### 2020 ACF Fall

## Packet M by Editors

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## **Tossups**

1. The Mariinsky ("ma-RIN-skee") Ballet's score for this ballet has a famous variation credited to Vakhtang Chabukiani, a Georgian ballet dancer. Riccardo Drigo's revision of the score to this ballet is the foundation of many modern scores for it, and was used in the 1895 Ivanov-Petipa revival. The coda of a famous *pas de deux* ("pah duh doo") from this ballet has a ballerina perform 32 fouettés ("fweh-TAYS") in a row. That ballerina also plays the role of a character who looks exactly like Odile ("oh-DEEL"), but is dressed in white. At the end of this ballet, Siegfried chooses to die with his lover by jumping into a lake. For 10 points, name this Tchaikovsky ballet, where Odette has been cursed to take the form of a bird.

ANSWER: <u>Swan Lake</u> [or <u>Lebedinoye ozero</u>] <Other Arts>

2. A work by this author is named for the idea that the title object is threatened by a whale, which represents Hobbes's *Leviathan*. Another work by this author ironically argues that certain people could become "Beneficial to the Publick," and this author also wrote letters addressing Esther Johnson as "Stella." This author of *A Tale of a Tub* wrote a satire suggesting that Irish poverty can be solved by selling children as food. This author of *A Modest Proposal* invented a character who meets a race of talking horses and later rejects all other humans as Yahoos. That character created by this author is imprisoned by a race of tiny people in Lilliput. For 10 points, name this author of *Gulliver's Travels*.

ANSWER: Jonathan **Swift** <British Literature>

3. This ruler announced they would co-rule with one son while declaring the other the rightful king of Armenia after the defeat of Artavasdes II ("ar-tuh-VAZ-deez"). This ruler's sister Arsinoë IV ("ar-SIN-oh-ee the fourth") was executed while exiled to the Temple of Artemis. This ruler supposedly won a bet by drinking a glass of vinegar with a dissolved pearl, and she seduced a lover after hiding inside of a rolled-up carpet. This ruler was succeeded by the short-lived reign of her Caesarion ("seh-ZAR-ee-on"). This pharaoh's reign ended after a defeat at the Battle of Actium. For 10 points, name this pharaoh who, after hearing of her lover Mark Antony's death, committed suicide by snakebite.

ANSWER: <u>Cleopatra</u> VII Philopator <Other History>

4. A leader of this school compared rolling a cylinder to rolling a cube in order to refute the "lazy argument" against his teachings. Plutarch of Chaeronea criticized that leader of this school of thought, Chrysippus, who defended its founder's teaching that the heart was the source of intelligence, not the brain. A "manual" for this philosophy is the *Enchiridion* of Epictetus. This school believed in the central idea of *logos*, and other members of this school included the Roman Seneca and its founder, Zeno of Citium. For 10 points, name this ancient school of philosophy discussed by Marcus Aurelius in *Meditations* that believed in detachment from worldly cares.

ANSWER: <u>Stoicism</u> <Philosophy/Social Science>

5. Extremely well-preserved fossils from this period can be found in the Jehol Biota in Liaoning, China. This period saw extremely high global temperatures in its "hot greenhouse" interval, which may have been impacted by heavy carbon dioxide emissions from the Deccan Traps. The end of this period is marked geologically by the K–Pg or K–T boundary, a thin rock layer with unusually high levels of iridium. The Alvarez hypothesis claims that a meteor impact at Chicxulub ("CHICK-suh-loob") resulted in the end of this period, during which *Triceratops* and *Tyrannosaurus* lived. For 10 points, name this final geological period of the Mesozoic era, which followed the Jurassic.

ANSWER: <u>Cretaceous</u> period [prompt on <u>Mesozoic</u> era until read] <Other Science>

6. A goddess in this myth system cried for 52 years after being accused of faking kindness. After the most handsome god in this myth system failed to self-immolate himself, the humblest god sacrificed himself instead. A deity in this myth system helped create the Earth from the body of a sea monster he defeated using his foot as bait. The fifth sun deity in this myth system constantly chased his 400 siblings across the sky and was born after his mother was impregnated by a ball of feathers. A god in this myth system sailed east on a raft of snakes and was often depicted as a feathered serpent. For 10 points, Quetzalcoatl ("ket-zahl-koh-AH-tul") was part of which myth system centered at Tenochtitlan ("tay-NOHCH-teet-LAHN")?

