

## ICCS 2014

### Packet 6

#### TOSSUPS

1. One novel written in this language concerns a professor who discovers that aquans will survive a flood that covers the Earth. Another work written in this language features an attempt by Johnnie Walker to make a flute out of the souls of cats that he has killed. Those novels written in this language are *Inter Ice Age 4* and *Kafka on the Shore*. *Confessions of a Mask* was written in this language by an author who attempted a failed coup d'état and then killed himself. For 10 points, name this native language of Kobo Abe, Yukio Mishima, and Haruki Murakami.

ANSWER: Japanese [or Nihongo]

2. This man is not Jerry Brown, but he was elected Governor of California a record three times, and was previously Attorney General of that state during Japanese internment. Dwight Eisenhower legendarily said his biggest mistake was appointing this man to the Supreme Court. As Chief Justice, the Supreme Court expanded civil rights in such cases as *Miranda v. Arizona*. For 10 points, name this Chief Justice of the Supreme Court during almost all of the 1960's, who also names a commission that investigated the assassination of John F. Kennedy.

ANSWER: Earl Warren

3. One version of this quantity is equal to the trace of the density matrix, and this quantity is the macroscopic quantity that characterizes the microcanonical ensemble. One equation states that this quantity is the product of Boltzmann's constant and the natural logarithm of the number of microstates of a system. The third law of thermodynamics states that this quantity is zero for a perfect crystal at absolute zero. For 10 points, name this thermodynamic quantity, higher for gases than for liquids or solids, the measure of disorder in a system.

ANSWER: entropy

4. The theology developed by this person was explained in *Loci communes* by Philipp Melancthon. Forty-one errors made by this person were outlined in the papal bull *Exsurge domine*. This man rejected the idea of the Eucharist as symbolic at the Marburg Colloquy, at which he debated his contemporary Huldrych Zwingli. He declared "Here I stand; I can do no other" at the Diet of Worms, where he defended statements he posted on a church in Wittenberg. For 10 points, name this man whose 95 theses helped kick off the Protestant Reformation.

ANSWER: Martin Luther

5. In one of this composer's operas, the protagonist sings of saving his mother from burning at the stake in "Di quella pira." The drinking song "Libiamo ne' leiti calici" is sung in another of this composer's operas, which is about the relationship between Alfredo and the title woman. Highlights from his operas include the "Anvil Chorus" and a "Triumphal March" from an opera in which Radames is condemned to be buried alive, but not before falling in love with the title Ethiopian princess. For 10 points, name this composer of *Il Trovatore*, *La Traviata*, and *Aida*.

ANSWER: Giuseppe Verdi

6. During one of these events, Wladyslaw Kozakiewicz made an obscene gesture to a group of Soviets. Tensions during the 1956 Hungarian Revolution manifested at one of these events in the “blood in the water” incident. Operation Wrath of God was carried out in retaliation for a massacre at one of these events, in which Black September members killed eleven Israelis in Munich. In 1980, this event was boycotted in response to the USSR’s invasion of Afghanistan. For 10 points, name this international sporting competition that takes place every four years.

ANSWER: Summer **Olympic** Games [Accept specific years, anti-prompt on specific occurrences, esp if someone buzzes on the blood in the water clue with “polo match” or something]

7. This work’s cast album earned Robert Lopez the Grammy in his EGOT accomplishment. One character in this musical hopes to spend two years in Orlando, but only ends up there in a dream-*cum*-nightmare. A pageant put on in this work, subtitled “American Moses,” notably asserts that Moroni descended from the Starship Enterprise. The villagers blaspheme in a song called “Hasa Diga Eebowai” in this musical. For 10 points, name this Broadway musical which originally starred Andrew Rannells and Josh Gad as missionaries of the title religion in Uganda.

ANSWER: *The **Book of Mormon***

8. These organs express the enzyme that hydroxylates vitamin D at the 1 position. The function of these organs can be measured using the Cockcroft-Gault formula, which requires measuring the creatinine clearance. One set of cells in this organ secretes erythropoietin. The functional unit of these organs ends with the collecting duct and begins with the glomerulus; that functional unit is the nephron, which also contains the Loop of Henle. For 10 points, name these organs which are usually paired, and which are responsible for controlling the osmolarity of and filtering the blood.

