

2022 ACF Fall

Packet I by Editors

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Tossups

1. The oldest example of this instrument is one called the “King” made by Andrea Amati. This instrument and its larger relative use an “eliminator” to remove a “wolf tone,” or resonant frequency, and are the two instruments in its family with a “thumb” position for higher notes often notated in tenor clef. Paul Tortelier (“torr-tell-ee-YAY”) began a trend among players of this instrument of using a hinged or bent endpin to stabilize its weight on the ground. This instrument is tuned in descending fifths from the A below middle C, with its lowest string tuned two octaves below middle C. For 10 points, name this bowed string instrument an octave lower than the viola but higher than the bass.

ANSWER: **cello** [or violon**cello**; accept Amati “King” **Cello**]

<Classical Music>

2. A form of this mineral with a hexagonal lattice, known as lonsdaleite (“LAWNS-day-lite”), is exclusively found in meteorite debris. In 2017, physicists created this mineral while simulating the atmospheres of Uranus and Neptune, where this mineral evaporates and falls down similar to rain. This mineral most often occurs as xenoliths (“ZEN-uh-liths”) in the rock kimberlite. This mineral has a face-centered cubic crystal structure in which each atom is sp³-hybridized. Because this mineral cannot be scratched by any other mineral, it is assigned a 10 on the Mohs scale. Under extreme heat and pressure, this mineral is formed from graphite. For 10 points, name this very hard allotrope of carbon.

ANSWER: **diamond** [reject “carbon” or “C”]

<Other Science>

3. This author wrote about a character who stops a war between two villages by burning all their firearms, gaining the epithet “Breaker-of-Guns.” That character created by this author, Captain Winterbottom, later falls ill after trying to appoint the priest Ezeulu as Warrant Chief. Despite his lazy flute-playing father, a character created by this author gains respect for defeating a man who was nicknamed “the Cat.” In a novel by this author of *Arrow of God*, a yam farmer who beats his wife during the Week of Peace lands a killing blow on his ward Ikemefuna and is eventually exiled from Umuofia. For 10 points, name this Nigerian author who wrote about Okonkwo in *Things Fall Apart*.

ANSWER: Chinua **Achebe**

<World/Other Literature>

4. This thinker differentiated lifestyle-based status groups who depend on honor from classes in the paper “Class, Status, and Party,” which defines class in terms of his concept of life chances. This thinker controversially claimed that Confucianism was free of prophecy in the book *The Religion of China*. This thinker divided authority into traditional, rational-legal, and charismatic types. A book by this thinker argues that predestination turned the church from an enemy into an ally of capitalism. This thinker defined the state as having a “monopoly of the legitimate use of physical force.” For 10 points, name this sociologist who wrote *The Protestant Ethic and the Spirit of Capitalism*.

ANSWER: Max **Weber** (“VAY-bur”) [or Maximilian Karl Emil **Weber**]

<Social Science>

5. A woman who was framed using this substance was forced to relate her sad story outside of a castle for a year. A legendary Norse execution method named for this substance involved pulling a person's lungs out of their back to resemble an eagle. Six maids used this substance to falsely accuse Rhiannon ("hree-ANN-oan") of infanticide. Sigurd used this substance to understand birdsong and make his skin invulnerable. Two dwarves created the mead of poetry by mixing honey with this substance from Kvasir. Joseph of Arimathea ("AIR-ih-muh-thee-uh") used the Holy Grail to collect this substance, which was released along with water by the Lance of Longinus. For 10 points, during the Eucharist ("YOO-kuh-rist"), most Christians equate wine with what substance in Christ's body?

ANSWER: **blood** [or **blóð**; or **fuil**; or **sanguis**; accept human **blood** or dragon **blood** or puppy **blood**; accept **blood** eagle; accept **Blood** of Christ]

<Mythology>

6. During an attack in this present-day state, the first casualty was the free Black man Heyward Shepherd. Mother Jones participated in the largest labor uprising in U.S. history at this state's Battle of Blair Mountain. Robert E. Lee and Jeb Stuart helped capture an abolitionist who led an 1859 raid on an arsenal in this state with the support of Harriet Tubman and funding from the Secret Six. This state was briefly the last slave state admitted to the Union two years after it split off from a larger Confederate state at the 1861 Wheeling Convention. After a failed raid in this state, John Brown was executed. For 10 points, Harpers Ferry is in what coal-rich state governed from Charleston?

