

ACF Regionals 2019

Packet by Wright State, Johns Hopkins A, and UNC A

Tossups

1. The inertial mass of charge carriers in superconductors makes them act like an effective “kinetic” one of these devices. Planar chip examples of these devices are used in many RF circuits, and the SRF quantifies the point where the parasitic characteristics of these devices dominate their normal behavior. In a type of this device known as a saturable reactor, AC current flow is controlled by a secondary DC current. Nickel zinc ferrites are used in these two-terminal devices when they need to operate at high frequency. The reactance of these devices is proportional to signal frequency. The sign of the voltage across these devices is explained by Lenz’s law. Radio receivers use a resonant circuit consisting of one of these devices and a capacitor. For 10 points, name these circuit components that store energy in the magnetic field, and have a namesake quantity measured in henries.

ANSWER: **inductors** [or **chokes**; prompt on wire **coils** or equivalents]

<Physics>

2. A work of “theory-fiction” from this country that discusses ideas like the “Tellurian Insurgency” against “Solar Capitalism” is entitled *Cyclonopedia*. An author from this country wrote a book that recounts an incident in Oklahoma in which a group of students tortured another student who they suspected of being a secret police agent. The narrator of that book meets a man who she calls her “magician” after being expelled from a university post. A girl from this country is sent to Vienna to attend a French school at the end of “The Story of a Childhood,” the first part of an autobiographical graphic novel by an author born in this country. A memoir from this country is about a book club whose members read *The Great Gatsby* and a novel by Vladimir Nabokov. For 10 points, name this birth country of Marjane Satrapi (“mar-ZHAHN sah-trah-pee”) and Azar Nafisi, the authors of *Persepolis* and *Reading Lolita in Tehran*.

ANSWER: **Iran** [or Islamic Republic of **Iran**; or Jomhuri-ye Eslami-ye **Iran**; or **Persia**]

<World Literature>

3. This good appears in the title of a painting in which a cut-off, gold-framed painting of a boat appears in the right foreground and a figure uses both of his palms to inspect this good. The production of this good is shown in a number of genre paintings by William Aiken Walker. A large amount of this good sits on a table in the background of a painting in which the artist’s uncle, Michel Musson, sits and “classes” a sample of this good. During the 20th century, a so-called “duck” made from this good became a cheaper alternative to linen for painting canvases. A painting by Edgar Degas (“day-GAH”) depicts the activities of an office for exchanging this good in New Orleans. For 10 points, name this good that Winslow Homer portrayed being harvested in an 1876 painting of two black sharecroppers.

ANSWER: **cotton** [accept **Cotton Merchants in New Orleans**, A **Cotton Office in New Orleans**, or The **Cotton Pickers**]

<Painting>

4. A language from this country does not follow the “immediacy of experience principle,” according to a “reassessment” of it by Nevins, Pesetsky, and Rodrigues (“rod-REE-gez”). Many dialects of this country’s most common language feature L-vocalization and palatalization of the stops “t” and “d” into affricates (“AFF-ruh-kits”) before a high front vowel. A scholar who wrote about a language in this country in the book *Don’t Sleep, There Are Snakes* claims that its apparent lack of recursion is evidence against Chomsky’s universal grammar; that linguist is Daniel Everett. Unlike its European counterpart, many dialects of the most common language in this country, such as *carioca* (“kah-ree-OH-kah”) and *paulista* (“pow-LEECE-tah”), replace the informal second-person “tu” with the

formal “você” (“vo-SAY”). For 10 points, name this country home to the tribal language of Pirahã (“PEE-ruh-hah”) and the majority of the world’s speakers of Portuguese.

ANSWER: **Brazil** [or Federative Republic of **Brazil**; or República Federativa do **Brasil**]
<Social Science>

5. A mural painter in one of these locations decides to kill himself by making an appointment with the Federal Bureau of Termination in Kurt Vonnegut’s story “2 B R 0 2 B” (“to be R not to be”). Shortly after Howard and Ann Weiss get home from one of these locations, a baker insistently calls them to ask them to pick up a cake for their son in Raymond Carver’s story “A Small, Good Thing.” A character dreams that one of these places is a “mechanical slaughterhouse” where Old Blastic is killed. Dale Harding is among the “acutes” who live in one of these places in a novel whose protagonist convinces the prostitute Candy to sleep with the stuttering Billy Bibbit. Chief Bromden escapes from one of these locations in a novel in which Randle McMurphy butts heads with Mildred Ratched. For 10 points, name this type of institution where Ken Kesey’s *One Flew Over the Cuckoo’s Nest* is set.