ANSWER: **kidneys**

9. This novel’s protagonist frequently eats at a café run by Celeste. During a trial, Marie testifies about having watched a comedy movie with the protagonist, who claims that he committed a certain crime “because of the sun.” This work’s protagonist writes a letter to a Moor on the behalf of the pimp Raymond Sintes. It opens with the protagonist attending his mother’s funeral and showing no signs of grief. For 10 points, Meursault shoots an Arab on the beach in what novel by Albert Camus?

ANSWER: *The **Stranger*** [or *The **Outsider***; or *L’**Etranger***]

10. According to the efficiency wage hypothesis, market wages exceeding the equilibrium wage tend to increase this quantity. The natural rate hypothesis claims that there is always a base level for this quantity in the market. Okun’s law posits that a one percent increase in this quantity leads to a two percent decrease in GDP. The Phillips Curve demonstrates an inverse relationship between this quantity and inflation. There are cyclical and frictional varieties of this concept. For 10 points, identify this economic concept in which people in the labor force are unable to find jobs.

ANSWER: **unemployment**

11. A theorem about these entities states that the number of them below  $x$  grows as  $x$  over  $\ln$  of  $x$ . Goldbach's Conjecture asks whether every even number can be written as a sum of two of these numbers. A famous proof involving these numbers involves assuming there are only finitely many of them, then asking what divides the number one greater than their product. That proof by contradiction was used by

Euclid to demonstrate their infinitude. For 10 points, identify these numbers like 11, 13, and 17, which are only divisible by one and themselves.

ANSWER: **prime** numbers

12. A species of painted frog long thought extinct was rediscovered in 2011 in this nation's Lake Hula. One source of controversy in this nation is over the pollution of the Kishon River. This nation's southernmost city, which is on the Gulf of Aqaba, is Eilat. The National Water Carrier distributes water to cities from this nation's largest freshwater lake, the Sea of Galilee. The south of this nation is dominated by the Negev Desert, and this nation shares the Dead Sea with Jordan. For 10 points, name this Middle Eastern nation with capital at Jerusalem.

ANSWER: State of **Israel** [or Medinat **Yisra'el**]

13. This character's foster father died of grief after one of his sons killed another in a hunting accident. This former ward of King Hrethel gives his gold collar to his most faithful companion, Wiglaf, before dying of his wounds. Earlier, he is mocked by Unferth for having lost to Breca in a swimming contest. This "great Geat" repays a debt to a Danish king by protecting the mead-hall Heorot. For 10 points, name this title character of an Old English poem who helps King Hrothgar by killing Grendel.

ANSWER: **Beowulf**

14. A major outpost for this practice was located at Elmina and was founded by Joao II. An 1807 law in Britain that banned this practice was largely promoted by the Clapham sect led by William Wilberforce. It was documented in the autobiography of Olaudah Equiano who witnessed it firsthand during his childhood, and asphyxiation and starvation were common during its horrific "middle passage." For 10 points, identify this practice in which manufactured goods bartered for millions of Africans for forced servitude in the new world.

ANSWER: Trans-Atlantic **slave trade** [prompt on "slavery" or equivalents]

15. One version of this painting was stolen in 1994, on the same day as the opening ceremony of the Winter Olympics. Two boats can be seen in the background of this painting in a body of water that reflects the oddly-colored sky. One theory that explains this painting's orange, swirling sky was the then-recent eruption of Krakatoa. This painting's central figure wears an all-black outfit, is standing on a bridge, and is grasping the sides of his head with both hands while performing the title action. For 10 points, name this painting by Edvard Munch.

ANSWER: *The* **Scream** [or *The* **Cry**; or **Skrik**; or *The* **Scream of Nature**; or *Der* **Schrei der Natur**]

16. Changes in this property's namesake coefficient due to temperature are measured by using the van't Hoff equation. The bottom row of an ICE table contains the concentrations of the relevant species in this condition. When a reaction reaches this state, its namesake coefficient is equal to the reaction quotient. Le Chatelier's principle states that when a system in this state is disturbed, it will shift to restore the system to this state. For 10 points, name this chemical state at which a reaction proceeds at the same rate as its reverse reaction.

