ACF Fall 2014: Nemo auditur propriam derpitudinem allegans
Packet by Detroit Catholic Central C (Will Lamarra, Keith Melong, Austin Morton, Denis
Tchaouchev), University of Georgia (Jason Fern, Claire Garland, Evan Knox, Kailyn LaPorte, Dylan
Morgan, Julia Tallant), and Brown A (Abid Haseeb, Rohith Nagari, Lloyd Sy)
Edited by Jordan Brownstein, Jacob Reed, Max Schindler, Richard Yu, and Ben Zhang
Head-editing by Gautam Kandlikar and Gaurav Kandlikar

## **Tossups**

- 1. This man's attempt to ride into Rome on a chariot pulled by four elephants was halted when the elephants couldn't fit through a gate. He intervened in a war for the Hasmonean kingdom between Hyracanus II and Aristobulus II. With Metellus Pius, this man put down the revolt of Sertorius in Iberia. After being granted a navy by the Lex Gabinia, this man defeated the Cilician pirates in three months. At this man's namesake theater, an enemy of his was murdered under this man's statue. After his loss at Pharsalus, this man fled to Egypt and was beheaded by soldiers of Ptolemy XIII. For 10 points, name this Roman who, along with Crassus and Caesar, was part of the First Triumvirate.
  - ANSWER: **Pompey** the Great [or Gnaeus **Pompeius** Magnus]
- 2. In one of this author's stories, Twinkle discovers a large statue of Jesus in the attic of a house where she and her husband are hosting a dinner party. This author of "This Blessed House" wrote a novel in which a future MIT graduate is discovered in a train wreck because he was holding a page of the story "The Overcoat". In that novel by this author, Ashima and Ashoke Ganguli name their son after Nikolai Gogol. This author wrote a collection whose title story ends with Bobby being rescued from a troop of vicious monkeys by the tour guide Mr. Kapasi. For 10 points, name this contemporary Indian American author of *The Namesake* and "Interpreter of Maladies".
  - ANSWER: Jhumpa **Lahiri** [or Nilanjana Sudeshna **Lahiri**]
- 3. This man delivered a lecture describing a "crude but vital" popular mentality that "inhabits the sky-scraper..." as opposed to one that inhabits "colonial mansions." He wrote a book that described essence, matter, truth, and spirit as four constituents of a group of foundations for experience. This writer of "The Genteel Tradition in American Philosophy" argued that philosophy should rely on instinct instead of rational thought, and that it begins in medias res. This author wrote The Realms of Being and Scepticism and Animal Faith. For 10 points, name this Spanish-American philosopher who said that "those who cannot remember the past are condemned to repeat it."
  - ANSWER: George <u>Santayana</u> [or Jorge Agustín Nicolás Ruiz de <u>Santayana</u> y Borrás]
- 4. In this structure, oligosaccharides are transferred to asparagine residues from dolichol. The SRP localizes polypeptides to the translocons of this organelle. In these organelles' membranes, P450 helps detoxify substances by hydroxylation. In this organelle, protein disulfide isomerase oxides the sulfhydryl groups of cysteines to form disulfide bonds. The KDEL sequence retains specific proteins in this organelle after they are folded. Part of this organelle is continuous with the nuclear envelope; the surface of that portion is studded with ribosomes. For 10 points, name this membranous organelle that comes in smooth and rough varieties.
  - ANSWER:  $\underline{endoplasmic\ reticulum}$  [accept smooth  $\underline{ER}$  or rough  $\underline{ER}$ ; anti-prompt, i.e. "Can you be less specific?" on "sarcoplasmic reticulum"]

5. In a film directed by this man, Gus says "I'm a captain now, and I want to marry" to Flora, who runs away and heroically jumps off a cliff. In that film by this director, the Lieutenant Governor Lynch tries to force Elsie to marry him, but a group led by the "Little Colonel" saves her. Another of his films has four interwoven tragic storylines from different time periods, with interludes featuring a woman rocking a cradle. This director depicted the lives of the Cameron and Stoneman families in South Carolina in a film that ends with members of the KKK stopping African-Americans from voting. For 10 points, name this American who directed *Intolerance* and *Birth of a Nation*.