ANSWER: **hospitals** [accept mental **hospitals** or psychiatric **hospitals** or the Chicago Lying-In **Hospital**; accept mental **asylums** or insane **asylums** or **mental institutions**]
<American Literature>

6. Griller and Ingold asserted that the cyclization of a 5-hexene derivative can be used as a “clock” for reactions of these molecules. MTSL is added with cysteine (“SIS-teen”) in a common site-specific labeling method that uses these molecules. A modulating field of 100 kilohertz and an applied field of 8 to 12 gigahertz are used in a technique for imaging these molecules, which uses DPPH as a standard and plots absorbance and the first derivative of absorbance. Nitroso examples of these molecules like TEMPO are often persistent, so they’re used as traps in EPR spectroscopy. Solvent cages assist a type of polymerization that uses these molecules, which begins with light- or heat-catalyzed homolysis. Reactions of these molecules are drawn using fish-hook arrows, and the superoxide example of these molecules is a common cause of DNA damage. For 10 points, name these molecules that contain unpaired electrons.

ANSWER: free **radicals** [prompt on spin; prompt on paramagnetic molecules or species]
<Chemistry>

7. In 2015, Raphael I (“the first”) Sako, the patriarch of an Eastern Catholic Church located in this country, proposed a union of it and two other Nestorian churches headquartered here. A sect of Mandaeans (“man-DEE-ins”) in this country who worship John the Baptist as their chief prophet are the Sabians (“SAY-bee-ins”). A non-Christian *Book of Revelation* and *Black Book* comprise the scripture of a religious minority primarily located in this country, whose devotees make pilgrimages to the shrine of Sheikh Adi ibn Musafir, an avatar of Melek Taus (“tah-OOSE”). This home country of the Chaldean (“kal-DEE-in”) Catholic Church is also home to a religious minority who have undergone violent persecution due to accusations of devil worship by members of Daesh (“DAH-eesh”). For 10 points, name this home country of the Yazidis, an ethnic minority who speak Kurdish and live in northern cities such as Mosul.

ANSWER: **Iraq** [or Republic of **Iraq**]
<Religion>

8. This king’s second wife was rumored to be a changeling. In a battle that took place two days after a disastrous naval defeat at the Battle of Beachy Head, this king abandoned his Irish supporters, causing him to be nicknamed “the shit” in Ireland. The Tory and Whig parties formed during the Exclusion Crisis, which tried to prevent this king from ascending to the throne. “Hanging Judge” George Jeffreys sentenced hundreds of rebels to death in the Bloody Assizes (“uh-SIZE-izz”) after an uprising that intended to replace this king with his nephew the Duke of Monmouth. After this king’s deposition, the Jacobite movement sought to restore this king and his descendants to the throne.

This man fled to the court of Louis XIV (“the fourteenth”) after his defeat at the 1690 Battle of the Boyne. For 10 points, name this last Stuart king, who was deposed by William and Mary in the Glorious Revolution.

ANSWER: **James II** [or **James VII** of Scotland; prompt on **James**]

<British History>

9. In a 2017 video game, this character is able to teleport across a map by either “morphing” or “shifting.” In a film that features this character, he is incapacitated after being stabbed in the eye with a pen formerly owned by Stephen King. This character is reconstructed by nanites in a film in which he punches the head off of the android KM-14 and shatters a girl’s head after freezing it with liquid nitrogen. In the fifth film in this character’s franchise, he is emulated by Roy Burns, who is defeated by the recurring protagonist Tommy Jarvis. In his first appearance, this villain pops out of a lake to attack Alice Hardy in a dream sequence after his mother kills various counselors at Camp Crystal Lake. For 10 points, name this killer who wears a hockey mask from the *Friday the 13th* franchise.

ANSWER: **Jason** Voorhees [prompt on **Voorhees**]

<Trash>

10. The eldest of a set of seafaring siblings in this empire lost his arm while trying to capture the port city of Bougie (“boo-ZHEE”), leading to him being nicknamed “Silver Arm.” This empire beheaded captured prisoners and floated their decapitated bodies on mock crucifixes after the capture of Fort St. Elmo. Francis I and this empire joined forces to capture the port city of Nice (“neese”). Jean de La Valette led the Knights Hospitaller in a successful defense against this empire’s siege of Malta. Andrea Doria was defeated by this empire’s admiral Hayreddin Barbarossa at the 1538 Battle of Preveza, which solidified this empire’s naval supremacy until it was defeated by Holy League forces commanded by Don John of Austria. For 10 points, name this empire whose domination of the Mediterranean was ended at the Battle of Lepanto.