ANSWER: **West Virginia** [or **WV**]

<American History>

7. After the 2001 withdrawal of the Catholic Church, this country's Uniting Church became the operator of a supervised injection site. In 2022, this country granted visas to the Murugappan family, who had been denied asylum while living in this country's town of Biloela ("bill-oh-EE-luh"). This country experienced a wildfire named for Currowan as part of its 2019-2020 "Black Summer," one of this country's annual wildfire seasons. In this country, a shooting at Monash University led to the strengthening of gun laws enacted after the Port Arthur shooting under Prime Minister John Howard. For 10 points, the unvaccinated Serbian tennis player Novak Djokovic ("no-vack joe-koh-vitch") was deported from what country with a tennis open held in Melbourne?

ANSWER: **Australia** [or Commonwealth of **Australia**; accept **Australian** Open]

<Current Events>

8. *Description acceptable.* Forces fighting for this cause were defeated by the Austrian marshal Joseph Radetzky at the Battle of Novara. In Great Britain, the Palmerston ministry collapsed when a supporter of this cause attempted to assassinate the French emperor Napoleon III, who later pledged his support to this cause during a meeting at Plombières ("ploam-B'YAIR"). In the early 19th century, this cause was spearheaded by a secret society of "charcoal burners" whose prominent members included Giuseppe Mazzini. The Count of Cavour supported this cause as prime minister of Sardinia. For 10 points, identify this cause that created a kingdom that Victor Emmanuel II eventually led from Rome.

ANSWER: **Risorgimento** [or **Italian unification** or **Unità d'Italia**; accept descriptions of the **creation** of **Italy** or **Italian independence** or equivalents]

<European History>

9. This author wrote a story in which a rogue cowboy angrily decides against killing a sheriff after seeing that the sheriff has just been married. In a novel by this author, a character discovers a decaying body after entering a forest clearing “where the high, arching boughs made a chapel.” This author wrote about a character who joins a “tattered man” to accompany the wounded Jim Conklin as he looks for a place to die. A character created by this author receives a mistaken “war wound” after being butted in the head with a Union rifle. For 10 points, name this author who wrote about Henry Fleming in *The Red Badge of Courage*.

ANSWER: Stephen **Crane** (The story in the first line is “The Bride Comes to Yellow Sky.”)

<American Literature>

10. A derivative of this compound with two chlorine and two fluorine atoms, which is trademarked by DuPont as Freon-12, was the earliest CFC refrigerant. In a reaction called steam reforming, this compound is heated alongside water vapor to produce a mixture known as syngas (“SIN-gas”). This compound is sometimes found in nature in a solid, cage-like hydrate that is nicknamed “fire ice” due to its high flammability. This is the largest component of an odorless mixture to which mercaptan is added so that leaks can be detected. This alkane (“AL-kayn”), which has a tetrahedral geometry, is the primary component of natural gas. For 10 points, name this simplest hydrocarbon, whose formula is CH₄ (“C-H-four”).

ANSWER: **methane** [accept CH₄ until read; prompt on natural gas until read]

<Chemistry>

11. A 2020 translation of this text by Maria Dhavana Headley opens with the word “Bro!” The final member of an ancient race buries treasure during this text’s “Lay of the Last Survivor” section, which is one of its “four funerals.” In this text, a man chases a monster into a lake after the murder of the soldier Aeschere. The Nowell Codex is sometimes named for preserving this text, which describes a character who brags about winning a swimming contest against Breca and obtains the sword Hrunting from Unferth (“un-FAIRTH”). That character in this text rips the arm off of a “descendent of Cain” while protecting the mead hall of King Hrothgar. For 10 points, name this Old English epic about the title king of the Geats, who kills the beast Grendel.

ANSWER: **Beowulf**

<British Literature>

12. This denomination ordained John Mbiti, who advanced controversial theories of how Africans conceive of time in his *African Religions and Philosophy*. Heresy by one of this denomination’s priests in Africa led to its Lambeth Conference, which in 2022 was convened by Justin Welby. Desmond Tutu served in this non-Lutheran Protestant denomination, whose Daily Office is included in the Book of Common Prayer. This denomination’s Choral Evensong and speeches by its leader, the Archbishop of Canterbury, are broadcast by the BBC. For 10 points, King Henry VIII (“the eighth”) founded what Christian denomination named for the most populous country in the United Kingdom?