ANSWER: D. W. Griffith [or David Llewelyn Wark Griffith]

6. Near this work's beginning, its narrator tells the reader to skip over any offensive sections, while its final section is a "Retraction." One character in this work gives a lengthy demonstration of how to harangue a husband, and says that she liked her fifth husband the best because he was best in bed. At the end of that section of this work, a husband yields "mastery" to his ugly wife, whereupon he removes a curtain and sees that she is now young and beautiful. In the second section of this poem, Theseus imprisons Palamon and Arcite, who then battle over Emily. For 10 points, name this long poem narrated by people like the Knight and the Wife of Bath, by Geoffrey Chaucer.

ANSWER: The **Canterbury Tales** 

7. Robert Boisjoly and Allan McDonald attempted to prevent this event, the latter of whom wrote a book titled for *Truth*, *Lies*, and some objects involved in this event. The Kerwin Report found that three out of four PEAPS had been activated during this event. The company Morton Thiokol was fined in its aftermath. Ronald Reagan delayed his State of the Union Address to honor the victims of this event, who attempted to "touch the face of God." It was investigated by the Rogers Commission, in which Richard Feynman demonstrated a flaw in the construction of the O-rings. For 10 points, name this disaster in which Christa McAuliffe and others died as a space shuttle blew up.

ANSWER: **Challenger** disaster [accept equivalents like the **Challenger** explosion]

ANSWER: **ships** [or **boats**; or solar **barges**; or solar **barques**]

- 8. In Egyptian mythology, one of these objects took the forms of the Mandjet and the Mesektet. In Norse mythology, the giantess Hyrrokkin arrived to push one of these objects, on which Nanna committed suicide. The *Gylfaginning* advises its readers to clip the toe- and fingernails of the dead to prevent the completion of the largest of these objects, which is named Naglfar, and also mentions the best of them, Frey's Skidbladnir. Similarly to the way a dove lost parts of its tail feathers, one of these objects was partially damaged as it passed through the Clashing Rocks on its way to Colchis and the Golden Fleece. For 10 points, identify these objects exemplified by the *Argo*, on which Jason sailed.
- 9. Six equivalents of a compound containing this element and chlorine are used to convert an aldehyde to an E-alkene in the Takai olefination. E.J. Corey and Bill Suggs discovered a pyridinium salt reagent in which this element is bound to oxygen and chlorine. This metal's trioxide is combined with acetone and sulfuric acid in a reagent which is used to convert primary alcohols to carboxylic acids. This metal, which is used in organic chemistry as part of the PCC and Jones reagents, imparts a red color to corundum. For 10 points, name this metal which is named for its ability to change the color of many metal compounds. ANSWER: **chromium** [or **Cr**]

- 10. An author writing about these two relatives refers to an anonymous "great and inestimable chronicle" detailing their origins, and described their philosophy as "a certain gaiety of spirit, pickled in the scorn of fortune." After Friar John helps one of these two people win a battle, that person rewards him by building an abbey governed by the rule "do what thou wilt." The Abbey of Theleme is founded by the father of this father-and-son pair, both of whom inexplicably vary in size over the course of five novels in which they appear. One of them travels to consult the Oracle of the Holy Bottle with his friend Panurge. For 10 points, name these two giants who are the subject of a work by Francois Rabelais.

  ANSWER: Gargantua AND Pantagruel [or The Life of Gargantua and Pantagruel; or La Vie de Gargantua et de Pantagruel; order does not matter; do not accept or prompt on partial answer]
- 11. This leader began the practice of holding victory feasts on a platform atop captured noblemen. The successors of this man are the subject of an account by Rashid al-Din, and this leader established the Yam postal system. This man measured the heads of prisoners against a linchpin to determine who to execute after putting down Jamukha's revolt. The Naiman and Merkit tribes opposed this man, who responded to the murder of his ambassadors by destroying the Khwarezmian Empire. This husband of Borte was served by the general Subotai and was succeeded by his son Ogedei. For 10 points, name this founder of the Mongol Empire.