ANSWER: **Ottoman** Empire [or Exalted **Ottoman** State; or Devlet-i Aliye-i **Osmaniye**; or **Osmanlı** Devleti; or **Osmanlı** İmparatorluğu; accept **Turkish** Empire; prompt on **Turkey**]

<European History>

11. This composer adapted material from his first two symphonies for his Opus 8, a series of twelve *Silhouettes* for piano. In the F-sharp minor middle section of a piece by this composer, almost every phrase opens with the notes [read slowly] F-sharp G-sharp A G-sharp A; that G-flat major piano piece was supposedly inspired by a train ride, and Fritz Kreisler arranged it for violin in G major. This composer based a set of sixteen pieces originally for piano four-hands on dances such as the *sousedská* (“SOH-set-skah”) or *skočná* (“SKOATCH-nah”). This composer of two *Furianty* (“FOO-ree-ont-ee”) and eight *Humoresques* for piano also drew from a national folk dance to write a six-movement piano trio subtitled *Dumky*. For 10 points, name this Czech composer of the *Slavonic Dances* and a Symphony No. 9 “From the New World.”

ANSWER: Antonín **Dvořák**

<Music>

12. There is exactly one structure with this property for a topological manifold in dimensions lower than four. Both the real and imaginary parts of complex functions with this property are harmonic, and complex functions with this property satisfy the Cauchy–Riemann (“koh-SHEE REE-man”) conditions. Given a function f that has this property in some neighborhood, its inverse function g will also have this property if the Jacobian determinant of f is nonzero. All the entries in the Jacobian matrix must exist for a multivariable function to have this property. Real analytic functions have this property “infinitely,” and are equal to an infinite power series. Single-variable functions lack this property if their graphs have corners or cusps. For 10 points, name this property of functions that have linear approximations at every point.

ANSWER: **differentiable** [or word forms like **differentiability**; accept **analytic** or word forms after the first sentence but until read; accept infinitely **differentiable**]

<Other Science (Math)>

13. The perpetrator of an attack in this state repeatedly said, “You don’t know how happy that makes me” to Vera Palmer after she opened a malfunctioning elevator for him. Claire Wilson was shot through the womb in this state while eight months pregnant, killing her unborn baby. On August 1, 1966, 14 people were shot to death by Charles Whitman from the observation deck of a tower in this state’s flagship public university. Governor John Connolly was injured while riding in a limousine in an attack in this state’s Dealey Plaza. A former book depository in this state was the shooting perch of an assassin who was later killed by nightclub owner Jack Ruby; that assassination was investigated by the Warren Commission. For 10 points, name this state where Lee Harvey Oswald assassinated John F. Kennedy in Dallas.

ANSWER: **Texas**

<American History>

14. The bodhisattva (“boh-dee-SUT-vuh”) Manjushri is most commonly depicted riding one of these creatures. One of these creatures nurses King Gesar (“GEZ-er”) in a Tibetan epic. It’s not a dog, but according to Okinawan legend, one of these animals caused a boulder to fall from heaven and crush a dragon who was attacking the port of Naha. In Balinese mythology, the demon mother Rangda is in a constant struggle with the heroic spirit king Barong, who resembles one of these animals. In East Asian countries, statues of these creatures always appear in opposite-gender pairs, often with the male having an open mouth. An avatar of Vishnu that was half-this animal is often depicted in the process of destroying his nemesis, the demon Hiranyakashipu. The national symbol of Singapore is a combination of this animal and a fish. A popular Chinese dance depicts, for 10 points, what maned felines?

ANSWER: **lions** [accept **shishi** or **shisa** until read; accept **lion** statues or **lion** dance; prompt on **cat**]

<Mythology>

15. In a play by this author, a gentleman protests that “Louisa” doesn’t rhyme with “Whitsun week” while listening to love poetry addressed to his chauffeur’s sister Louisa. One of this playwright’s characters says that “to be in hell is to drift” and “to be in heaven is to steer” during a debate about the Life Force. In a play by this author, it is revealed that Ann persuaded her father to name the author of *The Revolutionist’s Handbook* as one of her guardians in a scheme to marry him. That play about the anarchist Jack Tanner includes a third act called “Don Juan in Hell,” which is often performed separately. This author used the Serbo-Bulgarian War as the backdrop for a play in which Raina Petkoff calls Bluntschli her “chocolate-cream soldier.” For 10 points, name this author of *Man and Superman* and *Arms and the Man*.

ANSWER: George Bernard **Shaw**

<British Literature>

16. One method of forming these bonds uses the reagent SEA (“S-E-A”), which can undergo an acyl shift; that method is native chemical ligation. These bonds show a weak *n*-to- π -star electronic transition between 210 to 230 nanometers, and a strong π -to- π -star transition near 190 nanometers called NV1. The iso- form of these bonds are used to attach ubiquitin. Through partial resonance, these bonds are locked into a planar configuration. Oxyma and DCC are used to form these bonds after deprotection removes a Boc (“bock”) or Fmoc (“F-mock”) protecting group during solid phase synthesis. Linezolid (“lih-NEZZ-uh-lid”) and chloramphenicol (“klor-um-FEN-ih-call”) inhibit the formation of these bonds. Chymotrypsin (“KYE-mo-TRIP-sin”) and trypsin break down these bonds. Elongation factors assist in the formation of these bonds in the A and P sites of the ribosome during translation. For 10 points, name these bonds that connect two amino acids.