ANSWER: **equilibrium**

17. According to Plutarch, this man died on the island of Skyros after being thrown off a cliff by Lycomedes. He is sheltered from a storm by Hecale while on his way to capture the Marathonian Bull. This man's failure to switch his black sails for white ones causes his father's suicide. He is given a sword and a ball of thread by Ariadne, who he later abandons on Naxos. He kills bandits including Procrustes while traveling to Athens, after finding his father Aegeus's sword and sandals under a rock. For 10 points, name this Greek hero who slays the Minotaur.

ANSWER: Theseus

18. Although it's neither in the United States nor the United Kingdom, those two nations agreed to cooperate in nuclear research in an agreement in 1943 named for this place. During one event in this region, kidnapped British diplomat James Cross was released after his captors fled to Cuba. Paul Rose was a terrorist operating in this province and was arrested after the murder of Pierre Laporte. Those events occurred in this province during the October Crisis; as a result, Prime Minister Pierre Trudeau invoked the War Measures Act and declared martial law in Montreal. For 10 points, name this French-speaking province of Canada.

ANSWER: Quebec [Prompt on "Canada" until "region"]

19. In one section of this work, Elroy Berdahl takes the narrator fishing on the Rainy River. Another story from this work sees Mary Anne Bell visit her boyfriend Mark but end up falling in with a group of Special Forces soldiers. That story was related by Rat Kiley and is called "Sweetheart of the Song Tra Bong." The title objects of this story collection include chess sets, diseases, and M-16s. For 10 points, name this memoir about the author's experiences serving in the Vietnam War, written by Tim O'Brien.

ANSWER: *The Things They Carried*

20. These systems' components' distortion causes problems in the "Oxford philosophy" developed by J.L. Austin and Gilbert Ryle about their "ordinary" variety. If one of these systems is only understood by one person, it is incoherent according to an argument by Ludwig Wittgenstein. The original Turing test determined whether artificial intelligence was distinguishable from that of humans by its ability to communicate through one of these systems. For 10 points, name these systems studied by Ferdinand de Saussure, whose words are translated into one another.

ANSWER: languages [accept private languages or ordinary languages or natural languages or human languages; do not accept "programming languages" or "computer languages"]

21. Henryk Gorecki's symphony of this number is the *Symphony of Sorrowful Songs*. In music theory, this number's Roman numeral labels the mediant chord. A Mozart piece for this many musicians is called "Kegelstatt." Mahler's symphony of this number features the alto solo "O Mensch" and, with its six movements, is his longest. A typical Classical-era concerto contains this many movements. Beethoven's E-flat major symphony of this number is called "Eroica." For 10 points, how many musicians would you need to play the Brahms Horn Trio?

ANSWER: three [accept equivalents such as "the third"]

22. This politician's views were leaked to the press in the "Kite" incident named for his estate. This man gave a series of speeches attacking "Beaconsfieldism" as part of his Midlothian Campaign. This man attacked Ottoman atrocities in his pamphlet "Bulgarian Horrors and the Question of the East," and his

government was later blamed for the death of Charles “Chinese” Gordon at the Siege of Khartoum. During his first administration, the Church of Ireland was disestablished, but he later twice failed to pass Irish Home Rule bills. For 10 points, name this four-time British Prime Minister, the liberal rival of Benjamin Disraeli.

ANSWER: William **Gladstone**

23. The resolution to the Gibbs mixing paradox involves noting that this quantity must be divided by the factorial of the number of particles. The Helmholtz free energy is proportional to the product of the temperature with the log of this quantity, and the derivative of this quantity with respect to the thermodynamic beta gives the mean internal energy. In the canonical ensemble, this quantity is defined as the sum over all the states of the Boltzmann factors of a physical system. For 10 points, identify this quantity, symbolized  $Z$ , which represents the energy distribution of a thermodynamic system at equilibrium.

ANSWER: **partition function**

24. The speaker of one poem in this collection considers his similarities with an ancient Roman after noting that “on Wenlock Edge the wood’s in trouble.” Another poem in this collection imagines a conversation between a man who “cheers a dead man’s sweetheart” and the dead man himself, who asks “Is my team ploughing?” The speaker reminisces about “the time you won your town the race” in a poem that addresses “an athlete dying young.” For 10 points, name this poetry collection by A.E. Housman, about doomed and melancholy youths in the title English county.