ANSWER: **Genghis** Khan [or **Chinggis** Khan; **Temujin**]

12. Pen y ["uh"] Fan is located in this country's Brecon Beacons national park. The north of this country is home to castles like Conwy and Caernarfon ["kah-EER-nah-fon"]. Its capital is home to the St Fagans history museum. A small town in this country has over two dozen bookstores and is on the Wye river. The Menai Strait separates its mainland from the large island Anglesey to its northwest. People in this country celebrate artistic festivals called eisteddfodau. This country is bordered to the West and North by Cardigan Bay and the Bristol Channel. Its highest mountain is Snowdon and its largest cities are Swansea and Cardiff. For 10 points, name this country west of England.

ANSWER: <u>Wales</u> [or <u>Cymru</u>, which sounds sort of like "KUM-bree"; prompt on "UK," "United Kingdom, "Great Britain," etc., but do NOT accept or prompt on "England" or "Scotland"]

13. In a Sinclair Lewis novel, the literary club of Gopher Prairie, Minnesota is named for one of this man's works. The speaker of one of this author's poems is awed by a Power "whose care / Teaches thy way along that pathless coast" though soon "that toil shall end." The speaker of that poem by this author hopes that "in the long way that [he] must tread alone," his steps will be led aright by the one who guides the addressee's "certain flight." Another of this author's poems suggests not going "like the quarry-slave at night" when "thy summons comes to join" an "innumerable caravan," and to simply lie "down to pleasant dreams." For 10 points, name this poet of "To a Waterfowl," who penned a meditation on death called "Thanatopsis."

ANSWER: William Cullen Bryant

14. Diana Vreeland called this color "the great clarifier" and decorated her entire apartment in shades of it. Valentino is known for his dresses in this color, which lends its name to one of his lines. Revlon created an iconic nail polish in its namesake shade of this color. Christian Louboutin uses this color for the soles of his high heels. Traditional East Asian wedding dresses are in this color. This color names a multi-brand line of products created by Bobby Shriver and Bono for AIDS awareness. Revlon uses shades of this color with names like "Fire and Ice" and "Love that [this colour]" for its lipsticks. For 10 points, name this color, used for the carpet at celebrity galas.

ANSWER: <u>red</u> [accept any shades of red like <u>crimson</u> or <u>scarlet</u>; accept Revlon <u>Red</u>; accept Product <u>Red</u>]

15. In this Biblical book, a woman who is staying at an inn calls her spouse a "bloody husband" after she performs a circumcision. A man in this book laments his "uncircumcised lips" while his genealogy is being related to him. In this book, a bitter well is turned sweet when a tree is thrown into it. In this book, the magicians Jannes and Jambres turn rods into snakes that are devoured by another snake. While living in Midian, a man in this book is told the phrase "I am that I am" by a burning bush. In this book, a golden calf is idolized by the followers of Aaron while stone tablets bearing the Ten Commandments are given to Moses. For 10 points, name this second book of the Hebrew Bible.

ANSWER: Book of **Exodus** [or **Sh'mot**]

16. This quantity equals isospin plus one-half the sum of baryon number, strangeness, charm, bottomness, and topness, according to the revised Gell-Mann-Nishijima formula for it. This quantity's conservation law can be written as "del dot J plus d-rho d-t equals zero". Poisson's equation sets the Laplacian proportional to the negative of the density of this quantity. This quantity collects in opposite values on either side of a capacitor, and its time-derivative is the current. The electric force between two objects is proportional to the product of this quantity for each object, according to Coulomb's Law. For 10 points,

name this quantity measured in coulombs, which is positive for a proton.