ANSWER: **peptide** bonds [prompt on **covalent** bonds or **amide** bonds; prompt on anything that mentions **proteins**]

<Biology>

17. This character insists on burning all the documents pertaining to a lawsuit between Lord Kissbreech and Lord Suckfist. The seventh chapter of a novel named after this character ends with a list of ludicrously-titled novels attributed to the Abbey of Saint-Victor, which has often been taken as a critique of scholasticism. This student of the tutor Epistemon justifies beating up a Limousin (“li-moo-ZANN”) for speaking “incorrectly” by arguing that language should be maintained and not change. Badebec dies while giving birth to this character, who is born hairy “like a bear.” The narrator of a novel fails to report on a battle that this character participates in because he was exploring a civilization inside this character’s mouth. The Oracle of the Holy Bottle is consulted by Panurge and this character. For 10 points, the second title character of a series of novels by François Rabelais (“rab-LAY”) is what son of Gargantua?

ANSWER: **Pantagruel**

<European Literature>

18. A tumultuous interlude in Act 1 of this opera opens with a heavy E-flat downbeat in the timpani, followed by the lower woodwinds and strings playing eighth notes E-flat F-flat E-flat, then up to a half-note C-flat. After that interlude, a character sings that the stars “are drawing up the clouds of human grief” while others shelter in a pub called The Boar; that aria is “Now the Great Bear and Pleiades.” In this opera, a character sings the “Embroidery” Aria after Balstrode finds a ruined jersey that she recognizes as one that she had made for John. This opera’s libretto, written by Montagu Slater, was based on George Crabbe’s poem *The Borough*. *Four Sea Interludes* are often excerpted from this opera. For 10 points, name this opera in which the title fisherman is accused of killing his apprentices, composed by Benjamin Britten.

ANSWER: **Peter Grimes**

<Other Arts>

19. This book identifies one concept as a form of lawfulness that enforces only the “law of movement” of nature or history in order to achieve the “fabrication of mankind.” The first section of this book points to movements led by Marcel Déat (“day-AH”) and Jacques Doriot (“dor-YO”) as examples of the continued mainstream popularity of anti-Dreyfusard (“anti-dray-foo-SAR”) ideas in 20th-century France. This book describes its title concept as “a system in which all men have become equally superfluous.” According to this book, “continental imperialist” movements such as pan-Slavism helped to institutionalize scientific racism and anti-Semitism on the path to creating this book’s title form of government. This book was written seven years before its author’s book *The Human Condition*. For 10 points, name this book by Hannah Arendt (“AR-unt”) that analyzes the emergence of Stalinism and Nazism.

ANSWER: **The Origins of Totalitarianism**

<Philosophy>

20. In 2009, Palau agreed to provide asylum to seventeen detainees of this ethnicity from Guantanamo Bay. After Thai authorities denied members of this ethnicity the right to travel to Turkey for asylum, the Grey Wolves bombed the Erawan Shrine in 2015. In 2013, three members of ETIM, a terrorist organization advocating for a separate homeland for these people, crashed a 4×4 (“four-by-four”) vehicle in a suicide attack that killed five people total. These people are the largest ethnic group in a national subdivision whose name translates as “New Frontier.” A proposed independent state for these people is called the Republic of East Turkestan. The alleged rape of a woman by men of this ethnicity sparked the 2009 Urumqi (“uh-rum-CHEE”) riots. For 10 points, name this minority who live in the Xinjiang (“shin-jyong”) Autonomous Region of China.

ANSWER: **Uyghurs** (“WEE-gurs”) [do not accept or prompt on “Muslims”]

<World History>

21. One of this author’s protagonists realizes that he doesn’t know how to make modern weaponry or a printing press after he ends up in the Medieval Era, but he’s taken for a miracle-worker anyway because of his gold cross. In

a novel by this author, Sylvia plots to cut down the Great Tree of Groby, which is a symbol of her husband's family, after learning of his affair with the suffragette Valentine Wannop. This author wrote a novel that begins with the line "This is the saddest story I have ever heard," in which John Dowell's wife Florence fakes a heart ailment to facilitate an extramarital affair. For 10 points, name this novelist who wrote about the "last Tory" Christopher Tietjens ("TEE-chins") and the soldier Edward Ashburnham in *Parade's End* and *The Good Soldier*, respectively.

ANSWER: Ford Madox **Ford** [or Ford Hermann **Hueffer**] (The first sentence is about *Ladies Whose Bright Eyes*.)