ANSWER: <u>Aztec</u> mythology <Mythology>

7. This dynasty was opposed by a rebellion that took its name from a required donation to the Celestial Masters. The court of a ruler of this dynasty debated over the monopolies of the two title goods in the Discourse on Salt and Iron. This dynasty was interrupted by the Xin ("shin") Dynasty, which was led by Wang Mang ("wong mong"). This dynasty crushed the rebellion of the Trung Sisters in Vietnam. The Yellow Turban Rebellion helped bring an end to this dynasty, whose rulers included Wudi. The former peasant Liu Bang ("l'yoh bong") founded this dynasty, which succeeded the Qin ("chin"). For 10 points, name this dynasty that shares its name with China's largest ethnic group. ANSWER: <u>Han</u> Dynasty

<World History>

8. A work by this author features a doctor who repeatedly reminds other characters how honest he is. Another work by this author begins with one of the title characters receiving a spinning top from a soldier on her name day. That play by this author ends with Olga repeating the words "If we only knew...." Gayev's obsession with billiards features in a work by this author, which ends with the old manservant Firs ("feerce") left in an abandoned house to die. That play by this author of *Ivanov* ends with Madame Ranevskaya leaving as the sound of offstage axes represents the title trees being chopped down. For 10 points, name this Russian playwright of *Three Sisters* and *The Cherry Orchard*.

ANSWER: Anton <u>Chekhov</u> <European Literature>

9. Seeing items of this material from the Netherlands marketed as "West African" in Brixton inspired Yinka Shonibare to use colorful examples of this medium in his headless mannequin sculptures. Henri Matisse's cut-outs were partly inspired by the complex geometric patterns that decorate works of this medium made by the Kuba people. Central African artisans have traditionally used single-heddle devices to produce works in this medium from raffia. In the United States, academic stoles are frequently made with a variety of this medium originated by Akan artists, the *kente* type of this material. For 10 points, what medium is used to make wax-prints, *dashiki*, and other West African garments?

ANSWER: **cloth** [or **clothing**; or **textile**s; or **weaving**; or **tapestry**; or **fabric**] <Painting/Sculpture>

10. In the Cannizzaro reaction, two of these functional groups are disproportionated to form a primary alcohol and a carboxylic acid. Hydroboration and oxidation of a terminal alkyne produces an enol ("EEN-all") that tautomerizes ("taw-TAW-mur-eye-zizz") into one of these functional groups. This functional group gives a positive result in Fehling's test and forms a "silver mirror" in the Tollens' test. The simplest example of this functional group has chemical formula CH2O and is commonly used in embalming. For 10 points, name this functional group that contains a carbonyl bound to at least one hydrogen and is often contrasted with ketones.

ANSWER: aldehydes

<Chemistry>

11. Members of this group were massacred at Haun's Mill. A cultural practice of this group was targeted in *Reynolds v. U.S.* and by the 1874 Poland Act. A militant faction of this group known as the Danites were the targets of Executive Order 44 issued by Lillburn Boggs. This group allied with the local Paiute ("PIE-oot") people to attack pioneers in the Baker-Fancher Party during the Mountain Meadows Massacre. In 1844 the founder of this group and his brother Hyrum were murdered while jailed in Carthage, Illinois. This religious group sought to establish the State of Deseret in modern-day Utah. For 10 points, name this religion whose leaders included Brigham Young and Joseph Smith.

ANSWER: <u>Mormon</u>s [or The Church of Jesus Christ of <u>Latter-day Saints</u>; or <u>LDS</u>; or the <u>Mormon</u> Church; or <u>Mormon</u>ism]

<American History>

12. Country and office required. A power afforded to this government office is restricted by the Lascelles Principles and by a 2011 act that requires elections to be held on the first Thursday in May, at least every five years. This official is subjected to rapid-fire interrogations every Wednesday at noon on the televised program "Questions." The term "Special Relationship," first coined by a holder of this office, refers to a personal diplomatic alliance between it and the American president. This official is the "first among equals" in the prototypical example of a Westminster system of government. For 10 points, name this office held by the political leader whose official residence is 10 Downing Street.