ANSWER: A **Shropshire Lad**

## BONUSES

1. These equations are derivable by combining Legendre transforms with the fact that the second partial derivatives of a thermodynamic potential with respect to its independent variables is independent of order. For 10 points each:

[10] Identify these equations which relate thermodynamic quantities to each other via partial derivatives, named for a Scottish physicist.

ANSWER: Maxwell relations or equations

[10] This term describes variables that appear diagonally across from each other in the Maxwell relations. It also describes the relationship between the complex numbers  $z$  and  $\bar{z}$ .

ANSWER: conjugate

[10] The term “conjugate” is also used in quantum mechanics to describe variables related to each other through this relation; the most famous pair of conjugate variables are momentum and position, which cannot be simultaneously known to arbitrary precision.

ANSWER: Heisenberg uncertainty principle

2. This book’s cover illustrated its concept of a sovereign leading a commonwealth by showing a giant king whose body is composed of many smaller men. For 10 points each:

[10] Name this book which states that life is “nasty, brutish, and short” in a state of nature and argues that a society bound together by a social contract should be governed by absolute rule.

ANSWER: Leviathan

[10] *Leviathan* was written by this British political philosopher, who tutored Charles II.

ANSWER: Thomas Hobbes

[10] The state of nature described in *Leviathan* is often described with this phrase. Either the four-word Latin phrase or its English translation is acceptable.

ANSWER: war of all against all [or *bellum omnium contra omnes*; the Latin is the original, so accept other English translations like war of each against all, war of everyone against everyone, etc.]

3. This man is praised for his ability to buck barley and criticized for forgetting to keep silent during a job interview. For 10 points each:

[10] Name this nephew of Aunt Clara, a laborer who intends to live off the fat of the land and tend the rabbits when he and George get a farm of their own.

ANSWER: Lennie Small

[10] Lennie and George appear in this novel by John Steinbeck. Later in this novel, Curley’s wife is accidentally killed by Lennie, who doesn’t know his own strength.

ANSWER: Of Mice and Men

[10] This swamper offers 350 dollars to join George and Lennie on their dream farm. Carlsen browbeats this character into letting him kill his dog.

ANSWER: Candy

4. It ran through the “Valley of the tears” in its Southern portion, and the supply depot of Sepon was situated along it. For 10 points each:

[10] Identify this complex system of thoroughfares in Vietnam. Attempts to defoliate the canopy cover for this route using Agent Orange were unsuccessful.

ANSWER: **Ho Chi Minh** trail [or **Truong Son** Strategic Supply Route; accept equivalents for “trail”]  
[10] The VietCong used the Ho Chi Minh trail to build up its forces in South Vietnam for this offensive, which occurred during the 1968 celebration of the Vietnamese New Year.

ANSWER: **Tet** Offensive [or **Tet** mau than or Su kien **tet** mau than 1968]

[10] The CIA had recruited members of this ethnic group in Laos to counter the influence of VietCong and the Pathet Lao. The “Secret Army” of this ethnic group was led by Vang Pao.

ANSWER: **Hmong** [or **Hmoob** or **Moob**]

5. Romario described this event as “the biggest theft in history.” For 10 points each:

[10] Name this large soccer tournament held in Brazil in 2014, which was marked by protests throughout the country.

ANSWER: 2014 FIFA **World Cup**

[10] Brazil’s current President is this woman, a member of the Workers’ Party.

ANSWER: Dilma **Rousseff**

[10] This other Workers’ Party politician preceded Rousseff as President of Brazil.

ANSWER: Luiz Inacio **Lula** de la Silva

6. One character in this play explains to another how he escapes unwanted social occasions by “bunburying.” For 10 points each:

[10] Name this play, in which Jack Worthing and his friend Algernon believe they must change their names in order to marry the women they love.

ANSWER: *The **Importance of Being Earnest***

[10] *The Importance of Being Earnest* is by this Irish aesthete, who wrote about a painting that shows its subject's accumulated sins in *The Portrait of Dorian Gray*.

ANSWER: Oscar **Wilde**

[10] Jack Worthing was accidentally left in one of these things in Victoria Station as a baby.

