#### 2020 ACF Fall

#### Packet B by McMaster A, NYU A, UNC B

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### Tossups

1. This ruler mandated that four-footed animals could only be killed for food, and that his royal kitchen could only kill two peacocks a day. This ruler commissioned a structure that was designed to look like a garden, but was actually a torture chamber. During a series of conquests, this man's forces supposedly made the Daya River turn red with blood. That conquest, known as the Kalinga ("kuh-LIN-guh") War, caused this ruler to reject his more violent ways. After converting religions, this ruler built thousands of stupas ("STOO-puhs"), many of which depict his namesake *chakra*: a wheel with 24 spokes. For 10 points, name this grandson of Chandragupta, a ruler of the Mauryan Empire who spread Buddhism across India.

ANSWER: <u>Ashoka</u> the Great [or <u>Ashoka</u> Maurya; or <u>Priyadasi</u>] <World History>

2. This writer cited Moses, Cyrus, Theseus, and Romulus as "armed prophets" who needed violence to implement their reforms. This philosopher illustrated his idea of *virtu* with episodes from Roman history in a commentary on the first ten books of *Ab Urbe Condita* ("ob OOR-bay con-DEE-tuh"). Jean-Jacques Rousseau interpreted this author's most famous text as a satire, claiming his "love of freedom" was evidenced in his *Discourses on Livy*. This philosopher claimed that the title figure must be violent like a lion and cunning like a fox in a treatise that he dedicated to Lorenzo the Magnificent. For 10 points, name this Florentine thinker who wrote that it was "better to be feared than loved" in *The Prince*.

ANSWER: Niccolò <u>Machiavelli</u> <Philosophy/Social Science>

3. The speaker of this poem describes a "magic lantern" that "threw the nerves in patterns on a screen." This poem's author temporarily filled in four blank pages with a section they called a "Pervigilium." This poem's epigraph refers to a "tongue of flame" that "ceases to flicker" in a passage borrowed from Dante's *Inferno*. At the end of this poem, the title character hears "the mermaids singing each to each," but does "not think that they will sing to me." This poem's speaker reluctantly ponders questions such as, "do I dare to eat a peach?" and "do I dare disturb the universe?" The refrain "in the room the women come and go, / talking of Michelangelo" appears in, for 10 points, what poem by T. S. Eliot?

ANSWER: "The <u>Love Song of J. Alfred Prufrock</u>" [prompt on <u>Prufrock</u>] <American Literature>

4. This monarch created the Chastity Commission to address immoral behaviors. Vampires in Moravia were investigated by this ruler's physician Gerard van Swieten ("GAIR-ard vawn SVEE-ten"). This leader's longtime chancellor, the Prince of Kaunitz, spearheaded a reversal of European alliances by allying with France in the Diplomatic Revolution of 1763. This leader was forced to cede Silesia in the Treaty of Aix-la-Chapelle ("ex-la-sha-PELL"). This ruler's father Charles VI asked for European powers to respect her legitimacy in the Pragmatic Sanction, which was ignored by Frederick the Great. Her children included Joseph II and Marie Antoinette. For 10 points, name this empress whose ascension sparked the War of Austrian Succession.

ANSWER: <u>Maria Theresa</u> <European History>

- 5. A piece in this form dedicated to Johann Tost features a prominent first movement violin solo on the E string and is known as "Lark." The second movement of another piece in this genre consists of variations on the hymn "Gott erhalte ("air-HALL-tuh") Franz den Kaiser," whose tune was appropriated for the German national anthem. Six of these pieces were dedicated to Count Erdödy ("AIR-der-dee"), one of which was nicknamed "Emperor." Like the symphony, this form's early development is credited to Franz Joseph Haydn, who is known as its "father." For 10 points, name this genre of chamber music performed by an ensemble that includes two violins, a viola, and a cello. ANSWER: string quartets [accept string quartets by Franz Joseph Haydn; prompt on quartets] <Classical Music>
- 6. This organ is separated into lobes by the oblique fissure. This organ contains most of the body's ACE, an enzyme that converts angiotensin I to angiotensin II. Type II cells in this organ produce a phospholipid called DPPC that can act as a surfactant. Two pleural membranes surround this organ and exert a negative pressure on it. Blood from the heart enters this organ through the only arteries that carry deoxygenated blood. The diaphragm controls the expansion and contraction of this organ. A network of capillaries facilitates gas exchange in this organ's alveoli. For 10 points, name this large respiratory organ.