ANSWER: **Anglican** Communion [accept **Anglican** Church or Church of **England**; accept **Anglican** Church in South Africa; accept **Episcopal** Church or **TEC**] (The second sentence refers to John Colenso.)

<Religion>

13. A form of these devices has a movable arm called a wiper connecting the input wire to a circular strip and shares a name with a type of voltage meter also called a potentiometer (“puh-TEN-shee-AH-meter”). On these devices’ labels, successive colors of the rainbow indicate increasing orders of magnitude for up to six colored bands. When these devices are connected in parallel, their total eponymous value equals one over the sum of each value’s reciprocal. On a circuit diagram, these devices are symbolized by a zigzag line. These devices’ eponymous value multiplies electric current to give the voltage across them by Ohm’s law. For 10 points, name these circuit components that impede the flow of charge.

ANSWER: **resistors** [accept **resistance**; accept variable **resistors**; accept **potentiometers** until read; accept specific types such as thin film **resistors**]

<Physics>

14. The “father” of this country’s archaeology is Julio C. Tello (“TAY-yoh”). John Victor Murra’s “vertical archipelago” theory describes this country’s sea-mountain-forest trade. This country’s Caral Culture was based in its “Norte Chico” region. Michael Moseley’s “maritime foundations” hypothesis states that this country’s civilization developed from rich fisheries supported by the Humboldt Current. This country’s high-altitude *puna* contains the earliest evidence of guanaco and vicuña domestication. This country and an eastern neighbor share the region where potatoes were first domesticated, the Altiplano around Lake Titicaca. For 10 points, name this South American country home to the earliest known alpacas and llamas in the Andes

ANSWER: **Peru** [or Republic of **Peru** or República del **Perú** or **Piruw** Ripuwlika or **Piruwxa** Ripuwlik]

<Other History>

15. At the end of this novel, a group that searches for the body of a hanged man discovers two skeletons in an embrace. In this novel, Pierre Gringoire (“P’YAIR gron-GWAR”) fails to get people to watch his play instead of a parade through town by the Pope of Fools. A corrupt clergyman in this novel begins practicing black magic and frames a character for the stabbing of the Captain of the Archers. That archdeacon in this novel is later pushed off a building after the title character sees that he has handed over the Romani girl Esmeralda to her death. For 10 points, name this Victor Hugo novel about the misshapen Quasimodo, who lives in a medieval French cathedral.

ANSWER: *The **Hunchback of Notre Dame*** [or ***Notre-Dame de Paris***; or ***Our Lady of Paris***]

<European Literature>

16. An organism in this phylum was studied by Craig Mello and Andrew Fire to discover the mechanism of RNA interference. Members of this largest pseudocoelomate (“SOO-doh-SEE-lum-ate”) phylum are protected by a thick cuticle made of collagen. A model organism in this phylum is almost exclusively hermaphroditic, with only 0.1 percent being males. A strain of *E. coli* known as OP50 is grown as food for that model organism in this phylum, which has about 1000 somatic cells. A parasite in this phylum causes trichinosis (“trick-uh-NOH-sis”), which is spread by undercooked pork. This phylum includes the model organism *C. elegans*. For 10 points, name this invertebrate phylum of “roundworms.”

ANSWER: **nematodes** [or **Nematoda**; accept **roundworms** until read]

<Biology>

17. This artist depicted Mary turning from a marble lectern towards a palace in a landscape-oriented painting of the *Annunciation*. A symbolic juniper bush provides the backdrop for this artist's portrait of Ginevra de' Benci. Eight brown tapestries frame both sides of a failed *secco* painting by this artist in which a common eyeline is broken by a man knocking over salt. Jesus holds a glass orb and makes the sign of the cross in this artist's rediscovered painting *Salvator Mundi*. This artist of *The Virgin of the Rocks* painted a deteriorated fresco mural in Milan that depicts Jesus revealing his betrayal to the Apostles. For 10 points, name this master of *sfumato* who painted the *Last Supper* and the *Mona Lisa*.