ANSWER: <u>Prime Minister</u> of the <u>United Kingdom</u> [or <u>PM</u> of the <u>UK</u>; or <u>British Prime Minister</u>; prompt on partial answers]

<Philosophy/Social Science>

13. A symphony by this composer begins with the violins playing "E flat, D, D" three times to introduce the theme. That symphony's last movement begins with a broad ascending broken G minor chord known as a Mannheim Rocket. The last movement of this composer's final symphony begins with the theme "C D F E" and ends with a five-voice fugue. That symphony follows this composer's "Great G minor" 40th symphony and was given a mythologically-inspired nickname by Johan Peter Solomon. For 10 points, name this composer of 41 symphonies, the last of which is nicknamed "Jupiter," who also composed the opera *The Magic Flute*.

ANSWER: Wolfgang Amadeus Mozart

<Classical Music>

14. A character in this play is praised with the words "he could be *anything* in that suit." Several characters in this play meet Miss Forsythe during a dinner at Frank's Chop House, where one character describes a failed meeting with Bill Oliver. In this play, Charley's son Bernard is unable to help the protagonist's son pass math. This play's protagonist has an affair with The Woman in Boston and gives her stockings, although his wife Linda constantly mends them. Happy and Biff fail to live up to their promise in this play, which ends with the title professional driving away to kill himself for insurance money. For 10 points, name this play about Willy Loman by Arthur Miller.

# ANSWER: **Death of a Salesman**

<American Literature>

15. Diffuse reflection of these devices' output creates a speckle pattern. LIGO detects gravitational waves by measuring interference between two of these devices. They're not magnets, but a "trap" made of these devices was used by Cornell and Wieman to create the first observed Bose–Einstein condensate by cooling rubidium atoms near absolute zero. These devices require the majority of particles within an optical resonator to be in an excited state. That condition, known as population inversion, is achieved by "pumping" energy into a gain medium. For 10 points, name these devices that use stimulated emission to create a coherent beam of light.

ANSWER: <u>laser</u>s <Physics>

16. The Jewish scholar Maimonides distinguished this practice into eight different levels in a hierarchy that is sometimes called "Rambam's Ladder." In many Indian religions, this practice is central to the virtue of *dana*. In Islam, *sadaqah* is a voluntary form of this practice, another form of which is mandatory for people who have *nisab*. The Hebrew word for "justice" or "righteousness," *tzedakah*, often specifically refers to this practice. One of the Pillars of Islam sets a 2.5-percent requirement for this practice, and is known as *zakat*. For 10 points, identify this general practice of giving to the poor.

ANSWER: **charity** [or **almsgiving**; accept **giving to the poor** or similar answers until read; accept **tithe**; accept **zakat** or **tzedakah** or **sadaqah** until read]

<Religion>

17. During this war, the Government of National Defense was formed by Léon Gambetta. The results of this war led the ideology of *revanchism* ("ruh-VONCH-ism") to develop within its losing side. After a loss at the Battle of Gravelotte ("grahv-LUTT"), an army in this war was trapped in the city of Metz ("mess"). The Treaty of Frankfurt ended this war, and was signed as its losing side was crushing the left-wing Communards. That side in this war gave up Alsace-Lorraine ("al-SOSS lo-RAIN") after Napoleon III was captured at the Battle of Sedan. For 10 points, name this 1870 to 1871 war in which the German Empire was declared amid the siege of Paris.

ANSWER: Franco-Prussian War

<European History>

18. In 2019, a posthumous collection of short stories by an author from this country was published by Saqi Books, entitled *The Quarter*. In a novel set in this country, Zaita helps a dentist to steal teeth from corpses and sell them cheaply; that dentist is Dr Booshy. In another novel set in this country, Amina breaks her collarbone in a car crash after leaving the house without the permission of her tyrannical husband, al-Sayyid Ahmad. *Midaq Alley* is set in this country, as is a trilogy of novels containing *Palace Walk*, *Palace of Desire* and *Sugar Street*. For 10 points, name this home country of writer Naguib Mahfouz, where he set his *Cairo Trilogy*.

ANSWER: <u>Egypt</u> [or <u>Misr</u>] < World/Other Literature>

19. A well-preserved Roman city in this country is nicknamed the "Pompeii of the East" and is named Jerash. A valley in this country served as an otherworldly background for films like *Star Wars: The Rise of Skywalker* and *Lawrence of Arabia* and is called Wadi Rum. This country's tiny coastline lies on the Gulf of Aqaba ("AH-kuh-buh"). The most popular tourist destination in this country is an ancient city built by the Nabatean ("nah-buh-TEE-in") people near the Dead Sea that includes a temple carved into the side of a cliff; that city is Petra. This country shares its name with the river in which Jesus was baptized. For 10 points, name this "Hashemite kingdom" in the Middle East whose capital is Amman.

