessert** or similar]

<Current Events/Geography/Other Academic/Pop Culture>

15. In a short story set in this state, the protagonist sends a letter to Madame Valmondé (“val-mon-DAY”) asking for help. In that short story set in this state, Armand burns the protagonist’s belongings and finds a letter that reveals his black ancestry. The non-conforming pianist Mademoiselle Reisz (“rice”) and the more traditional Adèle Ratignolle (“ra-teen-YOLE”) feature in a novel set in this state, in which the protagonist has an affair with Alcée Arobin (“all-SAY ah-ro-BAN”) in her husband’s absence. “Désirée’s Baby” is set in this state, as is a novel whose protagonist drowns herself in the Gulf of Mexico and is named Edna Pontellier. For 10 points, Kate Chopin (“sho-PAN”) partially set *The Awakening* in what state’s city of New Orleans?

ANSWER: **Louisiana**

<American Literature>

16. To open this symphony’s Allegro con fuoco fourth movement, the strings repeat “long B, short C” and gradually accelerate, before the brass introduces the grandiose theme “long E [pause], F-sharp, G, long F-sharp, [pause] E E.” In 1893, Anton Seidl (“ZY-dull”) premiered this symphony at Carnegie Hall with the New York Philharmonic. This symphony’s scherzo uses cross-rhythms to depict a scene from *The Song of Hiawatha*. This symphony’s Largo second movement in D-flat major contains a plaintive English horn solo adapted into the spiritual “Goin’ Home.” For 10 points, name this American-inspired final symphony by Antonin Dvořák.

ANSWER: “**New World**” Symphony [or Symphony “**From the New World**”; or Antonín **Dvořák**’s Symphony No. **9** in E minor; accept Symphony No. **9** after “Dvořák” is read]

<Classical Music>

17. A period of reforms in this empire began with the Rescript of the Rose Chamber. The mother of rulers of this kingdom was known as the *valide* (“VAH-lee-deh”). Religious minorities in this empire were organized by the millet system. In the mid-19th century, this empire attempted to modernize and westernize through the Tanzimat Reforms. Rulers of this empire resided in Topkapi Palace, which housed the Imperial Harem. This empire used the devshirme (“DEV-shir-meh”) system to conscript Christians into its janissary corps. This empire established its capital under Mehmed the Conqueror after seizing it from the Byzantines. For 10 points, what empire was ruled by sultans like Suleiman the Magnificent from Istanbul?

ANSWER: **Ottoman** Empire [prompt on Turkey]

<World History>

18. Using the output of a Hadamard gate as the control input of a CNOT (“C-not”) gate creates this phenomenon in qubits (“Q-bits”), where it may be explained by Bell states. The proposal of local hidden variables to govern this phenomenon was disproved by Bell’s theorem. This phenomenon appears to violate causality (“cause-AL-it-ee”) by transmitting information faster than light according to the EPR paradox. Reflecting his skepticism toward quantum mechanics, Albert Einstein derided this phenomenon as “spooky action at a distance.” For 10 points, name this physical phenomenon that results in the description of one particle’s quantum state being dependent on the quantum state of other particles.

ANSWER: quantum **entanglement** [accept **Bell state** until read]

<Physics>

19. In his doctoral dissertation, Robert K. Merton proposed a thesis that this belief system helped the rise of scientific research. This belief system was discussed in a book that uses the method of “Verstehen” (“fur-SHTAY-in”) to help find a set of “ideal types.” Benjamin Franklin’s claim that “time is money” is discussed in a work titled after this belief system. That book argues that this title religious system has been losing prominence due to the process of “disenchantment” and that an “iron cage of rationality” is forming. For 10 points, name this religious system whose namesake “work ethic” is discussed in reference to the “Spirit of Capitalism” in a Max Weber (“VAY-bur”) book.

ANSWER: **Protestantism** [accept *Protestant Ethic and the Spirit of Capitalism*; prompt on Christianity before “titled after”]

<Philosophy/Social Science>

20. A passage concerning food sacrificed to idols states that this concept “builds up” while knowledge “puffs up.” A Biblical text urges readers to “Be on [their] guard; stand firm in the faith” and “Do everything in” this concept. Earlier, that letter states that without this concept, the speaker is only a “resounding gong or a clanging cymbal.” In another passage, Paul writes that this concept “bears all things” and “believes all things” and that “faith, hope and [this concept] remain,” but the greatest of those is this concept. For 10 points, name this concept called *agape* (“ah-GAH-pay”) in Greek and described as patient and kind in First Corinthians 13, a passage often read at weddings.