ANSWER: lungs <Biology>

7. This politician's father and brother were both named Thomas D'Alesandro ("dell-us-SAHN-dro") and both served as mayor of Baltimore. This politician was criticized after an April 2020 interview with James Corden that featured a freezer full of ice cream. After the 2016 elections, Tim Ryan launched an unsuccessful leadership challenge against this politician, who after the 2018 elections regained an office they had lost to John Boehner. In 2020 this Californian tore up a copy of Donald Trump's State of the Union address several weeks after she oversaw his impeachment. For 10 points, what Democratic congresswoman is the Speaker of the House? ANSWER: Nancy **Pelosi** ("peh-LOH-see")

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

8. In a work by this author, Pelasgus manipulates the assembly into allowing the daughters of Danaus ("DAN-ay-us") into Argos. Another work by this author begins with a watchman spotting a lit beacon that heralds the end of a war. In a play by this author, a woman encourages her husband to walk on purple tapestries after he returns home with the captive Cassandra. The Chorus refuses to bow to Aegisthus ("ay-JISS-thuss") at the end of that play by this author, which forms a trilogy with Libation-Bearers and Eumenides ("yoo-MEN-id-eez"). For 10 points, name this Athenian tragic playwright who depicted the murderous Clytemnestra in Agamemnon, the first play in his trilogy *Oresteia* ("oh-rest-AY-ah").

ANSWER: **Aeschylus** ("ESS-kuh-luss")

<World/Other Literature>

9. In Hinduism, this practice, along with education under a guru, defines the first of the four stages of life called ashrama. Paul recommends this practice as an ideal in a passage asserting "I wish all were as I myself am." The fourth of the five major Jain vows is to follow this practice, denoted by the term brahmacharya. After the Second Vatican Council, the Catholic Church revived the diaconate as an institution exempt from the requirement for this practice. This practice was mandatory for all members of the Shaker sect. For 10 points, identify this requirement for monks and nuns in Buddhism and Christianity, a religiously-significant state of sexual abstinence.

ANSWER: <u>celibacy</u> [or <u>chastity</u>; accept clerical <u>celibacy</u>; or descriptions like <u>abstaining</u> from <u>sex</u>ual activity; accept *brahmacharya* until read]

<Religion>

10. A common method of strengthening this material involves submerging it in a potassium nitrate solution to replace sodium ions with potassium ions. The "Vaseline" type of this material is named due to its pale yellow-green color that arises due to traces of uranium. A form of this material that contains no impurities and has high working and melting temperatures is known as fused quartz. A heat-resistant form of this material results from the addition of boron trioxide and is commonly sold as Pyrex. Acetone is often used to rinse laboratory equipment made of, for 10 points, what amorphous solid usually made from transparent silicates?

ANSWER: **glass** < Chemistry>

11. Henry Williams converted many of these people to Christianity and helped translate a treaty that gave another power the right of pre-emption to these people's lands. These people unsuccessfully revolted in the bloodless Dog Tax War. During the Boyd Massacre, these people targeted the Pākehā ("PAH-keh-HAH"), or white colonizers. A series of civil wars between these people was known as the Musket Wars, while another conflict involving them broke out in 1845 when Hōne Heke cut down a British flagpole in Northland. William Hobson persuaded these people to sign the Treaty of Waitangi. For 10 points, name these indigenous people of New Zealand.