ANSWER: Jordan

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

20. Hamilton's rule for kin selection assumes that this quantity's "inclusive" form is linear with respect to an altruistic behavior. Genetic load is the normalized difference in two forms of this quantity symbolized w. Evolution is often analogized to moving along a landscape where genotype is plotted against this property, a typical measurement of reproductive success. Herbert Spencer's four-word quip about organisms aiming to maximize this attribute was later adapted into the fifth edition of *The Origin of Species*. For 10 points, Charles Darwin described natural selection as "survival" of the individual with the greatest value for what property? ANSWER: biological <u>fitness</u> [or reproductive <u>fitness</u>; or survival of the <u>fittest</u>] <Biology>

### **Bonuses**

- 1. This author got severe carpal tunnel syndrome and had to hire the secretary Theodora Bosanquet ("BO-zun-ket") to help type his novels, an experience recounted in Bosanquet's memoir about this author "at work." For 10 points each:
- [10] Name this American author of *The Ambassadors*. Another of his books depicts Isabel Archer.

ANSWER: Henry James

[10] Theodora Bosanquet's experience was fictionalized in a Cynthia Ozick story entitled "Dictation." That story features Bosanquet's relationship with a secretary of this author of *Lord Jim* and *Heart of Darkness*.

ANSWER: Joseph Conrad [or Józef Teodor Konrad Korzeniowski]

[10] Bosanquet remarked on James's sensitive treatment of female characters, such as in this novel. In this novel, Maggie Verver buys the title object, leading to her discovery that Prince Amerigo is having an affair with Charlotte Stant.

ANSWER: The Golden Bowl

<American Literature>

- 2. Answer the following about the physics behind pitching in baseball, for 10 points each.
- [10] Breaking pitches, such as a curveball, move downward faster than the pull of gravity due to this effect, in which a spinning body moving in a fluid creates pressure differences that change its trajectory.

ANSWER: Magnus effect

[10] By contrast, a knuckleball's motion is caused by the "shedding" of these regions behind the ball, forming a Kármán street of these regions in the ball's wake. Small, unstable versions of these regions are called eddies.

ANSWER: vortex [or vortices; accept von Kármán vortex street; accept vortex shedding]

[10] The presence of eddies is indicative of this phenomenon, contrasted with laminar flow. This phenomenon causes the knuckleball to flutter in the air, as well as making airplanes shake mid-flight.

ANSWER: **turbulent** flow [or **turbulence**]

<Physics>

- 3. The mid-20th century saw a rivalry between this country's namesake style of Jiu-Jitsu and the emerging Luta Livre ("LEEV-ree") style. For 10 points each:
- [10] Name this country, home to many forms of martial arts. The "Vale Tudo" or "Everything Goes" style of fighting became popular in this country's city of Rio de Janeiro.

ANSWER: Brazil

[10] Brazilian Jiu-Jitsu was mostly invented by Hélio, a member of this wealthy Brazilian family. Another member of this family, Royce, won 4 of the first 5 UFC tournaments.

ANSWER: Gracie ("GRAY-see") family [accept Hélio Gracie or Royce Gracie]

[10] On the 10-year anniversary of the UFC, this man inducted Royce Gracie and his frequent opponent, Ken Shamrock, into the UFC Hall of Fame. This president of the UFC endorsed Donald Trump at the 2016 RNC.

ANSWER: Dana White [or Dana Frederick White Jr.]

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

- 4. This friar was instructed by the Catholic Church to raise funds to help construct St. Peter's Basilica. For 10 points each:
- [10] Name this German seller of indulgences who declared "when a coin in the coffer rings, a soul from Purgatory springs."

ANSWER: Johann Tetzel

[10] This monk supposedly nailed his 95 Theses to a church in Wittenberg. His frustration with indulgences and other excesses of the Catholic Church beyond faith alone led to the Protestant Reformation.

ANSWER: Martin Luther

[10] At this meeting presided over by Charles V, Luther declared "Here I stand, I can do no other" while refusing to renounce his beliefs. After this meeting, Luther fled to Wartburg Castle.