ANSWER: a **handbag**

7. Name these female painters, for 10 points each.

[10] This wife of Diego Rivera created many self-portraits, including one “with thorn necklace and hummingbird.”

ANSWER: Frida **Kahlo** de Rivera [or Magdalena Carmen Frieda **Kahlo** y Calderon; prompt on “Rivera”]

[10] This artist created works like *Blue and Green Music*. She also painted many works in New Mexico that featured what she called the “Black Place” and the “White Place.”

ANSWER: Georgia Totto **O’Keefe**

[10] This Impressionist’s works include one showing two women sitting on a couch entitled *Tea* and one of a woman holding a baby while a man rows a boat in *The Boating Party*.

ANSWER: Mary Stevenson **Cassatt**

8. In a speech, this man said that great decisions will be made not “by speeches and majority decisions” but “by blood and iron.” For 10 points each:

[10] Name this longtime Prussian and German chancellor, who orchestrated the Franco-Prussian War and German Unification.

ANSWER: Otto von **Bismarck** [or Otto Eduard Leopold von **Bismarck**]

[10] Bismarck came to power under this King. Two failed assassination attempts on him were used as an excuse by Bismarck to pass anti-socialist laws.

ANSWER: **Wilhelm I** [or **William I**, prompt on partial answer]

[10] After Wilhelm I's grandson Wilhelm II came to power, Bismarck was forced to resign. His resignation was shown in a cartoon by John Tenniel with this title, referring to the poor decision to force Bismarck out.

ANSWER: **Dropping the Pilot**

9. An older goddess associated with these animals was Mafdet, who was responsible for killing serpents and other venomous animals. For 10 points each:

[10] Name these domesticated animals that were widely revered in ancient Egypt, especially among the cult of the goddess Bastet, who had the head of one of them.

ANSWER: **cats** [or **mau**; or **felines**; or **lions**]

[10] This lion-headed goddess, the consort of Ptah, was the Upper-Egyptian equivalent of Bastet. In one story, Ra gets her drunk to prevent her from slaughtering humanity.

ANSWER: **Sekhmet** [or **Sachmis**]

[10] Sekhmet is often considered to be the more warlike aspect of this otherwise-peaceful cow goddess, who was associated with the Milky Way and the yearly floods of the Nile.

ANSWER: **Hathor** [or **Hesat**]

10. A library for this language called jQuery supports JSON ["Jason"] parsing. For 10 points each:

[10] Identify this language often used in HTML pages, whose code is often stored in .js files.

ANSWER: **JavaScript** [do not prompt or accept "Java"]

[10] JavaScript, like Python and other scripting language, uses a dynamic system for handling these entities. Although C# generally requires that you statically declare these entities to be, say, an integer or an object, the language's var keyword allows for dynamic forms of these entities.

ANSWER: **types** [or **typing** systems]

[10] JavaScript code used to be executed by an interpreter, but most modern browsers use a just-in-time version of this process for faster execution. This is the process of turning source code into machine-readable code so that the program can be executed.

ANSWER: **compilation** [accept word forms]

11. In one of this writer's plays, Adela grows jealous of her older sister's suitors and larger inheritance. For 10 points each:

[10] Name this author of *The House of Bernarda Alba* who wrote about The Groom and The Bride in his play *Blood Wedding*.

ANSWER: Federico García **Lorca**

[10] Lorca was a writer from this European country. Lope de Vega wrote thousands of sonnets and plays here.

ANSWER: Kingdom of **Spain** [or Reino de **España**]

[10] Lope de Vega wrote during this era of Spanish literary history. This phrase is also applied to the period of Latin literature that includes writers like Ovid and Virgil.

ANSWER: Spanish **Golden Age** [or **Siglo de Oro**; or **Golden Century**; or **Century of Gold**]



12. After being demoted to Chancellor of the Duchy of Lancaster, this man took up landscape painting after seeing his sister-in-law Goonie creating a watercolor on Hoe Farm. For 10 points each:

[10] Identify this politician who as Prime Minister guided Great Britain through World War II after succeeding Neville Chamberlain.

ANSWER: Winston Churchill [or Sir Winston Leonard Spencer-Churchill]

[10] Churchill's demotion came after his enthusiastic backing of this failed campaign against the Ottoman Empire. The goal of this campaign was to seize Constantinople.