ANSWER: **charge** [prompt on **Q**]

17. In this country, the English Factory House's power was opposed by the founding of the Douro Company. The attempted assassination of a king of this country in a shanty town led to the execution of the entire Tavora family on the orders of the Marquess of Pombal. This country was taken over by its neighbor after a king called the "Desired" was killed at the Battle of Alcacer Quivir. This country's navy used ships like the carrack and the caravel. John I founded this country's Aviz Dynasty, which was succeed by the Braganza Dynasty. For 10 points, name this home of Vasco de Gama and Henry the Navigator, an Iberian country where the Lisbon earthquake occurred.

ANSWER: Portugal [or Portuguese Republic]

18. The Held-Karp algorithm is a very inefficient dynamic programming way to perform this task. When the edges of the graph in question satisfy the triangle inequality, this task can be done approximately with the Christofides algorithm. A setup can be constructed such that the greedy approach to solving this problem, the nearest neighbor method, is actually the worst possible. This problem seeks to find the minimum length of a Hamiltonian cycle on a graph with given edge weights. For 10 points, identify this problem in computer science, which asks what the shortest possible route a roving vendor can take so that he visits every city once.

ANSWER: solving the **Traveling Salesman** Problem [or **TS**P]

19. In this opera, the title character compares himself to another character in the aria "Pari siamo," saying"my weapon is my tongue, his is his dagger." It opens with a character explaining that "this woman or
that woman" is the same to him in the aria "Questa o quella." The title character of this opera is
blindfolded and made to believe he is helping kidnap Countess Ceprano; that title character is really
being used to kidnap his own daughter, which he realizes at the end in "La maledizione!" In its final act,
the title character's daughter Gilda is killed by Sparafucile, and the Duke of Mantua sings "La donna è
mobile." For 10 points, name this Giuseppe Verdi opera about a hunchbacked jester.

ANSWER: Rigoletto

20. Erich Fromm contrasted this thinker's views with Freud's view of humans as isolated beings in a book called this thinker's "Concept of Man." This thinker's concept of reification of social relations was examined in a book by Gyorgy Lukacs. This man posited a base of productive forces that supports a political and cultural superstructure. In one work, he argued that the rate of profit tends to fall as production tends to advance. He co-wrote a pamphlet expounding on the conflict between the proletarian and bourgeois classes with Friedrich Engels. For 10 points, name this German author of Das Kapital and The Communist Manifesto.

ANSWER: Karl [Heinrich] Marx

## **Extra**

In this poem, seven hundred camels and a thousand hawks are included as part of an embassy sent by the wise adviser Blancandrin. This poem's last line declares the end of a story told by the mysterious poet Turoldus. In this poem, Thierry wins a trial by combat against Pinabel to prove that a man revealed a secret pass to King Marsilla's army. Archbishop Turpin and the wise knight Oliver die fighting alongside this poem's hero, who is betrayed by Ganelon. In this poem, the veins in the hero's temples burst when he blows his ivory horn to alert his army to the rear guard's defeat by the Saracens at Roncesvalles. For 10 points, name this medieval poem about a hero in Charlemagne's army.

ANSWER: The Song of Roland [or La Chanson de Roland]

## **Bonuses**

1. Substances with this property are named according to the Cahn-Ingold-Prelog rules. For 10 points each: [10] Identify this property of stereoisomers that cannot be superimposed on their mirror image. Its name is Greek for "handedness."

ANSWER: chirality

[10] Compounds that have multiple stereocenters but are not chiral overall are identified by this adjective.

ANSWER: **meso** compounds

[10] This type of mixture contains equal amounts of left and right enantiomers of a chiral molecules. Like meso compounds, they do not bend polarized light.

ANSWER: **racemic** mixture [or **racemate**]

2. This poem describes "angelheaded hipsters burning for the ancient heavenly connection to the starry dynamo." For 10 points each:

[10] Name this poem written for Carl Solomon that begins "I saw the best minds of my generation destroyed by madness, starving hysterical naked."