ANSWER: **love** [accept *agape* until read; accept **charity**]

<Religion>

Bonuses

1. Al-Hallaj, a controversial master from this tradition under the Abbasid Caliphate, was executed on charges of blasphemy for his proclamation, "I am the Truth." For 10 points each:

[10] Identify this Islamic mystical tradition. Followers of this tradition, such as the poet Rumi, often pursue a spiritual "annihilation of self" known as *fana*. This tradition's Mevlevi order is known as the "Whirling Dervishes."

ANSWER: **Sufism** [or **tawassuf**; anti-prompt (ask "can you be less specific?") on **Mevlevi Sufism**]

[10] Almost all Sufi orders trace their lineage back to Muhammad through this person. This husband of Fatima was killed by a Kharjiite while praying at the Great Mosque of Kufa.

ANSWER: **Ali** ibn Abi Talib

[10] In a form of prayer known as *dhikr* ("thicker"), Sufis seek to commune with the divine by frequently repeating these special phrases. According to *Sahih al-Bukhari*, any believer who knows these 99 phrases will get into Heaven.

ANSWER: **names of God** [or the **names of Allah**; prompt on **epithets for God**]

<Religion>

2. This country's namesake Solidarity Convention formed in 1965 to oppose ethnic discrimination. For 10 points each:

[10] Name this country, whose Constitution's Article 153 gives its native Bumiputera ("boo-mee-POO-teh-ruh") people preferred status. Race riots in 1969 forced the resignation of this country's first Prime Minister, Tunku Abdul Rahman.

ANSWER: **Malaysia**

[10] Two race riots took place in this city in 1964 between its ethnically Malay and Chinese populations. The riots resulted in this city being expelled from Malaysia and forming an independent city-state a year later.

ANSWER: **Singapore**

[10] This man led the Malaysian Solidarity Convention. This leader of the People's Action Party later served as Singapore's first Prime Minister for over three decades.

ANSWER: Harry **Lee** Kuan Yew [or **LKY**]

<World History>

3. Some of these objects have luminosity thousands of times greater than that of the Milky Way. For 10 points each:

[10] Name these active galactic nuclei with an enormous accretion disk. Their usual name describes them as radio sources, but only 10 percent of these objects are considered "radio-loud."

ANSWER: **quasars** [or **quasi-stellar object** or **QSO**; accept **quasi-stellar radio source**]

[10] Many known quasars have more than one image from Earth due to this phenomenon, predicted by general relativity. A quasar in the constellation Pegasus creates an Einstein cross due to this phenomenon.

ANSWER: **gravitational lensing** [prompt on partial answer]

[10] The centers of quasars are supermassive examples of these regions, where gravity is so strong that not even light can escape.

ANSWER: supermassive **black holes** [accept **SMBH**]

<Other Science>

4. This event is reported by a servant called Seyton, immediately after another character reports almost forgetting “the taste of fears.” For 10 points each:

[10] Name or describe this event. Immediately [emphasize] *after* this event is described on stage, another character gives a soliloquy that includes the words “out, out, brief candle!”

ANSWER: **death** of **Lady Macbeth** [or word forms; prompt on **death** or **dying** by asking “of which character?”; do not accept or prompt on “the death of Macbeth”]

[10] Lady Macbeth had persuaded her husband to murder King Duncan in order to become king of this country. Because of theatrical superstition, *Macbeth* is often referred to only as the play about this country.

ANSWER: **Scotland** [accept *The Scottish Play*; do not accept or prompt on “Britain” or “United Kingdom” or “UK”]

[10] The “Tomorrow and tomorrow and tomorrow” soliloquy sets the scene for Macbeth’s death in battle at the hands of this character. This Thane of Fife presents Macbeth’s head to Malcolm and hails Malcolm as king.

ANSWER: **Macduff**

<British Literature>

5. The “walking” themes in this piece give way to its blues-inspired middle section. For 10 points each:

[10] Name this “rhapsodic ballet” that, along with standard instruments, is scored for celesta, saxophones, and four taxi horns of various pitches labeled A, B, C, and D.