ANSWER: <u>Māori</u> <Other History>

12. One work by this artist is dominated by a black sky, in which a small moon is visible over a fading sunset. A wartime series by this artist includes images of women doing calisthenics. This artist was inspired by Paul Strand to move away from the Pictorialist style, and he later developed the Zone system for composing photographs. Along with Dorothea Lange, this photographer is famous for documenting life at the Japanese internment camp Manzanar. This photographer of *Moonrise, Hernandez, New Mexico* was one of the founders of the group f/64 ("F-stop-sixty-four"). For 10 points, name this American photographer best known for his pictures of Yosemite National Park.

ANSWER: Ansel Adams

<Other Arts>

13. A character with this surname is celebrated after delivering the "Speech at the Stone" at a local schoolboy's funeral. Another character with this surname has a sensualist son from his first marriage with Adelaida Ivanovna Miusov ("MEE-yoo-sov"). A character with this surname narrates a story in which Jesus kisses the man who has arrested him, "The Parable of the Grand Inquisitor." After attempting to run away with Grushenka, a character with this surname is convicted of using a brass pestle to murder his father, Fyodor. For 10 points, give this surname of Dmitri, Ivan, and Alyosha, the title brothers of a novel by Fyodor Dostoyevsky.

ANSWER: <u>Karamazov</u> [accept *The Brothers <u>Karamazov</u>*] <European Literature>

14. This concept names a form of "materialism" pioneered by Marvin Harris in *The Rise of Anthropological Theory*. Kenneth Pike developed his emic-etic distinction to classify accounts of this concept. A thinker wrote that this concept was the "web of significance" that man himself spins. A model of adapting to this concept includes the "honeymoon" phase and continues onto a namesake "shock." This concept was defined as "personality writ large" in a text titled for its "Patterns," and the author of that text also classified some of them into "guilt" and "shame" varieties. For 10 points, name this concept studied by Ruth Benedict, the set of norms and beliefs that define a society.

ANSWER: <u>culture</u> [accept <u>cultural</u> materialism, *Patterns of <u>Culture</u>*, or guilt and shame <u>culture</u>s] <Philosophy/Social Science>

15. In Einstein's tensor notation, the identity element for this operation is represented by the Kronecker delta. If a matrix has a full eigenspace, it can be represented by this operation on a modal matrix, a diagonal matrix, and the modal matrix's inverse. Performing this operation on a matrix and its inverse returns a matrix with ones along the diagonals and zeroes elsewhere. For matrices A and B, this non-commutative operation can only be done if the number of columns of A equals the number of rows of B. For 10 points, name this operation that, when applied to a matrix and itself, gives the matrix squared.

ANSWER: matrix <u>multiplication</u> [or matrix <u>product</u>; do not accept or prompt on "dot product," "inner product," or "scalar multiplication"]

<Other Science>

16. One justice in this case claimed that the founders had intended for a "perpetual and impassable barrier" between two groups. In his dissent in this case, John McLean referenced how the Northwest Ordinance had never been struck down. The plaintiff of this case originally filed it against John Emerson after he married Harriet Robinson and lived briefly in Wisconsin. An Illinois senator formulated the Freeport Doctrine to reconcile this ruling with popular sovereignty. This case invalidated the Missouri Compromise and was written by chief justice Roger Taney ("TAW-nee"). For 10 points, what 1857 case ruled that African Americans could not exercise the rights of US citizens?

ANSWER: <u>Dred Scott</u> v. Sandford [or <u>Dred Scott</u> v. John F. A. Sandford] <American History>

17. In a painting by this artist, an elderly figure representing time carries a woman representing truth to heaven, where a king reunites with his mother. This man's work *Bathsheba at the Fountain* used his second wife, Helena Fourment, as a model. In works like *The Garden of Eden with the Fall of Man*, this artist collaborated with Jan Bruegel the Elder. In a painting by this artist of *The Triumph of Truth*, peacocks watch from the clouds as cherubs present a man with a portrait of his future wife. This painter showed a woman disembarking at Marseille in one of the 24 paintings in his Marie de' Medici cycle. For 10 points, name this Flemish artist known for painting fleshy nudes.