ANSWER: Gallipoli Campaign [or Dardanelles Campaign or Battle of Gallipoli or Battle of Canakkale]

[10] This military force's landing in Gallipoli on April 25th, 1915 is now commemorated in a namesake holiday in its two namesake countries. This military force was commanded by John Monash.

ANSWER: ANZAC [or Australian and New Zealand Army Corps]

13. This composer drew on the *Arabian Nights* to compose his orchestral suite *Scheherazade*. For 10 points each:

[10] Name this composer, whose opera *The Tale of Tsar Saltan* contains the “Flight of the Bumblebee.”

ANSWER: Nikolai Rimsky-Korsakov

[10] Rimsky-Korsakov was from this country. Along with composers from this country such as Cesar Cui and Mily Balakirev, he was a member of the Mighty Five.

ANSWER: Russia

[10] Rimsky-Korsakov helped compile the unfinished opera *Prince Igor*, which was written by this man. This composer also wrote *In the Steppes of Central Asia*.

ANSWER: Alexander Borodin

14. A standard electrode potential is written as a reaction of this type, which takes place at the cathode of a voltaic cell. For 10 points each:

[10] Name this component of a redox reaction in which a species gains electrons.

ANSWER: reduction

[10] The component reactions of a redox reaction are called *this*, which also denotes a method used to balance redox reactions, contrasted with using oxidation numbers.

ANSWER: half-reactions

[10] A standard electrode potential of zero is defined as the potential of the half reaction that produces this gaseous molecule.

ANSWER: hydrogen molecule

15. This anthropologist compared the bricoleur and the engineer in his landmark work *The Savage Mind*. For 10 points each:

[10] Name this French anthropologist who pioneered structuralist anthropology. He believed that cultures and human thoughts were governed by universal, homologous structures.

ANSWER: Claude Lévi-Strauss

[10] Part of Lévi-Strauss' book *Tristes Tropiques* covers his interactions with the Bororo people in the Mato Grosso region of this country, whose Amazon rainforests are home to the Yanomami.

ANSWER: Federative Republic of Brazil [or República Federativa do Brasil]

[10] In *The Elementary Structure of Kinship*, Lévi-Strauss theorized that exogamous behavior is driven by this taboo, whose “horror” titles a Freud essay.

ANSWER: **incest** taboo

16. This man rejected asceticism and indulgence in favor of a “Middle Way” and described the Noble Eightfold Path to ending personal suffering. For 10 points each:

[10] Name this man, who founded a world religion that has Mahayana and Theravada branches.

ANSWER: **Gautama Buddha** [accept either underlined portion; or **Siddhartha** Gautama; or The **Buddha**; or **Shakyamuni**]

[10] In Mahayana Buddhism, this name is given to beings who have achieved enlightenment and work for the enlightenment of all beings. One such is Guanyin, an aspect of Avalokitesvara.

ANSWER: **bodhisattvas**

[10] This is the name for the celestial realms inhabited by Buddhas and *bodhisattvas*. One of these realms named Shambhala is the inspiration for the Shangri-La myth.

ANSWER: **Pure lands** [or **buddha-ksetra** or **Buddha fields**; or **jingtu**]

17. This author recounts how Croesus was warned “If you attack you will destroy a great empire.” For 10 points each:

[10] Name this Greek Historian and so-called “Father of History,” whose 10-volume *The Histories* is the primary source of information on the Persian Wars.

ANSWER: **Herodotus**

[10] Herodotus paints a rather barbaric picture of these nomadic peoples who inhabited the steppes north and east of the Black Sea. They displaced the Cimmerians and flourished starting in the 7<sup>th</sup> century BC.

ANSWER: **Scythians**

[10] One story often erroneously attributed to Herodotus is the legend of how this Athenian messenger ran 26 miles from Marathon to Athens to tell the people of victory, then died on the spot from exhaustion.

ANSWER: **Pheidippides**

18. The endosperm provides many of the nutrients for the developing embryo in these structures. For 10 points each:

[10] Name these plant embryonic structures usually covered in a protective coat.

ANSWER: **seeds**

[10] These “seed leaves” are found along the embryonic axis. Vascular plants are classified by whether they have one or two.