ANSWER: **Diet** of **Worms** ("vorms")

<European History>

- 5. This artist included a model symbolizing the Schuylkill ("SKOO-kul") River in his paintings of the sculptor William Rush. For 10 points each:
- [10] Name this American artist. He painted a boxer raising his arm in Salutat ("sah-LOO-taht") in 1898.

ANSWER: Thomas Eakins ("AY-kinz")

[10] Eakins was an early adopter of this artistic medium, developing a technique in which multiple exposures were combined in one negative. Eakins worked closely with Eadweard Muybridge ("Edward MY-bridge"), who used this medium to depict horses in motion.

ANSWER: **photo**graphy [accept word forms]

[10] A photograph inspired an Eakins painting of this name, in which two nude figures lie on some grass while another plays the pipes. A Nicolas Poussin painting titled for this place features some shepherds inspecting a tomb in a pastoral landscape.

ANSWER: Arcadia [accept Et in Arcadia Ego]

<Painting/Sculpture>

- 6. This leader stirred controversy in July 2020 by repealing a statute that made the Hagia Sophia ("HI-yuh soh-FEE-uh") a museum and declaring it a mosque. For 10 points each:
- [10] Name this leader of the Justice and Development party who suppressed the Gezi Park protests in 2013.

ANSWER: Recep Tayyip Erdoğan ("reh-JEP tie-EEP AIR-doh-wahn")

[10] Erdoğan is the president of this country. Previously, Erdoğan served as mayor of Istanbul in this country.

ANSWER: Turkey

[10] Throughout his 17 years in power, Erdoğan has clashed with this Kurdish separatist group. İt has been led by Abdullah Öcalan ("OH-juh-lahn") since the late 1970s.

ANSWER: **PKK** [or Kurdish **Workers' Party** or **Partiya Karkerên** Kurdistanê]

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

- 7. This poem describes its title musical instrument as a "simplest lute by the desultory breeze caressed." For 10 points each:
- [10] Name this so-called "conversation poem," which is addressed to "my pensive Sara."

ANSWER: "The Aeolian Harp"

[10] "A damsel with a dulcimer" sings about Mount Abora in this other poem, which opens with the title character decreeing "a stately pleasure dome."

ANSWER: "Kubla Khan"

[10] "The Aeolian Harp" and "Kubla Khan" are both by this English poet, who also wrote "The Rime of the Ancient Mariner."

ANSWER: Samuel Taylor Coleridge

<British Literature>

- 8. This was the only state Walter Mondale won in the 1984 presidential election. For 10 points each:
- [10] Name this state that Mondale, like Hubert Humphrey and Eugene McCarthy, represented in the Senate.

ANSWER: Minnesota

[10] Mondale lost the 1984 presidential election in a landslide to this incumbent president. This former Governor of California had earlier defeated Jimmy Carter in the 1980 election.

ANSWER: Ronald Wilson Reagan

[10] Mondale's running mate in the 1984 election was this New York congresswoman. This politician thus became both the first Italian-American and first woman to be on a major party presidential ticket.

ANSWER: Geraldine Anne Ferraro

<American History>

- 9. The light independent part of this process is known as the Calvin cycle. For 10 points each:
- [10] Name this pathway used by plants to convert carbon dioxide, water, and light energy into carbohydrates.

ANSWER: photosynthesis

[10] The Calvin cycle begins with this enzyme facilitating the incorporation of carbon dioxide into a five-carbon molecule called RuBP ("RUB-P"), which then splits into two molecules of PGA. This enzyme is the most abundant on Earth.

ANSWER: <u>RuBisCo</u> [or <u>RuBPco</u> or <u>RuBPCase</u> or <u>Ribulose-1,5-bisphosphate carboxylase/oxygenase</u>]

[10] This wasteful process occurs during roughly 25 percent of Calvin cycles. In this process, RuBisCo adds oxygen rather than carbon dioxide to RuBP, forming a molecule that must be broken down and recycled before use.

ANSWER: photorespiration

<Biology>

- 10. A mangala sutra, or thaali, is one of these objects that the groom ties around a wife's neck during a Hindu marriage. For 10 points each:
- [10] Name this object, which is given to a male child to symbolize a second birth in the *Upanayana* ("oo-puh-NAY-uh-nuh") initiation, a ceremony commonly named for this object. They are traditionally worn across the chest from the left shoulder.