ANSWER: Peter Paul **Rubens** <Painting/Sculpture>

18. Two chimeric ("kye-MAIR-ick") creatures with giraffe-like necks thought to be a combination of these animals and leopards are depicted at the center of the Narmer Palette. One goddess with the head of this animal was the patron of Lower Egypt and was portrayed with the vulture goddess Nekhbet ("NEK-bet") as one of the "Two Ladies." That goddess, Wadjet ("WAH-jet"), was portrayed with the sun disk as an emblem on the crowns of Egyptian pharaohs. After being attacked by one of these animals, Ra was forced to reveal his true name to Isis. One of these animals was created from the spit of Neith ("neeth") and fought Set while attacking the solar barge each night. Apep was depicted as, for 10 points, what legless reptile?

ANSWER: **snake** [or **serpent**; accept **cobra**; accept **serpopard**s] <Mythology>

19. A character in this novel dies of yellow fever after being stationed as governor in Coventry Island. Another character in this novel decides to "be [her] own Mamma," which is symbolised by her acting as Clytemnestra during a game of charades. That character in this novel seduces the Marquis of Steyne ("stain") to gain money from him. In this novel, a student of Miss Pinkerton expresses her support of Napoleon. George Osborne is killed at the Battle of Waterloo in this novel, although the protagonist's husband, Rawdon Crawley, survives. For 10 points, Becky Sharp is often considered the "anti-heroine" of what "novel without a hero" by William Makepeace Thackeray?

ANSWER: *Vanity Fair* <br/>
<British Literature>

20. Holding constant this process's namesake coefficient, which has units of area over time, results in the heat equation. Albert Einstein showed that without convection, this process leads to a mean-squared displacement that increases linearly with time, consistent with a random walk model. In that paper, Einstein described Brownian motion as an example of this process. When this process is not anomalous, Fick's first law states that its flux is proportional to the negative gradient of particle density. For 10 points, name this random motion of particles from regions of high concentration to low concentration.

ANSWER: <u>diffusion</u> [or word forms such as <u>diffusing</u>; accept <u>Brownian</u> motion until it is read; prompt on <u>random</u> <u>walk</u> until it is read]

<Physics>

#### Bonuses

- 1. This woman's identity is unknown, though she may have been the wife of Count Hugues de Sade ("oog duh sod"). For 10 points each:
- [10] Give the first name of this woman. Extensive love poetry dedicated to this woman is found in a collection referred to as "Scattered Rhymes" that was written in the early 1300s.

ANSWER: Laura [accept Laura de Noves]

[10] This author wrote love poetry to Laura. This author's wide travels, including an ascent of Mont Ventoux ("von-TOO"), have led to them being described as "the first tourist."

ANSWER: **Petrarch** [or Francesco **Petrarca**]

[10] Petrarch is credited with coining this historical term, now considered inaccurate. In describing the early Middle Ages, this term contrasts the "lightness" of classical antiquity with its deterioration after the fall of Rome.

ANSWER: "<u>Dark</u> Ages" <European Literature>

- 2. The Pillars of Creation in the Eagle Nebula are a major site for the formation of these bodies. For 10 points each:
- [10] Name these bodies created by cloud collapse. When their "proto-" phase ends, these bodies begin to move along the Hertzsprung–Russell diagram and can eventually become white dwarfs or red giants.

ANSWER: stars

[10] After the protostar phase, stars under 0.3 solar masses will travel along Hayashi tracks until reaching this continuous band along the HR diagram. Stars in this band have luminosity class V ("five").

ANSWER: main sequence

[10] Stars traveling along Hayashi tracks are named for this constellation's T star, which can be found in the Hyades ("HY-uh-deez") open cluster in this constellation.