<British Literature>

Bonuses

1. A friar attempts to reform this character after he pursues the newly rich Mistress Ursula in a William Kenrick play titled for this character's "wedding." For 10 points each:

[10] Name this character who compares Judge Shallow to a "cheese paring" and a carved radish. He and his cronies frequent the Boar's Head Inn.

ANSWER: Sir **John Falstaff** [accept either underlined portion]

[10] Mistress Quickly declares that Falstaff is in "Arthur's bosom" after his death in this Shakespeare play, whose title king rallies his troops to fight the French in the St. Crispin's Day Speech.

ANSWER: **Henry V**

[10] This "foul mouth'dst rogue in England" is the one who informs Falstaff of the death of Henry IV. This husband of Mistress Quickly is beaten up by the Welsh officer Fluellen ("floo-ELL-in"), who forces him to eat a raw leek.

ANSWER: Ancient **Pistol**

<British Literature>

2. This philosophical position rejects J. L. Mackie's "error theory," which itself argues that all claims about the morality of a particular action are necessarily false. For 10 points each:

[10] Name this position advocated by philosophers such as Peter Railton and Russ Shafer-Landau, which holds that moral claims can, in fact, be true.

ANSWER: **moral realism** [or **moral objectivism**; accept word forms such as **moral realist** or **moral objectivist**; prompt on **realism** or **objectivism**]

[10] This philosopher advanced a non-naturalist theory of moral realism, arguing that moral features of the world exist but are not reducible to non-moral features, in his 1903 work *Principia Ethica*.

ANSWER: G. E. **Moore** [or George Edward **Moore**]

[10] Moore's work in moral realism is often viewed as an extension of this Scottish Enlightenment philosopher's articulation of the "is-ought" problem in his *A Treatise of Human Nature*.

ANSWER: David **Hume**

<Philosophy>

3. One of the organisms engaged in these associations physically grows into the other in its arbuscular variant. For 10 points each:

[10] Name this type of mutualistic structure. Hyphal coils called pelotons are produced in one type of this structure which is necessary for orchids to grow.

ANSWER: **mycorrhizae** ("my-ko-RYE-zee")

[10] Mycorrhizae form between the roots of a plant and an organism of this kingdom, who unusually have chitin ("KITE-in") in their cell walls. Mycology is the study of these organisms.

ANSWER: **fungi** [or **funguses**]

[10] This other form of symbiosis between fungi and plants closely resembles mycorrhizae, but occurs when the plant derives its nutrients from the fungi rather than through photosynthesis.

ANSWER: **mycoheterotrophy** [or **mycotrophy** or **mycorrhizal cheaters** or **mycorrhizal cheating**]

<Biology>

4. Supposedly, the only person to survive a disastrous retreat from this city was the surgeon William Brydon. For 10 points each:

[10] Name this city. Lord Elphinstone's army was massacred by the Wazir Akbar Khan's forces while fleeing this city in 1842.

ANSWER: **Kabul**

[10] The massacre of Elphinstone's army was part of the Great Game, a struggle for control over Central Asia between Britain and this other imperial power.

ANSWER: **Russian** Empire

[10] In 1919, this other British officer in the Anglo-Afghan Wars ordered troops to fire into a crowd of Indians gathered in the Jallianwala Bagh public garden.

ANSWER: Reginald **Dyer** [or Reginald Edward Harry **Dyer**]

<British History>

5. This song concludes with the lines "To turn, turn will be our delight, till by turning, turning we come 'round right." For 10 point each:

[10] Name this song written by Joseph Brackett in 1848. A clarinet solo introduces this song in A-flat major in a section marked *doppio movimento* from a piece written for a ballet 96 years later.

ANSWER: "**Simple Gifts**" [prompt on Shaker melody or Shaker hymn or Shaker tune; accept "'**Tis the Gift to Be Simple**'"]

[10] Five variations on the Shaker hymn "Simple Gifts" can be heard towards the end of the suite from *Appalachian Spring*, a ballet by this American composer.

ANSWER: Aaron **Copland**

[10] A quartet of Anthony McGill, Itzhak Perlman, Yo-Yo Ma, and Gabriela Montero performed this composer's *Air and Simple Gifts* at Barack Obama's first Inauguration in 2009. Dale Clevenger premiered this composer's horn concerto in 2003.

ANSWER: John **Williams** [or John Towner **Williams**]

<Music>

6. These beings rescued their mother and sister from pirates, and they stormed Olympus in an attempt to take Artemis and Hera as wives. For 10 points each:

[10] Name these figures, a pair of giant twin sons of Poseidon. They killed each other in an early friendly-fire incident by both throwing spears intended to hit Artemis in the form of a doe.