ANSWER: **thread**s [or **string**s]

[10] Although Hindu texts prescribe that the Upanayana should be performed by all castes, the ceremony is mostly practiced nowadays by members of this uppermost, priestly caste in India.

ANSWER: brahmins

[10] The Upanayana is one of the traditional saṃskāras, or rites of passage. The final saṃskāra, *Antyesti*, refers to the funeral rites for the dead, which involve this process. To begin this process, the eldest son usually sprinkles ghee, or clarified butter, onto the body.

**ANSWER:** cremation

<Religion>

- 11. This composer's *Dances of Galanta* are based on traditional Hunagrian *verbunkos* folk dances. For 10 points each:
- [10] Name this Hungarian composer and ethnomusicologist who collected folk songs on phonograph cylinders. He also developed a namesake music education program.

ANSWER: Zoltán Kodály ("ko-DIE")

[10] Kodaly introduced this other Hungarian composer to the practice of collecting folk songs. He drew from those collections in works such as *Romanian Folk Dances* and the opera *Duke Bluebeard's Castle*.

ANSWER: Béla Bartók

[10] The popularity of Hungarian folk music was largely due to this virtuosic Hungarian pianist, who took Europe by storm in his namesake "mania." This composer created works like *Hungarian Rhapsodies* and *Transcendental Études*.

ANSWER: Franz Liszt [accept Lisztomania]

<Classical Music>

12. After hearing about this battle, an emperor supposedly cried "Give me back my legions!" For 10 points each:

[10] Name this battle in 9 CE in which Germanic tribes under Arminius defeated Roman forces under Publius Quinctilius Varus.

ANSWER: Battle of **Teutoburg** Forest

[10] The Battle of Teutoburg Forest was a devastating loss for this first Roman Emperor. More successful events during this emperor's reign included the beginning of the Pax Romana and the conquest of Hispania.

ANSWER: <u>Augustus</u> [accept Gaius <u>Octavius</u> Thurinus or Gaius Julius Caesar <u>Octavian</u>us; prompt on <u>Caesar</u>] [10] This Roman general was not present at the battle as he had left Germania in 6 CE to help put down the Great Illyrian ("ih-LEER-ee-in") Revolt. He later succeeded his stepfather Augustus as emperor.

ANSWER: <u>Tiberius</u> Julius Caesar Augustus [accept <u>Tiberius</u> Claudius Nero]

<Other History>

- 13. This novel opens with a character watching Yoko's reflection in the window of a train. For 10 points each:
- [10] Name this novel whose protagonist Shimamura is a self-styled expert on Western ballet. Later in this novel, Shimamura is captivated by Komako's ability to play the *samisen*.

ANSWER: **Snow Country** [or **Yukiguni**]

[10] Snow Country is a novel by this author, whose other works include Thousand Cranes and The Sound of the Mountain.

ANSWER: Yasunari Kawabata

[10] In *Snow Country*, Komako has this occupation. In Japan, these female entertainers perform traditional artforms such as dance and song, and, contrary to Western misconceptions, they are not sex workers.

ANSWER: geisha [or geiko or geigi]

<World/Other Literature>

- 14. A text about this concept was translated by William of Moerbeke and served as the model for treatises by his colleague, Thomas Aquinas. For 10 points each:
- [10] Name this concept that was discussed in Aristotle's *De anima*, which claims that humans have a "rational" form of this concept that separates them from animals.

ANSWER: the soul [accept psyche]

[10] William of Moerbeke and Thomas Aquinas wrote in this language used heavily by the Catholic Church. Marcus Tullius Cicero, who wrote in this language, compared Aristotle's writing to a "river of floating gold."

ANSWER: <u>Latin</u> [or lingua <u>Latina</u>]

[10] Aquinas used the concept of "hypostasis" to argue for the unity of body and soul. That concept originated from Plotinus, a member of this school of thought, which described a hypostasis between the Soul, the Intellect, and the One.

ANSWER: **Neoplatonism** [prompt on <u>Platonism</u>]

<Philosophy/Social Science>

- 15. A function f has this property if the value of f at any point c is equal to the limit of f-of-x as x approaches c from both sides. For 10 points each:
- [10] Name this property which informally means that a function has no holes, jumps, or vertical asymptotes.