ANSWER: <u>Taurus</u> <Other Science>

- 3. A series of paintings by Jacob Lawrence depicts this process. For 10 points each:
- [10] Name this process in which many African Americans moved from the South to Northern cities in the years after World War I. The Chicago race riot occurred in response to this process.

ANSWER: First **Great Migration** [prompt on <u>Migration</u> or <u>Migration</u> Series]

[10] This term describes a period of intense racial backlash to the First Great Migration. The Chicago "race riots" and massacres in Elaine, Arkansas, occurred during this period.

ANSWER: Red Summer of 1919

[10] The Great Migration helped spark the Harlem Renaissance, a period of cultural effervescence for African Americans that mostly took place in this decade.

ANSWER: 1920s [accept the Roaring Twenties]

<American History>

- 4. The first act of this opera begins with a chorus of exiled Palestinians, who take off their outer garments to become exiled Jews. For 10 points each:
- [10] Name this opera about the 1985 hijacking of the *Achille Lauro*. A 2014 production at the Met garnered news coverage due to protests about its alleged antisemitic message.

ANSWER: The **Death of Klinghoffer** 

[10] This composer of *The Death of Klinghoffer* also composed the operas *Doctor Atomic* and *Nixon in China*.

ANSWER: John Coolidge Adams

[10] Adams's composition *On the Transmigration of Souls*, which won the 2003 Pulitzer Prize for Music, was written as a "memory space" to commemorate this 2001 event that killed over 2,700 people in New York.

ANSWER: <u>September 11th</u> attacks [or <u>9/11</u>; or equivalents like the <u>Twin Towers</u> or <u>World Trade Center</u> attacks] <Other Arts>

- 5. Every morning in this country's historic capital of Luang Prabang, Buddhist monks take to the streets to collect alms of rice. For 10 points each:
- [10] Name this southeast Asian country whose capital is Vientiane ("vee-en-tee-ON"). It lies between Thailand and Vietnam and is north of Cambodia.

ANSWER: <u>Laos</u> ("louse") [or <u>Lao</u> People's Democratic Republic]

[10] Luang Prabang lies on this river that also flows through Phnom Penh ("p'nom PEN") in Cambodia.

ANSWER: Mekong River [or Mekong Delta]

[10] This ethnic group makes up 10 percent of Laos's population. Because they allied closely with American anticommunist efforts, many of these people fled to the US after the 1970s.

ANSWER: **Hmong** people ("mung") [accept **Mong**; prompt on Miao]

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

- 6. The eldest sons of the Eurypontid ("yoo-rih-PON-tid") and Agiad ("AY-jee-ud") families were exempted from this program. For 10 points each:
- [10] Name this education system in which young boys were raised in harsh conditions and encouraged to steal and murder in order to produce strong, militaristic citizens.

ANSWER: agoge ("ah-GO-gay")

[10] The agoge system was created by Lycurgus in this Greek city-state. It defeated Athens in the Peloponnesian War.

ANSWER: Sparta

[10] Sparta was served by this slave class, who revolted in the Messenian Wars. The Krypteia ("krip-TEE-uh") was a secret police encouraged by the Spartan government to attack these people.

ANSWER: **helot**s < Other History>

- 7. William Congreve wrote *The Way of the World* during this literary period. For 10 points each:
- [10] Name this period whose sexually explicit comedies often include rakish male characters. It coincides with, and is named after, the period of English history in which Stuart monarchs were returned to the throne.

## ANSWER: **Restoration**

[10] This author included the rakish naval captain Willmore in her play *The Rover*. This author, who wrote under the pseudonym Astrea, was one of the first English women to earn a living from writing, and was employed as a spy in Antwerp by Charles II.

ANSWER: Aphra Behn

[10] Restoration-era comedy of manners was later revived by this playwright with *The School for Scandal*. This playwright also created the character of Mrs. Malaprop in *The Rivals*.