ANSWER: **Otus** and **Ephialtes** [or the **Aloadae**]

[10] Otus and Ephialtes had earlier managed to trap Ares in one of these objects. One of these items often mistranslated as being a box was owned by Pandora and contained all of the world's evil.

ANSWER: **jar** [or **pithos**; or **urn**]

[10] In several accounts, Otus and Ephialtes used this other peak as a stepping stone in their attempt to reach the gods. This mountain is also where Chiron ("KYE-ron") lived and taught several mythical heroes.

ANSWER: Mount **Pelion**

<Mythology>

7. The number of electrons that these species donate is quantified by their denticity or their hapticity, depending on the type of compound they form. For 10 points each:

[10] Name these chemical species that complex to central metal ions in coordination compounds.

ANSWER: **ligands** ("LIG-unds")

[10] This series orders ligands by their ability to induce d-orbital splitting; it starts with pi-donors like I-minus and extends to strong-field pi-acceptors like CN-minus.

ANSWER: **spectrochemical** series

[10] This technique can be used to measure ligand affinity and determine binding mechanisms by measuring the temperature change in a sample cell when ligand is slowly added. It is especially useful for studying ligand binding to large biomolecules.

ANSWER: **isothermal titration calorimetry** [or **ITC**]

<Chemistry>

8. The speaker of a poem in this collection describes a “frequent and swift flash of eyes offering [him] love” in the title “City of Orgies.” For 10 points each:

[10] Name this collection. A poem in this collection calls a “mast-hemm’d” city a “stately and admirable” sight and begins “Flood-tide below me! I watch you face to face.”

ANSWER: Leaves of Grass

[10] This author included poems like “Song of Myself” and “Crossing Brooklyn Ferry” in his collection *Leaves of Grass*.

ANSWER: Walt Whitman [or Walter Whitman]

[10] Whitman declares “The great city is that which has the greatest man or woman” in a poem titled “Song of” this type of weapon, which it describes as “shapely, naked, wan (“wahn”).”

ANSWER: broad-axe [prompt on axe]

<American Literature>

9. Inhabitants of villages near Sanjiang (“san-jyong”) in modern-day Zhejiang (“juh-jyong”) Province were forbidden from stepping on dry land for supporting the loser of this battle. For 10 points each:

[10] Name this large naval battle in 1363 during the Red Turban Rebellion. The future Hongwu Emperor defeated the forces of Chen Youliang (“chun yo-lyong”) in this battle.

ANSWER: Battle of Lake Poyang

[10] The Hongwu Emperor was the first emperor of this dynasty, whose Yongle (“yong-luh”) Emperor sent the naval expeditions of Zheng He (“jung huh”).

ANSWER: Ming Dynasty

[10] The emperors of the Ming Dynasty, including its founder Yuanzhang (“y’wen-jong”), had this familial name. A later general with this family name was the first commander-in-chief of the People’s Liberation Army.

ANSWER: Zhu (“joo”) [accept Zhu De]

<World History>

10. François Le Moyne (“luh MWANN”) committed suicide a day after finishing a painting in which this figure saves another figure from Falsehood and Envy. For 10 points each:

[10] Name this winged allegorical figure that lifts a nude woman in the final painting of Peter Paul Rubens’s Marie de’ Medici cycle, in which Marie reconciles with her son Louis XIII.

ANSWER: Time [accept Saturn; accept Time *Saving Truth From Falsehood and Envy*]

[10] When Time isn’t holding a scythe, he is often shown with one of these time-measuring devices, such as the one behind him in the painting *Venus, Cupid, Folly and Time*.

ANSWER: hourglass [or sandglass, sand timer, sand clock, or clepsammia; prompt on clock or timer]

[10] *Venus, Cupid, Folly and Time* is the best-known work by this Italian Mannerist painter.

ANSWER: Agnolo Bronzino [or Agnolo di Cosimo]

<Painting>

11. *Foreign-language answer acceptable*. A book named after one of these places includes the story “It’s Because We’re So Poor,” which is about a family who loses a cow in a flood. For 10 points each:

[10] Name this type of place that titles a collection containing the stories “They Gave Us the Land” and “Tell Them Not to Kill Me.” A character whose last name is a word for this type of place loves Susana San Juan.

ANSWER: plains [or llanos; or páramos] (*Páramo* is a Spanish word for a barren plain.)

[10] This author of *The Burning Plain* wrote about Juan Preciado’s time in the ghost-inhabited town of Comala in his novel *Pedro Páramo*.

ANSWER: Juan Rulfo [or Juan Nepomuceno Carlos Pérez Rulfo Vizcaíno]

[10] This Colombian author allegedly read a gifted copy of *Pedro Páramo* twice in one night and claimed that he could recite it forwards and backwards. *Pedro Páramo* influenced his novel *One Hundred Years of Solitude*.