ANSWER: Leonardo **da Vinci** [or **Leonardo** da Vinci]

<Painting/Sculpture>

18. Miguel Cabello de Balboa disputed a claim that this ruler was captured by the Cañari ("con-YAR-ee") people after he destroyed their city of Tumbamba ("too-may-BOM-bah"). Vincente de Valverde ("vahl-VAIR-day") apocryphally convinced this ruler to convert to Christianity to avoid being burned alive. This ruler's general Quizquiz ("KEEZ-keez") defeated his brother's army at Quipaipán ("kee-pai-PON") to end a bloody civil war. Before ascending to their highest position, this leader assisted Huayna Capac ("WAI-nuh kuh-POCK") to defeat a Caranqui ("kah-RON-kee") rebellion. This leader offered a room full of gold and two rooms of silver as ransom after being captured by Spanish forces at Cajamarca ("cah-hah-MAR-kuh"). For 10 points, Francisco Pizarro executed what final ruler of the Incan Empire?

ANSWER: **Atahualpa** [or variants like **Atawallpa** or **Atabalica** or **Atabalipa**]

<World History>

19. In an emotional song in this musical, characters ask "is there a canopy in store for me?" A clarinet solo in this musical accompanies a scene in which characters place bottles on their hats and begin to dance. Characters argue about whether a man had delivered a horse or a mule in the opening song in this musical, which explains the roles of papas and mamas. In this musical, when a marriage proposal from Lazar ("laser") Wolf is ignored, the tailor Motel exclaims that it is the "Miracle of Miracles." The songs "Sunrise, Sunset" and "Tradition" appear in this musical, which is set in Anatevka in the Pale of Settlement. For 10 points, name this musical about the milkman Tevye and his Jewish family in a Russian shtetl.

ANSWER: ***Fiddler on the Roof***

<Other Fine Arts>

20. This city's bathhouses at Orchard Beach are being restored in its largest park, Pelham Bay. A large former landfill in this city will be converted into Freshkills Park. A landmark in this city was built after the razing of the Black neighborhood of Seneca Village. A body of water known simply as "the Lake" and the Ramble are found in a landmark in this city, whose Great Lawn and Turtle Pond are overlooked by Belvedere Castle. Parks Commissioner Robert Moses renovated many parks in this city, including one designed by Calvert Vaux ("vox") and Frederick Law Olmstead. This city's Flushing Meadows contains both Arthur Ashe Stadium and Citi Field. For 10 points, name this city that contains Central Park.

ANSWER: **New York** City [or **NYC**; accept **Manhattan**]

<Geography>

Bonuses

1. Answer the following about Islamic burial rites, for 10 points each.

[10h] Pandemic precautions have led to younger community members being trained in how to perform a type of this practice called *ghusl*, before bodies are enshrouded. A less intensive form of this practice is called *wudu'*.

ANSWER: **ablution** [or **washing** with water; accept descriptions of **pouring** water or **rubbing** with water]

[10m] Shortly before their death, the dying often say the *Shahada*, a creed that consists of affirming this doctrine alongside affirming that Muhammad is a prophet. This doctrine is referred to as *tawhīd* in Arabic.

ANSWER: **monotheism** [accept the **oneness** of **God**; accept “there is **no god but God**” or “there is **no god but Allah**” or descriptions of there being only **one God** or Allah being the **only god**]

[10e] When Muslims are buried, they are oriented so that the deceased’s head faces towards this city, where Muhammad was born.

ANSWER: **Mecca** [or **Makkah** al-Mukarramah]

<Religion>

2. This work confusingly argues for reincarnation by stating that coming back to life must balance out dying like sleep balances out waking. For 10 points each:

[10h] Name this Platonic dialogue set before Socrates’s execution. It defends the immortality of the soul and the theory of Forms.

ANSWER: ***Phaedo*** [or ***Phaidōn***; accept ***On the Soul***]

[10e] This other dialogue discusses how the souls of the dead are rewarded or punished before reincarnation in the Myth of Er. This dialogue includes the Allegory of the Cave.

ANSWER: the ***Republic*** [or ***Politeia*** or De ***Republica***]

[10m] In the *Republic*, Socrates argues that kings can err in their commands to rebut Thrasymachus’s (“thruh-SIH-muh-kiss’s”) definition of this concept as “the interest of the stronger” in favor of a conception that emphasizes harmony and friendship.