ANSWER: "Howl"

[10] "Howl" was written by this Beat Generation author. Philip Glass' 6<sup>th</sup> symphony incorporates text from this author's anti-nuclear poem "Plutonian Ode."

ANSWER: Allen **Ginsberg** [or Irwin Allen **Ginsberg**]

[10] At the title location of this Ginsberg poem, the speaker sees the "childless, lonely old grubber" Walt Whitman, who is "eyeing the grocery boys" and asks Garcia Lorca "what were you doing down by the watermelons?"

ANSWER: "A Supermarket in California"

3. During this prime minister's first term, he ordered the Wolseley expedition in response to the murder of Thomas Scott. For 10 points each:

[10] Name this Conservative who was forced to resign following the Pacific Scandal.

ANSWER: John Alexander Macdonald

[10] The Pacific Scandal involved allegations of bribery during the construction of one of these structures in Canada. In the USA, a transcontinental structure of this type was completed with a golden spike in Promontory, Utah.

ANSWER: transcontinental **railroad**s [accept word forms like **railway**]

[10] The aforementioned Wolseley expedition targeted this Metis rebel leader, who established the Red River Colony and was hung following the failure of his North-west rebellion.

ANSWER: Louis Riel [or Louis David Riel]

- 4. Picander wrote the libretto for several of this composer's works, including one that uses a "halo" effect in the strings when Jesus sings. For 10 points each:
  - [10] Name this composer whose works are catalogued using BWV numbers. He wrote the most famous St Matthew Passion and a Mass in B Minor so good that his family just called it "The Great Catholic Mass."

ANSWER: **J**ohann **S**ebastian **Bach** [prompt on just "Bach" or "J[ohann] Bach"]

[10] This instrument has a solo in the "Laudamus Te" of the *Mass in B Minor*. Bach composed a "Ciaconna" or "Chaconne" for this instrument, a piece that serves as the final movement of his D-minor second partita for it alone.

ANSWER: violins

[10] A famously beautiful manuscript of the *Sonatas and Partitas* for solo violin was copied by this second wife of Bach. Bach compiled a "little notebook" for her, including the famous "Minuet in G."

ANSWER: <u>A</u>nna <u>M</u>adgalena Bach [accept <u>Anna Magdalena</u> Wilcke(n); prompt on "Bach" or "Mrs. Bach"]

- 5. The case *Gitlow v. New York* ruled that this amendment does apply on the state level. For 10 points each:
  - [10] Name this amendment, which guarantees the freedoms of speech, religion, and assembly.

ANSWER: **First** amendment [or **1**<sup>st</sup> Amendment]

[10] The ruling in *Gitlow v. New York* reversed that of an earlier case, in which John Barron sued a city in this state. This state was the defendant in a case in which John Marshall said "the power to tax is the power to destroy."

ANSWER: Maryland

[10] Gitlow v. New York was the first step in this process, which gradually made the protections in the Bill of Rights applicable on the state level.

ANSWER: selective incorporation

- 6. This artist painted many still lifes of apples. For 10 points each:
  - [10] Name this French post-Impressionist who was a major influence on Cubism.

ANSWER: Paul Cézanne

[10] Cézanne often included a railway bridge in his views of this mountain in Provence.

ANSWER: Mont Sainte-Victoire [or Montagne Sainte-Victoire; or Santo Ventùri]

[10] One of Cézanne's largest canvasses is a depiction of several women doing this activity. Seurat painted some people doing this at Asnières.

ANSWER: **bath**ing [accept any equivalents that would involve them cleaning themselves by immersion in water]

- 7. The fundamental theorem of algebra states that all polynomials have at least one root in this field. For 10 points each:
  - [10]. Name this set of numbers that can be written as a+bi, for real a and b.

ANSWER: **complex** numbers

[10] If a polynomial p has all real coefficients, and x is a non-real root of p, then what function of x must also be a root of p?