ANSWER: Gabriel **García Márquez** [prompt on partial answers]

<World Literature>

12. The main female protagonist of *Hiroshima, mon amour* (“mon ah-MOOR”) is revealed to have endured this historical punishment. For 10 points each:

[10] Name this type of public humiliation that women who engaged in “horizontal collaboration” with Nazi soldiers often underwent in the postwar period.

ANSWER: **shaving** their heads [or **haircut**; accept any answer involving **cutting off hair**]

[10] Women who engaged in “horizontal collaboration” slept with Nazis during their occupation of this country, which was partially ruled by the collaborationist Vichy (“VEE-shee”) regime.

ANSWER: **France** [or the **French** Republic; or République **française**]

[10] Post-war reprisals also included the execution of this editor of the anti-Semitic newspaper *Je suis partout* (“zhuh swee par-TOO”). He became a *cause célèbre* (“cause suh-LEB-ruh”) among French intellectuals, with Paul Valéry and Albert Camus (“all-BAIR kah-MOO”) signing a petition to commute his sentence, but was executed anyway.

ANSWER: Robert **Brasillach** (“ro-BAIR bra-zee-YAHK”)

<European History>

13. In this sociologist’s best-known study, black applicants with no criminal record were shown to be around as likely to get job offers as white applicants with a felony conviction. For 10 points each:

[10] Name this recently deceased sociologist who included the results of that study in her article “The Mark of a Criminal Record.”

ANSWER: Devah **Pager** [or Devah Iwalani **Pager**]

[10] Pager based her study on an experiment by Schwartz and Skolnick that measured criminal records as a “legal” form of this sociological concept. A book by Erving Goffman titled for this concept divides it into categories such as “tribal” and “blemishes of individual character.”

ANSWER: **stigma** [accept legal **stigma** or social **stigma**; do not accept any other terms]

[10] Pager’s work also notes that limited employment opportunities are a key predictor for this phenomenon of convicted criminals committing additional crimes once they’ve been released from prison.

ANSWER: **recidivism** [accept word forms, such as **recidivate** or **recidivating**; accept the **revolving door**]

<Social Science>

14. Alexander Liberman’s sculpture *Argo*, which consists of several steel cylinders painted white, can be found on the grounds of this institution. For 10 points each:

[10] Name this American museum. Its Quadracci Pavilion, which takes the form of a ship with a movable *brise soleil* (“breeze so-LAY”) made of 72 steel fins, was designed by Santiago Calatrava.

ANSWER: **Milwaukee Art** Museum [or the **MAM**]

[10] The MAM is also home to a Dirk Skreber (“SKRAY-ber”) sculpture of one of these objects smashed around a pole. An imitation of an English landmark in Nebraska is composed of a ring of these objects spray-painted gray.

ANSWER: **cars** [accept synonyms like **automobiles** or **vehicles**; accept **Carhenge**]

[10] Dustin Shuler’s *Spindle*, which consists of eight cars impaled on a spike, can be found in this state. Anish Kapoor’s *Cloud Gate* is in Millennium Park in this Midwestern state’s largest city.

ANSWER: **Illinois**

<Other Arts>

15. The lower three vertices of the QAPF diagram correspond to three types of these minerals. For 10 points each:

[10] Name this group of aluminosilicate minerals that form many different solid solution minerals. Examples of these minerals that contain barium include hyalophane (“hy-AL-oh-fane”) and celsian (“SELL-see-in”).

ANSWER: **feldspars**

[10] Plagioclase feldspars make up the continuous branch of this geologist’s reaction series, starting with calcium-rich and proceeding down to sodium-rich feldspars. Its discontinuous branch includes magnesium- and iron-rich minerals like olivine.

ANSWER: Norman **Bowen** [or Norman Levi **Bowen**; accept **Bowen**’s reaction series]

[10] The feldspar orthoclase is found near the bottom of Bowen’s reaction series, indicating a low value for this quantity, which is shown on the vertical axis of Bowen’s reaction series.

ANSWER: **crystallization temperature** [accept descriptive answers indicating the **temperature** at which a mineral **forms** from a melt; prompt on **temperature**]

<Other Science (Earth Science)>

16. Conspirators in this scandal gave themselves nicknames like “The Wolfpack” and “The Cool Kids,” and it was the subject of 27 separate NCIS investigations that were closed without taking action. For 10 points each:

[10] Identify this ongoing scandal that involves numerous bribes paid by the namesake overweight chairman of Glenn Defense Marine Asia.

ANSWER: **Fat Leonard** scandal

[10] “Fat Leonard” Francis’s partners in crime included dozens of uniformed officers of this branch of the US armed forces, many of whom were attached to the Seventh Fleet.

ANSWER: United States **Navy**

[10] Several higher-level naval officers, including the amusingly-named Rear Admiral David Pimpo, were censured by this current Secretary of the Navy, who shares his first and last name with the white supremacist president of the National Policy Institute.