ANSWER: uniform **continuity** [or uniformly **continuous**]

[10] Continuous functions are subject to this theorem. Bolzano's theorem, a special case of this theorem, states that if a continuous function changes signs in an interval, the function has a root in that interval.

ANSWER: **intermediate value** theorem [or **IVT**]

[10] The intermediate value theorem only applies to sets with this property. A metric space has this property if every Cauchy ("ko-SHEE") sequence in the space converges.

ANSWER: Cauchy **completeness** [or Dedekind **completeness**]

<Other Science>

- 16. A housekeeper in this movie has a deadly peach allergy that Mrs. Park mistakes for tuberculosis, while a chauffeur is framed for having sex in the family car. For 10 points each:
- [10] Name this film centered around class disparities, in which Dong-ik offends his chauffeur by talking about how people who ride the subway smell bad.

ANSWER: **Parasite** [or **Gisaengchung**]

[10] In 2020, *Parasite*, a film from this country became the first non-English film to win Best Picture. Parasite's director, Bong Joon Ho, is from this country, the setting of Jang Hoon's *A Taxi Driver*.

ANSWER: **South Korea** [prompt on Korea]

[10] At the end of this 2013 film by Bong, a Kronole-fueled explosion derails the titular vehicle, with only Timmy and Yona emerging. An earlier scene in this movie revealed that the protein bars being fed to the squalid lower-class cars were made of insects.

ANSWER: **Snowpiercer** 

<Other Arts>

- 17. This author imitated an Italian genre with his twelve *Exemplary Novels*. For 10 points each:
- [10] Name this author. A more famous character created by this author has his library of chivalric romances, which is dedicated to Dulcinea, burned down by a barber and a priest.

ANSWER: Miguel de Cervantes Saavedra

[10] In this first novel by Cervantes its protagonists, Elicio ("eh-LEE-see-oh") and Erastro, are both in love with the title character. Its title character shares her name with a Nereid in the *Metamorphoses* whose lover, Acis, is killed by Polyphemus.

ANSWER: La Galatea

[10] In *La Galatea*, Elicio has this profession. Pastoral literature generally depicts characters who have this profession.

ANSWER: **shepherd**s [or sheep **herd**ers]

<European Literature>

- 18. This effect is often utilized in refrigeration and to liquefy gases. For 10 points each:
- [10] Name this effect that describes the temperature change of a real gas when insulated and forced through a valve.

ANSWER: <u>Joule–Thomson</u> effect [or <u>Joule–Kelvin</u> effect; or <u>Kelvin–Joule</u> effect; accept <u>throttling</u>]

[10] The Joule–Thomson effect is not observed in these gases, whose behavior is described by the equation "PV equals nRT."

ANSWER: ideal gases

[10] This quantity remains constant during the Joule–Thomson expansion of a gas. This quantity is defined as internal energy plus the product of pressure and volume.

ANSWER: enthalpy

<Chemistry>

- 19. Along with Bernardo O'Higgins, this general's forces were victorious at the Battle of Chacabuco. For 10 points each:
- [10] Name this supreme commander of the Army of the Andes. This man helped liberate Peru and his native Argentina.

ANSWER: José de **San Martín** ("san mar-TEEN")

[10] This other leader during the fight for independence in South America served as the first president of Gran Colombia. This general was given the nickname "El Libertador" for his revolutionary efforts.

ANSWER: Simón Bolívar

[10] San Martín and Bolívar met at a conference in this city to decide the future of post-independence South America. Soon after that meeting in this city, San Martín relinquished his power and retired from public life.

ANSWER: **Guayaquil** ("gah-yah-KEEL")

<World History>

- 20. Answer the following about the connection between snakes and prophecy in Greek mythology, for 10 points each
- [10] This Greek deity of prophecy established an oracle at the city of Delphi, where he had slain the monstrous serpent Python.

ANSWER: Apollo

[10] This blind prophet was turned into a woman for seven years after he hit a pair of mating snakes with a stick. He also appears throughout Sophocles' Theban trilogy, where he warns Oedipus ("ED-uh-puss") of his fate.

ANSWER: Tiresias

[10] This other prophet saved two snakes as a young boy; the snakes licked his ears in gratitude, which made him able to speak to animals. This prophet once escaped captivity by correctly predicting that his jail cell would collapse.

ANSWER: Melampus

<Mythology>