ANSWER: *An **American in Paris***

[10] *An American in Paris* was commissioned following the success of this so-called “jazz concerto” by the same composer. Paul Whiteman premiered this work during the concert “An Experiment in Modern Music.”

ANSWER: ***Rhapsody in Blue***

[10] *An American in Paris* and *Rhapsody in Blue* were written by this jazz-influenced composer, who also wrote the opera *Porgy and Bess*.

ANSWER: George **Gershwin**

<Classical Music>

6. One man adopted the pseudonym “Pacificus” while debating James Madison on the constitutionality of this stance. For 10 points each:

[10] Give this position, the subject of a namesake 1793 proclamation by George Washington. French ambassador Citizen Genet was recalled for undermining this stance of the American government.

ANSWER: **neutrality** [accept 1793 **Neutrality** Proclamation]

[10] This first Secretary of Treasury frequently used pseudonyms such as Pacificus and Phocion in his writings. This man was killed in a duel by Aaron Burr.

ANSWER: Alexander **Hamilton**

[10] Hamilton used this pseudonym in a series of letters to attack Samuel Chase as corrupt. Along with John Jay and James Madison, he later wrote the Federalist Papers under this pseudonym.

ANSWER: **Publius**

<American History>

7. Dortmund is the most populous city in a dense urban area named for this river. For 10 points each:

[10] Name this tributary of the Rhine River. Its namesake “valley” is a heavily industrialized region that, like the nearby Saar (“zar”) region, has extensive coal deposits.

ANSWER: **Ruhr** River [accept **Ruhr** Valley or **Ruhr** Region]

[10] The Ruhr Valley is in the western portion of this country. Before it reunified in 1990, one of this country’s capitals was in the Ruhr city of Bonn.

ANSWER: **Germany** [accept West **Germany**]

[10] This steel company, founded in the Ruhr, produced most German weapons in both World Wars. It merged with Thyssen (“TISS-in”) in 1999 and is a major producer of elevators, among other products.

ANSWER: **Krupp** [accept **ThyssenKrupp** or Friedrich Krupp AG Hoesch-**Krupp**]

<Current Events/Geography/Other Academic/Pop Culture>

8. The vector form of this law states that the current density at a given location is proportional to the electric field at that location. For 10 points each:

[10] Name this law. Devices that do not follow this law include filament lamps, indicated by a sigmoid curve when current is plotted against voltage.

ANSWER: **Ohm**’s law

[10] In the usual expression of Ohm’s law, the constant of proportionality is this quantity, denoted capital *R*. Ohm names the SI unit for measuring this quantity, which is the real part of impedance (“im-PEE-dense”).

ANSWER: **resistance** [do not accept or prompt on “resistivity”]

[10] These circuit components do not follow Ohm’s law. Current through these devices changes rapidly beyond the knee voltage in the forward direction and the breakdown voltage in the backward direction.

ANSWER: semiconductor **diodes** [accept p–n junction **diodes**]

<Physics>

9. Makena Onjerika, an author from this country, won the Caine Prize for African Writing in 2018. For 10 points each:

[10] Name this country. An author from this country justified his decision to stop writing in English in *Decolonising the Mind*, and set the novel *Petals of Blood* in this country just after its independence.

ANSWER: **Kenya**

[10] After being shortlisted for the Caine Prize in 2002, this author published *Purple Hibiscus* in 2003. Ifemelu struggles with racism in America, while Obinze (“oh-BEEN-zay”) is denied a visa, in this author’s *Americanah*.

ANSWER: Chimamanda Ngozi **Adichie** (“ah-DEE-chee-eh”)

[10] The 2019 winner of the Caine Prize, Lesley Nneka Arimah, is from this West African country. Adichie is from this country, as was Chinua Achebe (“ah-CHAY-bay”), the author of *Things Fall Apart*.

ANSWER: **Nigeria**

<World/Other Literature>

10. The Second Wave in the study of linguistic variation emphasized the expressive use of this type of speech in local communities. For 10 points each:

[10] Give this term for the variety of language spoken by ordinary people in a given region, which is contrasted with formal or standard varieties. This term originates from a Latin word for a native-born slave.

ANSWER: **vernacular**

[10] In this situation, whose name derives from Greek, a language has two varieties used by a community in different contexts: a “low” or vernacular variety, and a “high” variety used in formal settings.