ANSWER: Richard Brinsley Sheridan

<British Literature>

- 8. This woman is abandoned on a mountain after an oracle foretells that she will marry a creature feared by even Jupiter. For 10 points each:
- [10] Name this gorgeous woman whose story is told in Lucius Apuleius's *The Golden Ass*. When this woman is worshipped in place of the goddess Venus, the love goddess jealously sends her son to punish her.

ANSWER: **Psyche** ("SIGH-kee")

[10] This son of Venus falls in love with Psyche after scratching himself with his own arrow. When Psyche tests if this god is actually a fearsome monster and accidentally injures him, this god of love flees in disappointment.

ANSWER: **Cupid** [accept **Eros**]

[10] When Psyche tries to repent by serving Venus, she is told to retrieve a box of beauty from this woman. In another myth, Ascalaphus entraps this woman by revealing that she had eaten pomegranate seeds.

ANSWER: **Persephone** ("purr-SEH-foh-nee")

<Mythology>

- 9. Answer the following about the fine structure constant, for 10 points each.
- [10] Arnold Sommerfeld introduced the constant to quantify the splitting of energy levels in this model. This model, named for its Danish inventor, predicts that the atom consists of a nucleus orbited by electrons in discrete shells.

ANSWER: **Bohr** model [or Rutherford–**Bohr** model of the atom]

[10] The fine structure constant characterizes the strength of this force, which is the second-strongest of the fundamental forces at low energy scales.

ANSWER: <u>electromagnetism</u> [or the <u>electromagnetic</u> force or <u>electromagnetic</u> interaction; prompt on <u>EM</u>] [10] The fine structure constant is dimensionless, and has the same value in any unit system. Its value is usually approximated as 1 over this integer.

ANSWER: <u>137</u> <Physics>

- 10. In *Death in the Sickroom*, this artist showed his just-deceased sister in a chair facing away from the viewer, while the rest of their family gathers in mourning. For 10 points each:
- [10] Name this painter who depicted his sister Sophie while she was suffering from tuberculosis in *The Sick Child*, in which she appears propped up in a bed while a relative clasps her hand.

ANSWER: Edvard Munch

[10] Edvard Munch included *Death in the Sickroom* in a series titled *The Frieze of* this concept. Thomas Cole painted a series called *The Voyage of* this concept.

ANSWER: <u>Life</u> [accept The Frieze of <u>Life</u> or The Voyage of <u>Life</u>]

[10] Perhaps the best-known work in Munch's *The Frieze of Life* is this painting, which shows a figure with his hands on his face performing the title action. This painting's reddish sky may have been inspired by the eruption of Krakatoa.

ANSWER: *The Scream* < Painting/Sculpture >

- 11. In his memoir, this free-born author described being tricked into travelling to Washington, D.C., after which he was kidnapped and sold into slavery in the South. For 10 points each:
- [10] Name this author of the memoir Twelve Years a Slave, which was told to and edited by David Wilson.

ANSWER: Solomon Northup

[10] After escaping enslavement, an author with this first name wrote the autobiography *Incidents in the Life of a Slave Girl*, using the pseudonym Linda Brent. Another author with this first name wrote a novel in which Eliza escapes slavery by crossing the frozen Ohio River.

ANSWER: <u>Harriet</u> [accept <u>Harriet</u> Jacobs or <u>Harriet</u> Beecher Stowe]

[10] Simon Legree is a character in this anti-slavery novel subtitled *Life Among the Lowly*. This Harriet Beecher Stowe novel promoted abolitionism, but also entrenched racial stereotypes about African Americans.

ANSWER: Uncle Tom's Cabin

<American Literature>

- 12. Participants in a rebellion in this colony were told that drinking a special medicine would turn bullets into water. For 10 points each:
- [10] Name this colony in which its native peoples rose up against the German Empire during the Maji Maji Rebellion under the leadership of Bokero.

ANSWER: German East Africa [accept Tanzania]

[10] The German Empire committed a genocide beginning in 1905 against the Herero and Nama people of this modern-day African nation. Chancellor Leo von Caprivi helped obtain his namesake "strip" in the eastern portion of this country.