ANSWER: Richard **Spencer** [accept Richard Vaughn **Spencer** or Richard Bertrand **Spencer**]

<Current Events>

17. In the Tanakh, people brought the “first fruits” to the Temple of Jerusalem on this day. For 10 points each:

[10] Name this holiday that celebrates the revelation of the Torah to Moses. The introduction of coffee to the Ottoman Empire may have inspired the tradition of all-night Torah study on this day.

ANSWER: **Shavuot** (“shah-voo-OAT”) [accept **Feast of Weeks** or **Pentecost**]

[10] On Shavuot, Jews traditionally eat blintzes and other pastries containing this ingredient.

ANSWER: **cheese** [or **dairy** or **milk** or **milchig**]

[10] This book, the second of the Five Scrolls, is read during services on Shavuot. It is set in the time of the Book of Judges, and immediately follows it in most versions of the Old Testament.

ANSWER: Book of **Ruth** [or Megilat **Rut**]

<Religion>

18. Luttinger’s theorem states that these systems have a zero-temperature momentum-space volume independent of interaction strength. For 10 points each:

[10] Identify these systems that approximate interacting electron systems as a system of weakly-interacting quasiparticles with renormalized mass. These systems approximate normal electrons in a metal at low enough temperature.

ANSWER: **Fermi liquids** [or Landau–**Fermi liquids**]

[10] Fermi liquid theory relies on non-interacting states changing gradually as the interaction is turned on in this manner. According to a theorem named for this condition, a quantum system remains in its instantaneous ground state if its Hamiltonian changes sufficiently slowly.

ANSWER: **adiabatically** [accept word forms like **adiabaticity**; accept **adiabatic** theorem]

[10] Fermi liquids form a Fermi surface in which the occupation function is discontinuous due to this principle. This principle requires that no two electrons be in the same state.

ANSWER: **Pauli exclusion** principle [prompt on partial answer]

<Physics>

19. Heather Ann Thompson's book *Blood in the Water* criticized this man for ordering Russell G. Oswald to use tear gas against rioting prisoners in Attica State Prison. For 10 points each:

[10] Name this governor of New York who said that he felt "what Truman must have felt when he decided to drop the A-bomb" when he ordered the forceful retaking of Attica.

ANSWER: Nelson **Rockefeller** [or Nelson Aldrich **Rockefeller**]

[10] The Attica riots were sparked by the death of Black Panther George Jackson at this infamous prison in Marin County, California. Other notable inmates at this prison included Eldridge Cleaver and Sirhan Sirhan.

ANSWER: **San Quentin** State Prison

[10] Neal Cassady served two years in San Quentin for possession of this substance, whose prohibition was the target of Harry Anslinger's scare campaign. It was demonized by the 1936 film *Reefer Madness*.

ANSWER: **cannabis** [or **marijuana**; or **pot**; or **weed**; or **ganja**; or **bud**]

<American History>

20. The speaker of this poem sees a creature that cried "homesick for his fair native lake: Rain, when will you fall? Thunder, when will you roll?" For 10 points each:

[10] Name this poem dedicated to Victor Hugo about a bird "escaped from his cage." It opens "Andromache, I think of you!"

ANSWER: "The **Swan**" [or "Le **Cygne**"]

[10] "The Swan" appears in the "Parisian Scenes" section of this poet's *Les Fleurs du Mal* ("lay flurr doo MALL").

ANSWER: Charles **Baudelaire** [or Charles Pierre **Baudelaire**]

[10] In a poem from *Les Fleurs du Mal*, Baudelaire warns this person of Ennui, who "dreams of scaffolds as he smokes his hookah pipe." Baudelaire calls this person a "hypocrite" and "my fellow, my brother."

ANSWER: the **reader** [accept "Au **Lecteur**"]

<European Literature>

21. After being attacked by the rival Chanka people, this ruler is said to have called on the sun god Inti to turn stones into *pururauca* warriors to defend his city. For 10 points each:

[10] Name this son of Viracocha who transformed the Kingdom of Cuzco into the Incan Empire in the 15th century.

ANSWER: **Pachacuti** [or **Pachakutiq** Inka Yupanki; or **Pachacútec**]

[10] This Incan site is thought by archaeologists to have been built as an estate for Pachacuti. This site was rediscovered after Hiram Bingham's 1911 Yale Peruvian expedition.

ANSWER: **Machu Picchu** [or **Machu Pikchu**]

[10] According to some sources, Pachacuti began the construction of these storehouses, which would hold crops, meat, wool, and weapons, among other commodities. These structures not only helped to prevent famines in the empire, but also served as reminders to the people of their obligations to the empire.

ANSWER: **qullqas** [or **collicas**]

<World History>