ANSWER: **diglossia** [or **diglossic**]

[10] This term refers to any variety of a language used by a particular group of speakers, particularly a regional group. When it is spoken by a particular social group, it’s called a “sociolect.”

ANSWER: **dialect**

<Philosophy/Social Science>

11. Non-Muslims were banned from visiting this mosque after a 1996 *Vogue* photoshoot here scandalized local imams. For 10 points each:

[10] Name this massive mud mosque in the namesake city in Mali. The original mosque at the site dates to before the 1500s, although it was rebuilt in 1907 and is a landmark building of the Sudano-Sahelian architectural style.

ANSWER: Great Mosque of **Djenné** (“JEN-nay”)

[10] This material, whose name comes from the Spanish for “mudbrick,” was used to build the Great Mosque. It is common in the American Southwest.

ANSWER: **adobe**

[10] Spanish-built adobe missions inspired the Mission Revival style of architecture, which was used for the design of many buildings on the campus of Stanford University in this state.

ANSWER: **California**

<Other Arts>

12. In one story about this man, the Sheriff of Nottingham tries to trap this figure with an archery contest with gold and silver arrows as prizes. For 10 points each:

[10] Name this folk hero who escaped that trap by winning the contest in disguise, impressing Maid Marian. This English hero robbed the rich to give to the poor.

ANSWER: **Robin Hood**

[10] In the Mahabharata, Arjuna wins the hand of Draupadi by shooting one of these animals through the eye. In another story, Finn McCool’s thumb is burned by the dripping fat of one of these animals, causing him to suck on it.

ANSWER: a **fish** [accept **goldfish** or **salmon**]

[10] This legendary Chinese archer is best known for shooting down nine suns, leaving only the one we know today. He was the consort of the moon goddess, Chang’e (“chong-uh”).

ANSWER: Hou **Yi** (“ho yee”)

<Mythology>

13. Cassius Dio documented a story claiming that the Parthians poured molten gold into this person's mouth. For 10 points each:

[10] Name this person who formed the First Triumvirate, known for his unrivaled wealth.

ANSWER: Marcus Licinius **Crassus**

[10] Crassus defeated this gladiator's revolt during the Third Servile War. This man's followers were crucified along the Appian Way at the conclusion of the conflict.

ANSWER: **Spartacus**

[10] Crassus provided one of the first examples of this service, but would typically only help if he was able to buy the property. In addition to policing, *vigiles* ("wee-GHEE-lays") provided this service in Rome.

ANSWER: **firefighting** [or **firefighters**; or putting **out fires**]

<Other History>

14. All known diseases caused by these infectious agents in mammals are progressive, untreatable, and fatal. For 10 points each:

[10] Name these infectious agents that cause diseases such as scrapie and mad cow. These infectious agents are misfolded proteins that can transmit their structure to similar healthy proteins.

ANSWER: **prions**

[10] A FLAIR MRI can reveal the hyperintense lesions characteristic of this prion disease. The variant form of this disease is common in young people and can be caused by eating beef contaminated with mad cow disease.

ANSWER: **Creutzfeldt–Jakob** ("KROITS-felt YAH-kob") disease [or **CJD**]

[10] Many prion diseases, including Creutzfeldt–Jakob disease and mad cow disease, are spongiform encephalopathies ("en-seff-uh-LOP-uh-theez") meaning they affect this organ. This organ contains the frontal lobe.

ANSWER: **brain**

<Biology>

15. The Siege of Lisbon was one of the few successes for Christians in this war. For 10 points each:

[10] Name this crusade. Louis VII ("the seventh") and Conrad III participated in this crusade, which was called by Pope Eugenius III after the fall of Edessa in 1144.

ANSWER: **Second** Crusade

[10] The failures of the crusaders in the eastern theater of the Second Crusade contributed to the eventual fall of this city in 1187. This holy city for both Christianity and Islam was the target of many of crusades.

ANSWER: **Jerusalem**

[10] Like in the First Crusade, participants in the Second Crusade were called to help a Byzantine emperor from this dynasty. Alexius I, a member of this dynasty, had his reign chronicled by his daughter Anna.