ANSWER: Namibia

[10] Germany's African colonies were transferred to this international organization after the signing of the Treaty of Versailles. This organization proved ineffective at preventing Nazi and Italian expansion, leading to World War II.

**ANSWER: League of Nations** 

<European History>

- 13. This discipline was pioneered by the Norwegian economist Ragnar Frisch, who names a key theorem from it with Frederick Waugh ("wah") and Michael Lovell. For 10 points each:
- [10] Name this subfield of economics, whose namesake "Society" and journal were founded by Frisch. It focuses on using statistics to predict and explain economic phenomena.

ANSWER: econometrics

[10] The Frisch-Waugh-Lovell theorem justifies this econometric technique. This technique resolves endogeneity by introducing a variable that covaries with the dependent variable only through its relationship with the endogenous variable.

ANSWER: <u>instrumental variable</u>s estimation [accept descriptions like "using an <u>instrument</u>al variable"; prompt on IV estimation]

[10] Frisch and Waugh first used their theorem to remove trends from a series of economic data indexed by this quantity. Economists often measure this quantity in years or quarters.

ANSWER: time [accept time series data]

< Philosophy/Social Science >

- 14. The Dobzhansky–Muller ("dob-ZAHN-skee MOO-ler") model describes how this process occurs due to genetic incompatibilities that arise when two populations are attempting to hybridize. For 10 points each:
- [10] Name this process by which previously similar populations reach reproductive isolation. This process creates new groups at the lowest taxonomic level.

ANSWER: **speciation** [accept specific forms of **speciation**; accept answers indicating the formation of **new species**; prompt on **evolution**]

[10] This form of speciation occurs when populations reach reproductive isolation due to geographic separation, such as by the formation of mountains or islands.

ANSWER: <u>allopatric</u> speciation [accept <u>vicariant</u> speciation]

[10] Species colonizing island habitats can display this process, in which a single starting population rapidly evolves into multiple new species to exploit multiple niches. The 18 species of Darwin's finches are a result of this process.

ANSWER: adaptive radiation

<Biology>

- 15. This supporter of the Self-Strengthening Movement successfully quashed the Hundred Days' Reform. For 10 points each:
- [10] Name this leader who served as regent during the reign of the Guangxu ("gwong-shoo") Emperor in the late 19th century.

ANSWER: Empress Dowager Cixi ("tsuh-shee") [or Xiao Qin Xian]

[10] The Empress Dowager Cixi held power during this Chinese dynasty. Puyi ("poo-yee") served as the final emperor of this dynasty, the last to rule China.

ANSWER: **Qing** ("ching") Dynasty

[10] Cixi became empress during this 14-year revolt against the Qing which sought to create a Heavenly Kingdom of Peace. The leader of this rebellion, Hong Xiuquan ("sh'yoh-ch'wen"), claimed to be the younger brother of Jesus Christ.

ANSWER: **Taiping** Rebellion [or the **Taiping** revolt]

<World History>

- 16. A teacher in this play acts as a foreign photographer driving through the jungle, while four village girls perform the "Dance of the Lost Traveller" and mock his camera as a "one-eyed box." For 10 points each:
- [10] Name this play that is divided into Morning, Noon, and Night. In this play, the school teacher Lakunle ("LAH-koon-lay") fails to persuade Sidi to marry him after refusing to pay her bride price and saying that her brain is smaller than his.

ANSWER: The Lion and the Jewel

[10] Wole ("WOH-lay") Soyinka, the author of *The Lion and the Jewel*, also wrote this play, in which Elesin Oba is required by Yoruba tradition to die after his ruler dies. The ritual is disrupted by Simon Pilkings, who represents British colonial authorities.

ANSWER: Death and the King's Horseman

[10] Soyinka also wrote plays for this medium. Soyinka's play *The Detainee* was broadcast by the BBC in London for this auditory medium.