ANSWER: **cotyledon**

[10] Among angiosperms, fusion of the polar nuclei with a sperm cell nucleus usually results in an endosperm with this ploidy.

ANSWER: **triploid**y [or **three** sets of chromosomes]

19. One character in this film is called Jimmy Two-Times due to his repeating himself. For 10 points each:

[10] Name this film which stars Ray Liotta as Henry Hill and Joe Pesci as Tommy DeVito, who is murdered after being tricked into thinking he’s a made man.

ANSWER: **Goodfellas**

[10] *Goodfellas* was directed by this man, who also directed *Hugo*, *Raging Bull*, and *The Departed*.

ANSWER: Martin (Charles) Scorsese

[10] This other Scorsese film starred Robert De Niro as Travis Bickle, who gives himself a Mohawk and repeats into a mirror, “you talkin’ to me?”

ANSWER: Taxi Driver

20. The “clever slave” is a prominent stock character in this man’s plays. For 10 points each:

[10] Name this ancient Roman comic playwright of *Pseudolus* and *Miles Gloriosus*. Like Terence, he drew on the Greek comedies of Menander in his works.

ANSWER: Titus Maccius Plautus

[10] This Plautus play begins with a household god explaining how Phaedria’s father, the miser Euclio, found the title treasure under his house. Euclio is later robbed by the slave of Lyconides.

ANSWER: *The* Pot of Gold [or Aulularia]

[10] In this Shakespeare play, based on Plautus’s *Menaechmi*, hilarity ensues when Antipholus of Syracuse and his slave Dromio are both mistaken for their long-lost twin brothers.

ANSWER: *The* Comedy of Errors

21. This man wrote an article promoting charity called "The Gospel of Wealth." For 10 points each:

[10] Name this Scotsman who founded a powerful Pittsburgh based steel company. His philanthropy funded numerous libraries and universities across the country.

ANSWER: Andrew Carnegie

[10] This other philanthropist and business magnate was known as the "Commodore" for his railroad and shipping investments. He is the namesake of a Tennessee university.

ANSWER: Cornelius Vanderbilt

[10] Vanderbilt got his start as a ferry captain and was involved in this 1824 Supreme Court case, in which a New York monopoly on navigation privileges was ruled unconstitutional. The Court ruled that Congress had the power to regulate interstate commerce.

ANSWER: Gibbons v. Ogden [accept either part and in reverse order]

22. The color of these massless, chargeless particles corresponds to the eight Gell-Mann matrices. For 10 points each:

[10] Name these gauge bosons that mediate the strong force. Their interactions with quarks are described by quantum chromodynamics.

ANSWER: gluons

[10] The strong force is responsible for binding protons and neutrons into these dense structures at the center of atoms.

ANSWER: atomic nuclei [or nucleus]

[10] QCD exhibits confinement and this property, discovered by Wilczek, Gross, and Politzer. It makes bonds between particles become weaker as energy increases and distance decreases.

ANSWER: asymptotic freedom

23. The speaker of this poem declares “I am large, I contain multitudes”. For 10 points each:

[10] Name this poem that begins “I celebrate myself”, the longest poem included in *Leaves of Grass*.

ANSWER: “Song of Myself”

[10] “Song of Myself” was written by this American poet, who also wrote “O Captain! My Captain!” about the death of Abraham Lincoln.

ANSWER: Walt **Whitman**

[10] This other Whitman poem says “Flood-tide below me! I watch you face to face” and describes “crowds of men and women attired in the usual costumes” on the title conveyance.

ANSWER: “**Crossing Brooklyn Ferry**”

24. Answer the following about European art museums, for 10 points each.

[10] This Paris museum is home to Eugene Delacroix’s *Liberty Leading the People* as well as Leonardo da Vinci’s *Mona Lisa*.

ANSWER: **Louvre**

[10] This museum in Florence is home to Paolo Uccello’s *The Battle of San Romano* as well as *Madonna with the Long Neck* by Parmigianino.

ANSWER: **Uffizi** Gallery

[10] Jan Vermeer’s *Girl with a Pearl Earring* and *View of Delft* are both located in the Mauritshuis art museum in this Dutch city, which is home to the Huis ten Bosch royal palace.

ANSWER: **The Hague** [or **Den Haag**]