ANSWER: **justice** [or ***dikaíosunē***]

<Philosophy>

3. Barry Marshall won a Nobel Prize after drinking live *Helicobacter pylori* (“pai-LOR-ee”) to prove that the bacterium could cause this condition. For 10 points each:

[10m] Name this condition in which a digestive organ’s protective lining is broken, leading to abdominal pain.

ANSWER: **ulcers** [accept stomach **ulcers** or gastric **ulcers**; accept duodenal **ulcers**; accept peptic **ulcer** disease]

[10e] Ulcers can be treated with inhibitors of proton pumps, which create stomach acid by transporting hydrogen ions across this boundary that separates a cell from its surroundings.

ANSWER: **cell membrane** [or **plasma membrane**; prompt on **membrane**]

[10h] Other than its use as an abortifacient, the drug misoprostol (“mee-soh-PRAH-stul”) is used to prevent ulcers from developing in patients who are taking this class of pain-relieving drugs that includes aspirin and ibuprofen.

ANSWER: **NSAIDs** (“en-sedz”) [or **non-steroidal anti-inflammatory** drugs]

<Biology>

4. In the fifth part of a novel by this author, the relationship between the student and Kristyna prompts a reflection about *lítost*, an untranslatable word that describes a type of suffering. For 10 points each:

[10m] Name this author who described Tomáš's rebellion against the idea that only having a single life makes it meaningless in the novel *The Unbearable Lightness of Being*.

ANSWER: Milan **Kundera**

[10e] This country was the birthplace of Milan Kundera and writer Václav Havel ("VAHT-slav hah-vell"), who later became its president. Kundera set many of his novels in this country's capital of Prague.

ANSWER: **Czechoslovakia** [or **Československo**; accept **Czech** Republic or **Czechia** or **Česká** republika]

[10h] In *The Unbearable Lightness of Being*, Sabina often wears one of these items that belonged to her grandfather while engaging in trysts with Tomáš.

ANSWER: black **bowler hat** [prompt on black **hats**]

<European Literature>

5. The British archaeologist Gertrude Bell served as an advisor to one of this kingdom's rulers. For 10 points each:

[10h] Name this kingdom whose first leader was Faisal I ("fay-ZALL the first"). The Hashemite ("HASH-uh-mite") dynasty ruled this kingdom until it was overthrown in a 1958 coup d'état.

ANSWER: **Iraq** [or Kingdom of **Iraq** or al-Mamlakah al-'**Irāqīyah** 'al-Hāshimīyah]

[10m] Bell was nicknamed the "female" version of this British officer, who worked with Faisal I to help organize the Arab Revolt during World War I. This author wrote the best-selling autobiography *Seven Pillars of Wisdom*.

ANSWER: T. E. **Lawrence** [or Thomas Edward **Lawrence** [accept **Lawrence** of Arabia]

[10e] Bell's pro-Arab sympathies led her to criticize the Balfour Declaration, which promised British support for this movement that advocated a Jewish homeland in the Middle East.

ANSWER: **Zionism** [or word forms such as the **Zionist** movement; or **Tsiyyonut**; prompt on descriptions of the creation of **Israel**]

<World History>

6. A character agrees to abandon one of these things if another character would "call [him] but love." For 10 points each:

[10h] Name these things that are noted to be "nor hand, nor foot, nor arm, nor face." A character in a play would supposedly "retain that dear perfection which he owes" even without one of these things.

ANSWER: **names** [accept given **names** or first **names** or family **names** or last **names** or surnames; prompt on **Romeo** or **Montague** or **house** or **family** by asking "what specific things are being described by the quotes?"]

[10e] Juliet laments Romeo's name because he is a member of this family, which has a bitter feud with her family, the Capulets.

ANSWER: **Montagues**

[10m] *Romeo and Juliet* opens with a fight breaking out when Sampson performs this insulting gesture at Abram. This insulting gesture was comparable to flipping someone off.

ANSWER: **biting** his **thumb** [or equivalents such as **thumb biting** or **biting** his **thumb** toward Abram; accept "Do you **bite** your **thumb** at us, sir?"; prompt on descriptions of **biting** a finger]

<British Literature>

7. The most common use of the decibel scale is to measure this phenomenon's intensity. For 10 points each:

[10e] Name this phenomenon that propagates through air in the form of longitudinal waves.