ANSWER: complex **conjugate** of x

[10] This man's namesake rule of signs can tell you how many of the roots of a polynomial are positive and how many are negative. He also developed the coordinate plane.

ANSWER: Rene **Descartes** [or Renatus **Cartesius**]

8. In the final scene of this play, a teenager begs her tutor to teach her how to waltz. For 10 points each: [10] Name this play in which Thomasina Coverley is instructed by Septimus Hodge. In another plot in this play, set a hundred years later, Valentine and Hannah research the "hermit of Sidley Park."

ANSWER: Arcadia

[10] Arcadia was written by this British playwright, who expounded on two minor characters from Hamlet in his Rosencrantz and Guildenstern are Dead.

ANSWER: Tom **Stoppard** [or Tomas **Straussler**]

[10] In the opening line of *Arcadia*, Thomasina asks Septimus the meaning of this two-word phrase, which he punningly claims is hugging a side of beef. He later explains that it's "sexual congress."

ANSWER: "carnal embrace"

- 9. This name of this kind of speech derives from a Greek word meaning "companionship," and one of these speeches is given at the end of the Liturgy of the Word. For 10 points each:
  - [10] Give this term that in common usage refers to a short sermon or religious commentary.

ANSWER: a **homily** [or **homilies**; or **homilia**]

[10] The Liturgy of the Word is part of this Catholic religious observance that observes the sacrament of the Eucharist. They usually happen on Sundays.

ANSWER: masses [or missa]

[10] This text is recited during the breaking apart, or "fraction," of the Eucharistic bread. It asks "you who take away the sins of the world, grant us peace."

ANSWER: the **Agnus Dei** [or **Lamb of God**]

10. Identify the following about the geography of Florida, for 10 points each.

[10] This wetlands region in southern Florida is home to a namesake national park. It is mostly fed by water from Lake Okeechobee and is the target of many restoration efforts.

ANSWER: the **Everglades** 

[10] The Florida Keys are connected by the Overseas Highway, which is a portion of a US Route with this number. A highway with this number runs around the entirety of Australia; another runs down the coast of California.

ANSWER: one

[10] This river forms the easternmost part of the Florida-Georgia boundary, flowing from Okefenokee Swamp into the Atlantic near Fernandina Beach. Like Florida's St. Johns River, it is frequently misspelled with an apostrophe in its name.

ANSWER: Saint Marys River

- 11. The Orange Alternative, a protest movement associated with this group, engaged in antics such as singing odes to Stalin in front of a chimpanzee cage. For 10 points each:
  - [10] Name this trade union begun in 1980 at the Lenin Shipyards by electrician Lech Walesa.

ANSWER: **Solidarity** [or **Solidarnosc**]

[10] This series of meetings between President Jaruzelski and Walesa resulted in the April Novelization, a period during which Solidarity was legalized and the Contract Sejm parliament was established.

ANSWER: **Round Table** Talks

[10] In 1981, Solidarity members of this profession held a strike in Beirun. Soviet propaganda celebrated a member of this profession named Alexei Stakhanov who supposedly extracted over 200 tons of coal in a single shift.

ANSWER: coal **miner**s [accept word forms and obvious equivalents]

- 12. This book was written while its author was in prison, awaiting execution after his fall from power under King Theodoric in 6<sup>th</sup> century Rome. For 10 points each:
  - [10] Name this book that opens with a woman appearing before the author and shooing away the Muses of Poetry. In this book, the woman and the author discuss topics like the nature of happiness and why God allows evil to exist.

ANSWER: The **Consolation of Philosophy** [or De **Consolatione Philosophiae**]

[10] This philosopher wrote *The Consolation of Philosophy*, and also wrote about Aristotle's logic in his book *De Topicis Differentiis*.

ANSWER: **Boethius** [or Anicius Manlius Severinus **Boethius**]

[10] Book Two of *The Consolation of Philosophy* describes the "malice" and "vanity" of this concept.

This concept is symbolized as a woman who turns a spinning wheel.