ANSWER: **radio** [or **radio** plays]

<World/Other Literature>

- 17. Answer the following about the use of halogens in organic synthesis, for 10 points each.
- [10] In the presence of a free radical initiator, HBr ("H-B-R") reacts with alkenes in one of these types of addition reactions. In this type of reaction, the halogen adds to the less substituted carbon.

ANSWER: <u>anti-Markovnikov</u> reaction [accept descriptions like the reaction <u>does not follow Markovnikov's rule</u>]

[10] Primary alkyl halides can react with an alkoxide ion to produce one of these functional groups in a reaction named for Williamson. These functional groups contain an oxygen atom bonded to two alkyl or aryl groups.

ANSWER: ethers

[10] The Williamson ether synthesis proceeds via one of these reactions. PBr3 ("P-B-R-three") and SOCl2 ("S-O-C-L-two") can convert alcohols into good leaving groups for a class of these reactions, in which one functional group is replaced by another.

ANSWER:  $\underline{\text{substitution}}$  [accept  $\underline{\text{SN2}}$  or  $\underline{\text{substitution nucleophilic (bi-molecular)}}$ ; do not accept or prompt on "SN1"]

<Chemistry>

- 18. Pablo Sarasate ("sah-rah-sah-tay") refused to perform a work in this genre, saying "I don't want to stand there... and listen to the oboe playing the only melody in the adagio." For 10 points each:
- [10] Name this genre. Brahms dedicated a D major piece in this genre with a lengthy introduction to Joseph Joachim ("YO-zef YO-ah-kim"), who called it the most serious out of the four great German works of this genre.

ANSWER: violin concerto [accept Brahms's Violin Concerto in D major; prompt on concerto]

[10] Joachim called this composer's E minor violin concerto the "heart's jewel." This German composer wrote incidental music to *A Midsummer Night's Dream*, which includes a famous "Wedding March."

ANSWER: Felix <u>Mendelssohn</u> [or Felix <u>Mendelssohn</u>-Bartholdy]

[10] This pianist gave over 238 concerts with Joseph Joachim, most of which occurred after her husband Robert's death in a sanatorium.

ANSWER: Clara Schumann [or Clara Josephine Wieck; prompt on Schumann]

<Classical Music>

- 19. In *Knives Out*, Benoit Blanc doesn't notice an ambulance pulling up behind him as he sings along to this man's song "Losing My Mind." For 10 points each:
- [10] Name this songwriter who originally wrote that song for the musical *Follies*. He also wrote music and lyrics for the musicals *Sunday in the Park with George* and *A Little Night Music*.

# ANSWER: Stephen Sondheim

[10] In this film, a group of white-collar workers sing Sondheim's song "Send In the Clowns" to make fun of Arthur Fleck's face paint. Joaquin Phoenix played its title character, who in one scene dances on a staircase.

ANSWER: **Joker** 

[10] Two songs from *Company*, another Sondheim musical, appear in this other 2019 film. "You Could Drive a Person Crazy" is performed by three women at a party, and its male lead sings "Being Alive" at a New York jazz bar

ANSWER: Marriage Story

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

20. Answer the following about the martyrdom of Saint Stephen, for 10 points each.

[10] In his trial, Saint Stephen criticizes this Jewish body by claiming that they "resist the holy spirit" and that their "hearts and ears are still uncircumcised." Under the high priest Caiaphas, this body condemned Jesus.

ANSWER: Sanhedrin [accept Great Sanhedrin or Lesser Sanhedrin]

[10] Following his explosive speech, Saint Stephen is dragged out of the city and martyred in this manner. In the Gospels, Jesus saves a woman from this punishment by challenging anyone "without sin" to carry it out.

ANSWER: **stoning** [or descriptions like **throwing stones**]

[10] Before stoning Saint Stephen, the crowd threw down their coats at the feet of this Pharisee, who approved of the stoning of Stephen. He laters converts to Christianity while on the road to Damascus.

ANSWER: **Saul** of Tarsus [or St. **Paul** of Tarsus]

<Religion>