ANSWER: **sound** [accept **sound** waves]

[10h] Sound waves consist of high-density crests known as compressions along with low-density troughs ("troffs") known by this term.

ANSWER: **rarefactions** ("rare-uh-factions")

[10m] In this process, the crests and troughs of two sound waves overlap, canceling each other out. This process may result in "dead zones" where no sound can be heard.

ANSWER: **destructive interference** [prompt on **interference**; reject "constructive interference"]

<Physics>

8. Answer the following about long driving scenes in world cinema, for 10 points each.

[10e] The Oscar-winning 2021 film *Drive My Car* is set in this country. Earlier directors from this country include Yasujiro Ozu and *Seven Samurai* director Akira Kurosawa.

ANSWER: **Japan** [or **Nippon**-koku or **Nihon**-koku]

[10m] A long take of a traffic jam leading up to a car accident appears in *Week End*, a film by this director who died in September 2022. This pioneer of the French New Wave used many jump cuts in his first film, *Breathless*.

ANSWER: Jean-Luc **Godard**

[10h] Long shots of driving alternate with conversations about suicide in *Taste of Cherry*, a film from this country by Abbas Kiarostami. An Oscar-winning filmmaker from this country directed *A Separation* and *The Salesman*.

ANSWER: **Iran** [or Islamic Republic of **Iran** or Jomhuri-ye Eslâmi-ye **Irân**; prompt on **Persia**] (The second director is Asghar Farhadi.)

<Other Fine Arts>

9. The Transatlantic accent, which was common in early 20th-century television and film, mixed an accent from this country with one from America. For 10 points each:

[10e] Name this country whose high-class Received Pronunciation accent is most common in university towns like Oxford or Cambridge.

ANSWER: **United Kingdom** [or **UK**; or Great **Britain**; or **United Kingdom** of Great Britain and Northern Ireland; accept **England**; accept **British** accent]

[10h] When the letter "r" is devoiced in Received Pronunciation, it has this manner of articulation in which air is forced through a narrow gap at the place of articulation. Sibilants are a subtype of this kind of sound.

ANSWER: **fricative** [accept **frication**]

[10m] One of these sounds found in the American English word "tour" has merged with the vowel sound in "door" in Received Pronunciation. These sounds are formed by combining two vowels in one syllable.

ANSWER: **diphthongs** [or **gliding vowels**; reject "glides" or "semivowels"]

<Social Science>

10. This semi-legendary man was exiled after proposing that the plebs give up their representation in exchange for grain. For 10 points each:

[10h] Name this man who then defected to the Volsci and attacked Rome. According to Livy, he spared Rome only due to the pleas of his two sons, wife Volturna, and mother Veturia at his tent, a scene depicted by Shakespeare.

ANSWER: Gnaeus Marcius **Coriolanus** [or Gaius Marcius **Coriolanus**; prompt on **Marcus**]

[10m] In Plutarch's *Parallel Lives*, Coriolanus is paired with this Greek who betrayed the Sicilian Expedition in the Peloponnesian War after being arrested. After returning to Athens, he was soon exiled again and defected to Persia.

ANSWER: **Alcibiades**

[10e] Coriolanus's capture of Corioli from the Volsci and his attack on Rome both occurred in a conflict between the Volsci and a "league" of this ethnic group, led by Rome. This group shares its name with ancient Rome's language.

ANSWER: **Latins** [accept **Latinum** or lingua **Latina**; accept **Latin** League or Foedus **Latinum**]

<Other History>

11. Like his friend and rival Barbara Hepworth, this artist's sculptures often feature curved forms and pierced torsos. For 10 points each:

[10h] Name this British sculptor of *Atomic Energy*, who was inspired by Mayan chacmools to create the series *Reclining Figures* over five decades.

ANSWER: Henry **Moore** [or Henry Spencer **Moore**]

[10e] Moore's sculptures fall under this broad category of art that does not attempt to represent reality. Jackson Pollock was part of an American movement named for this kind of "expressionism."

ANSWER: **abstract** art [accept **abstract** expressionism]

[10m] Moore's *Atomic Energy* is located on a university campus near this city. Other public sculptures in this city include a large, jackal-like Picasso sculpture and an Anish Kapoor work made of stainless steel.