ANSWER: **fortune** [or **fortuna**; or synonyms like "**luck**" or "**chance**"]

- 13. This author wrote a novel in which Rebeca suffers from pica, a disease that impels her to eat earth and whitewash. For 10 points each:
  - [10] Name author who wrote about the many generations of the Buendia family in his novel *One Hundred Years of Solitude*.

ANSWER: Gabriel **Garcia Marquez** [or Gabriel Jose de la Concordia **Garcia Marquez**]

[10] Jose Arcadio Buendia dreams of a city of "mirrors (or mirages)" that leads him to establish this town. This fictional South American town is the setting of *One Hundred Years of Solitude*.

ANSWER: Macondo

[10] The Buendia family ends when Aureliano Babilonia and his aunt Amaranta Ursula commit incest, causing their child to be cursed with this unusual physical feature. Aureliano abandons the baby to be eaten by ants.

ANSWER: a pig's **tail** [or clear equivalents like "having the **tail** of a pig"]

- 14. An excess of this neurotransmitter's activity is associated with schizophrenia. For 10 points each:
  - [10] Identify this neurotransmitter, which is associated with pleasure and reward-seeking behavior. It is a precursor to norepinephrine.

ANSWER: dopamine [or DA]

[10] Dopamine is part of this class of monoamine neurotransmitters, which contain a di-hydroxylated phenyl group. Epinephrine and norepinephrine are also examples of this type of neurotransmitter.

ANSWER: catecholamines

[10] All catecholamines are derived from this amino acid. Insulin binds to a receptor that causes kinases to phosphorylate this amino acid.

ANSWER: **tyrosine** [or **Tyr** or **Y**]

- 15. In a two-person economy, the person who holds a lower value for this quantity for a good is said to hold a comparative advantage for that good. For 10 points each:
  - [10] Identify this type of cost that is defined as the amount of potential production of one good given up by a producer when she or he decides to produce a different good.

ANSWER: opportunity costs

[10] A high opportunity cost translates to a steep slope on this curve, which depicts the maximum amount of production of two goods that an economy can maintain, at different levels of each good.

ANSWER: production possibility frontier [or production possibility curve; or PPF; or PPC]

[10] A concave production possibilities curve may indicate a situation described by this three-word phrase, which refers to circumstances in which the average cost of a product decreases as more of the product is produced.

ANSWER: an **economy of scale** [or word forms]

16. Identify the following about the various times Ares got humiliated, for 10 points each.

[10] Ares left Troy and went back to Olympus to whine to Zeus after he got stabbed in the stomach by this Greek soldier. This man also crushed the hip of Aeneas and wounded the hand of Aphrodite.

ANSWER: **Diomedes** 

[10] These two giants, the sons of Iphimedia and Poseidon, trapped Ares in a bronze jar for thirteen months. They also planned to reach Olympus by piling Mount Helion on top of Mount Ossa, but died before that happened.

ANSWER: **Otus** and **Ephialtes** [accept in either order; or the **Aloadae**]

[10] This lame god trapped Ares in bed with his wife Aphrodite, after which all the gods laughed at them. This god was thrown out of Olympus by Hera because she found him too ugly.

ANSWER: **Hephaestus** 

17. This man halted the Move to the Left program after overthrowing Milton Obote. For 10 points each: [10] Name this Ugandan dictator who expelled all Asians from his country in 1972 and was overthrown by forces sent by Julius Nyerere.

ANSWER: Idi Amin Dada

[10] Julius Nyerere was a socialist president of this East African country, which was created by the Articles of Union and named for the former British territory and the nearby archipelago it comprises.

ANSWER: Tanzania

[10] Like Amin, this erstwhile dictator of the Central African Republic may have practiced cannibalism. This man overthrew David Dacko and once personally murdered schoolchildren who refused to wear the uniforms he mandated.