ANSWER: **Komnenos** [accept Manuel I **Komnenos**; accept Alexius I **Komnenos**; accept Anna **Komnenos**]

<European History>

16. This play ends with the protagonist watching impassively as George Gibbs weeps over her grave. For 10 points each:

[10] Name this play in which a dead mother chooses to revisit her twelfth birthday, and subsequently asks the Stage Manager if anyone truly appreciates the value of life while they live it.

ANSWER: **Our Town**

[10] This playwright invented the fictional town of Grover's Corners for *Our Town*. This author also wrote the novel *The Bridge of San Luis Rey*.

ANSWER: Thornton **Wilder**

[10] An important motif in *Our Town* is the choir's regular singing, which is directed by this character. This church organist has "seen a peck of troubles," which may have caused his alcoholism and eventual suicide.

ANSWER: **Simon Stimson** [accept either underlined name]

<American Literature>

17. G. A. Cohen belonged to a school of thought named for this word that grew out of the September Group and focused on Karl Marx. For 10 points each:

[10] Give this word that also names a school of philosophy traditionally contrasted with continental philosophy. That school named for this word uses tools like mathematics and formal logic.

ANSWER: **analytic** [accept **analytical** Marxism]

[10] G. A. Cohen wrote a defense of Karl Marx's view of this concept. Hegel ("HAY-gull") divided this concept into original, reflective, and philosophical in his "Lectures on the Philosophy of" it.

ANSWER: **history** [or world **history**; or *Lectures on the Philosophy of **History***]

[10] Karl Marx believed that the "history of all hitherto existing society is the history of" struggles named for this concept. The petty bourgeoisie is now conflated with the "middle" or "working" group of this type.

ANSWER: **class** [or middle **class**; or working **class**; or **class** struggle]

<Philosophy/Social Science>

18. Answer the following about portraits of popes, for 10 points each.

[10] A portrait of this pope painted by Diego Velázquez was described by Joshua Reynolds as "the finest picture in Rome." Upon seeing the detailed realism of Velázquez at work, this pope is said to have remarked "It's too true!"

ANSWER: Pope **Innocent X** (prompt on **Innocent**)

[10] This artist painted about 50 heavily distorted versions of Velázquez's *Portrait of Innocent X* in his "Screaming Popes" series. This Irish painter also created the horrifying *Three Studies for Figures at the Base of a Crucifixion*.

ANSWER: Francis **Bacon**

[10] Both Velázquez and Bacon were likely inspired by the *Portrait of Pope Julius II* painted by this Renaissance artist. Plato and Aristotle are shown standing side by side in this painter's *The School of Athens*.

ANSWER: **Raphael**

<Painting/Sculpture>

19. In one poem, the speaker asks why the consuls and praetors are carrying elegant silver and gold canes, and is told that those items dazzle these people. For 10 points each:

[10] Name these people. A poem that anticipates the arrival of these people begins by asking “What are we waiting for, assembled in the forum?” and ends by saying that these people “were a kind of solution.”

ANSWER: the **barbarians** [accept “Waiting for the **Barbarians**”]

[10] “Waiting for the Barbarians” is by this poet, who also wrote “Nero’s Deadline” and “The God Abandons Antony.” This poet spent most of his life in Alexandria, and often wrote explicitly about sex and homosexuality.

ANSWER: C. P. **Cavafy** (“kuh-VAH-fee”)

[10] Cavafy wrote in this European language. Nikos Kazantzakis used this language to write a novel about Zorba.

ANSWER: Modern **Greek** [or **Ellinika**]

<European Literature>

20. Methylamine (“METH-ull-uh-meen”) can be produced in industry by reacting this compound with chloromethane. For 10 points each:

[10] Name this chemical compound whose production accounts for over 1 percent of the world’s total energy use. Alkali metals dissolve in this chemical to yield solvated electrons.

ANSWER: **ammonia** [or **NH₃**]

[10] This ammonia-producing nitrogen fixation process is often catalyzed by an iron powder obtained from magnetite. Osmium was used as the catalyst in the original reaction chambers of this eponymous process.

ANSWER: **Haber** process [or **Haber–Bosch** process]

[10] The Haber process produces the ammonia used in this chemical process for creating nitric acid. This two-stage process begins with an exothermic reaction catalyzed by platinum that forms nitric oxide and water.

ANSWER: **Ostwald** process

<Chemistry>