ANSWER: **Chicago**

<Painting/Sculpture>

12. Answer the following about the very busy cast of Netflix's *Sex Education*, for 10 points each.

[10h] This actor plays Eric Effiong, who explores Nigeria's underground gay scene while attending a family wedding. This actor is set to play the next regeneration of the Doctor in *Dr. Who*, after Jodie Whittaker.

ANSWER: Ncuti **Gatwa** ("SHOO-tee GAT-wah") [or Mizero Ncuti **Gatwa**]

[10m] Simone Ashley, who plays Olivia, portrayed Kate Sharma on the second season of this Netflix and Shondaland show. In this show's first season, the Duke of Hastings marries Daphne, a member of the title family.

ANSWER: **Bridgerton** [accept Daphne **Bridgerton**]

[10e] Gillian Anderson, who plays Otis's sex therapist mother Jean, won an Emmy for her appearance playing this "Iron Lady" and 1979-1990 UK prime minister in *The Crown*.

ANSWER: Margaret **Thatcher** [or Margaret Hilda **Thatcher** or Margaret Hilda **Roberts**]

<Pop Culture>

13. Caleb Cheeshahteumuck (“CHEE-shuh-TEE-uh-muck”), a resident of this school’s “Indian College,” became its first Native American graduate in 1665. For 10 points each:

[10e] Name this oldest institution of higher learning in the U.S., which is located in Cambridge, Massachusetts.

ANSWER: **Harvard** University [accept **Harvard** College]

[10h] Cheeshahteumuck was a member of this tribe, whose name means “People of the First Light.” Its leaders included Massasoit and Metacom.

ANSWER: **Wampanoag** [or **Wôpanâak**]

[10m] Increase, a member of this family, served as president of Harvard in the late 1600s. Another member of this family, Cotton, defended the Salem Witch Trials in his book *Wonders of the Invisible World*.

ANSWER: **Mather** [accept Cotton **Mather**; accept Increase **Mather**]

<American History>

14. For 10 points each, answer the following about different “merges” in computer science.

[10e] Merge is a divide-and-conquer algorithm for this task, which puts some collection of elements in order.

ANSWER: **sorting** [accept merges**ort**]

[10h] In the Git version control software, merge is used to combine commits made on these entities. The checkout command is used to switch between these entities.

ANSWER: **branches**

[10m] The merge command is used in a “structured” language to insert, update, or delete in the relational type of these systems. Transactions in these systems should obey the ACID (“acid”) properties.

ANSWER: **databases** [or **DBs**; accept relational **databases**] (The language is Structured Query Language, or SQL.)

<Other Science>

15. Answer the following questions about the musical relationships of composer Johann Nepomuk Hummel, for 10 points each.

[10e] Hummel’s piano quintet probably inspired the instrumentation of Schubert’s later *Trout Quintet*, both of which atypically used this lowest common stringed instrument in place of a second violin.

ANSWER: **bass** [accept double **bass** or contrabass or upright **bass** or string **bass**]

[10h] As Joseph Haydn’s health declined, Hummel replaced him in 1804 as the master of concerts for this Hungarian noble family. Haydn worked for this family for most of his life.

ANSWER: **Esterházy** family [or House of **Eszterházy**]

[10m] In 1813, Hummel married the singer Elisabeth Röckel, who was the possible dedicatee of this Beethoven piece often played by beginner pianists. This A minor bagatelle starts with its main [read slowly] “E D-sharp E D-sharp E” motif.

ANSWER: “**Für Elise**” [accept Bagatelle No. **25**]

<Classical Music>

16. In retaliation for facilitating an offensive by these people, the priestess Tarpeia was crushed to death with shields, inaugurating her namesake place of execution. For 10 points each:

[10h] Name these people whose king Titus Tatius implemented the worship of Ops and Sol. Janus created a hot spring to protect these people during the inaugural Consualia festival.

ANSWER: **Sabines**

[10e] Tatius co-ruled with this man, who was later deified as Quirinus and who ordered the Rape of the Sabine Women. This legendary first king of Rome ward off the ghost of his twin Remus with a bean-throwing festival.

ANSWER: **Romulus**

[10m] After being promoted by Romulus, the Sabine goddess Ops later became syncretized as a consort of this god, the father of Vesta. During this god's annual festival, slaves wore pileus caps and switched places with their masters.