ANSWER: Jean-Bedel Bokassa [Salah Eddine Ahmed Bokassa]

- 18. These objects' names come from the fact that they absorb all incoming radiation, so they do not reflect any light. For 10 points each:
  - [10] Identify these idealized objects, which, when at thermal equilibrium, radiate energy at a rate given by the Stefan-Boltzmann law.

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

[10] This law exactly gives the spectral radiance of light at a given frequency emitted by a blackbody. At high frequencies, it gives similar results to the incorrect Wien approximation.

ANSWER: Planck's law

[10] The classic mechanically-derived Rayleigh-Jeans law would predict infinite energy for some parts of the spectrum in a "catastrophe" named after this type of radiation, which is slightly longer in wavelength than X-rays.

ANSWER:  $\underline{\textbf{ultraviolet}}$  [or  $\underline{\textbf{UV}}$ ]

- 19. This country has faced civic unrest in eastern cities like Donetsk and Luhansk. For 10 points each:
  - [10] Name this former Soviet Republic. Its Crimean peninsula was annexed by Vladimir Putin in 2014.

ANSWER: **Ukraine** [or **Urkrayina**]

[10] This owner of the Roshen candy company succeeded Viktor Yanukovych and Oleksandr Turchynov as President of Ukraine in May 2014.

ANSWER: Petro Oleksiyovych Poroshenko

[10] Putin claimed that Russia could overrun Kiev in a fortnight in a leaked conversation with José Manuel Barroso, the president of *this* executive branch of the European Union.

ANSWER: **<u>European Commission</u>** [or **<u>EC</u>**; don't accept "European Council"]

- 20. This character rejects the courtship of a famed ice skater because she is in love with a cavalry officer. For 10 points each:
  - [10] Name this eventual wife of Konstantin Levin and younger sister of Dolly, who falls in love with Count Vronsky before the title character of the novel she appears in does.

ANSWER: <u>Kitty Shcherbatsky</u> [accept either underlined part; or <u>Katerina</u> Alexandrovna Shcherbatsky] [10] Kitty Shcherbatsky appears in this Leo Tolstoy novel, whose protagonist commits suicide by throwing herself in front of a train.

ANSWER: Anna Karenina

[10] This Leo Tolstoy novella is about a judge who suffers a fatal fall while putting up curtains. In his final days, the title judge takes comfort in resting his legs on the shoulders of his servant, Gerasim.

ANSWER: The **Death of Ivan Ilyich** [or **Smert Ivana Ilyicha**]

## Extra

With Tamar, Rahab, and "the wife of Uriah," this woman is one of only four women mentioned in the genealogy of Jesus Christ. For 10 points each:

[10] Name this woman whose mother-in-law Naomi advises her to go lay at the feet of a man with whom she would be joined in Levirate marriage. She meets that man, Boaz, while gleaning in his fields in her namesake Biblical book.

ANSWER: Ruth

[10] This grandson of Ruth is often depicted with Jesus' family tree growing out of him, as described in the Book of Isaiah. The prophet Samuel considered each of this man's sons before anointing the youngest one King of Israel.

ANSWER: **Jesse** [or **Yishai**]

[10] That son of Jesse was this king, who gained fame for killing Goliath.

ANSWER: David

This poem begins as a "lowing herd wind[s] slowly over the lea" and "the ploughman homeward plods his weary way." For 10 points each:

[10] Identify this poem describing an area where "some mute inglorious Milton" or "Cromwell guiltless of his country's blood" may rest, as well as a "youth to Fortune and to Fame unknown."

ANSWER: "Elegy Written in a Country Churchyard"

[10] This poet wrote "Elegy Written in a Country Churchyard." He claimed that "where ignorance is bliss, 'tis folly to be wise" in his "Ode on a Distance Prospect of Eton College."

ANSWER: Thomas **Gray** 

[10] In a poem about one of these things, Gray asks "What female heart can gold despise?" When one of these beings is in trouble, "no Dolphin came, no Nereid stirred."

ANSWER: a **cat** [accept "Ode on the Death of a Favourite **Cat**, Drowned in a Tub of Gold Fishes"]