ANSWER: **Saturn** [accept **Saturnalia**; prompt on **Cronus** or **Kronos**]

<Mythology>

17. This type of creature “can seldom see through his bars of rage” and “stands on the grave of dreams.” For 10 points each:

[10h] Name this type of creature that is contrasted with one that thinks of “trade winds soft through the sighing trees.” This type of creature “is heard on the distant hill” for it “sings of freedom.”

ANSWER: **caged bird** [accept “I Know Why The **Caged Bird** Sings”; prompt on **bird** or **avian**]

[10e] This African-American poet wrote “I Know Why the Caged Bird Sings” and declared “I am the dream and the hope of the slave” in “Still I Rise.”

ANSWER: Maya **Angelou** [or Marguerite Annie **Johnson**]

[10m] Angelou's poem “On the Pulse of Morning” was written for one of these events. “The Hill We Climb,” a poem that was written for one of these events, asks “where can we find light in this never-ending shade?”

ANSWER: U.S. **presidential inaugurations** [accept **presidential inauguration** of Bill Clinton or Joe Biden; prompt on **inaugurations**]

<American Literature>

18. Answer the following about cleaning organic laboratory glassware, for 10 points each.

[10m] Most glassware is easily cleaned with this polar aprotic (“ay-PRO-tick”) solvent. This compound, which consists of a carbonyl (“car-buh-NEEL”) group bonded to two methyls, is the simplest ketone (“KEE-tone”).

ANSWER: **acetone** [or 2-**propanone**; prompt on **dimethyl ketone**]

[10e] Stained glassware is soaked overnight in baths named for these two substances. Chemicals are classified as these two substances depending on if their pH is above or below seven.

ANSWER: **acids** AND **bases** [accept **acid** baths in place of “acids”; accept **base** baths in place of “bases”; accept answers in either order]

[10h] Unremovable organic matter can be destroyed with piranha solution, a mixture of this compound and sulfuric acid. This UV-sensitive compound is degraded by catalase (“CAT-uh-laze”).

ANSWER: **hydrogen peroxide** [or **H₂O₂** (“H-two-oh-two”); prompt on **peroxide**]

<Chemistry>

19. A militant “Social and Political Union” that supported this movement was run by the Pankhurst family. For 10 points each:

[10e] Identify this cause advocated by feminists like Millicent Fawcett. A 1918 law represented a victory for this movement by allowing a disenfranchised group to pick their representatives in Parliament for the first time.

ANSWER: **women’s suffrage** [accept **suffragette** movement or descriptions of the movement to grant **women** the right to **vote**]

[10h] Many British suffragettes who were arrested for vandalism protested their imprisonment by engaging in this practice. The “Cat and Mouse” Act was meant to reduce the efficacy of this practice.

ANSWER: going on **hunger strikes** [accept **fasting** or a **refusal** to **eat** or equivalents]

[10m] Emily Davison, another leader of the suffragette movement, was run over by a horse owned by the fifth king of this name. The first king of this name was the first British king from the house of Hanover.

ANSWER: **George** [accept **George** I or **Georg** Ludwig; accept **George** V or **George** Frederick Ernest Albert]
<European History>

20. A poem by this author inspired the title of Richard Flanagan’s novel about the Australian prisoner of war Dorrigo Evans. For 10 points each:

[10h] Name this author who compared and commented on poems by 36 different authors in an anthology based on a children’s game. This author took his pen name from the banana tree outside his home.

ANSWER: Matsuo **Bashō** [or **Matsuo** Bashō; or **Matsuo** Kinsaku or **Matsuo** Chueemon Munefusa] (The anthology is *The Seashell Game*.)

[10e] Bashō is considered the foremost master of this Japanese poetic form that uses a “cutting word” and consists of three lines of five, seven, and five syllables.

ANSWER: **haiku** [accept **hokku**]

[10m] Allen Ginsberg’s translation of a Bashō haiku about one of these animals uses the word “Kerplunk!” to represent a splash. One of these animals named Dan’l Webster is force-fed quail shot in a story by another author.

ANSWER: **frog** [accept Bashō’s **frog** haiku; accept “The Celebrated Jumping **Frog** of Calaveras County”; prompt on **amphibians**] (Mark Twain wrote “The Celebrated Jumping Frog of Calaveras County.”)

<World/Other Literature>