SUBMIT 2014: "sometimes referred to as Groper[citation needed]"

Editors Packet 2

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#### **Tossups**

1. Transporters of this compound are coded by the SLC14A2 gene. One structure maintains a high concentration of this molecule by a mechanism in which alternating permeability of the ascending limb and descending limb and opposite directions of flow create a high sodium gradient in the medulla; that mechanism is countercurrent multiplication. In his experiment on protein folding, Anfinsen treated RNase A with 2-mercaptoethanol and this molecule. In a process that creates this compound, (\*) carbamoyl phosphate is created from bicarbonate and glutamine. In that process, arginase hydrolyzes arginine into ornithine and this compound. For 10 points, name this compound which has a namesake cycle used in making nitrogenous waste into a form more easily excretable from the body.

ANSWER: urea cycle

2. One album by a man who played this instrument featured the tracks featured a cover of Miles Davis's "No Blues" along with the original composition "Four on Six." That album, *Smokin' at the Half Note*, was recorded by Wes Montgomery. Another jazz musician who plays this instrument has released albums like *Earth Run* and the self-titled *Rit* and *Rit* 2, and another player of this instrument frequently collaborated with Steve Rodby in his namesake Group. That Group released tracks like "Are You Going with Me?" and (\*) "Last Train Home." The recently deceased Jim Hall played this instrument. Lee Ritenour and Pat Metheny play this instrument, of which a special Pikasso 42 string model was produced for Metheny. For 10 points, name this instrument whose blues players include B.B. King and Eric Clapton.

ANSWER: electric guitar (do not accept bass guitar)

3. During this war, one officer's life was saved either by Daniel Frazier or Reuben James. A commander in this war responded "my head or yours!" when William Eaton asked to enter his city, leading to a battle where Presley O'Bannon led a successful charge. This war ended with a peace treaty signed by Tobias Lear. A group of officers known as "Preble's boys" were present at one battle in this war during which the (\*) Intrepid was packed with explosives and sent into the enemy fleet. The Battle of Derne ended this war, and William Bainbridge was captured during this war after the USS Philadelphia ran aground in a certain harbor. For 10 points, name this war that was the first to include Stephen Decatur's heroism and began when Thomas Jefferson refused to pay tribute to the Pasha of Tripoli.

ANSWER: First Barbary Coast War (or Tripolitan War, prompt on "Barbary Wars")

4. One character created by this author is informed of his twitching face by Clay and realizes that he stands a chance of regaining his "faculties." In one work of this author, a woman tells her son that she is "vice-admiral Tannebaum;" that story centers on Lionel, who claims that the maid Sandra called his father a "thing that goes up in the air." This author wrote a story which ends with Sergeant X receiving a wrist-watch from the title character, who he had earlier seen at a choir practice and met in a cafe. Another story by this author features a girl who complains about (\*) Sharon Lipschutz and a man who describes the bloating and starvation of the title entities before shooting himself in his hotel room. For 10 points, name this author who penned "Down at the Dinghy" and "For Esme: With Love and Squalor" and also wrote about Seymour Glass in "A Perfect Day for Bananafish."

ANSWER: Jerome David Salinger

- 5. A controversial film made by a member of this movement titled *Fill The Void* was released in 2012. Aaron of Karlin was a significant scholar of this movement whose early growth was fueled by large numbers of Sabbateans joining this movement. Its founder feuded with Jakob Frank, and Nachman of (\*) Breslov founded a large branch of this movement. Leaders of this movement are termed tzaddikim, and members of this group frequently wear a shtreimel after marriage. The Chabad sect is the largest group within this movement, which Simon Dubnow called, "the answer to the stress and sorrow of Jewish public life." Known for their pe'ot, for 10 points, name this sect of Judaism founded by Ba'al-Shem Tov, easily recognizable by their uncut sidecurls.

  ANSWER: <u>Hasidism</u> (accept <u>Hasidic</u> Judaism; accept <u>Chassidut</u>; accept <u>Orthodox</u> Judaism before Aaron of Karlin; prompt on it afterwards)
- 6. One president of this country was assassinated by his bodyguard after returning from exile to lead the High Council of State. That council was formed after an annulled election that would have been won by the FIS party in this country. The GIA carried out the Rais Massacre in this nation, in which the First of November declaration was issued by a revolutionary group headed by Ahmed (\*) Ben Bella, who would go on to become this country's first post-independence leader. Following the Evian agreements, many of this country's pied-noirs fled to France, which ruled this country prior to a 1954 to 1963 war for independence. For 10 points, name this African country currently led by Abdelaziz Bouteflika, the leader of the FLN party, whose largest city and capital is Algiers.

ANSWER: Algeria

7. Upon the death of one philosopher, this man wrote an essay about that philosopher's opinions on affirmative action, although this philosopher admitted John Rawls had never actually written about it. This man included the chapter "Why We Can't Understand Thought from the Outside" in his book *The Last Word*. This philosopher identifies causal, constitutive, resultant, and circumstantial varieties of the title phenomenon in one essay, which defines it as "when something someone does is beyond his control, yet we still hold him up to (\*) moral judgment." This author of "Moral Luck"'s most famous work begins "Consciousness is what makes the mind-body problem really intractable," and that essay singles out the conscious experience of mammals. For 10 points, name this NYU-based philosopher best known for his influential critique of reductionism in "What Is it Like to Be a Bat?"

ANSWER: Thomas Nagel

8. One problem in this computational complexity class is the problem of determining the triviality of a fundamental group of a finite simplicial complex. This is the complexity class of the problem of determining the minimum number of bits needed to encode a string; that value is the Kolmogorov Complexity. One problem in this decision class imagines two lists of words over an alphabet and asks if a sequence of values from the lists can be made using the same indices. (\*) Yuri Matiyasevich determined that the problem of solving Diophantine equations is in this complexity class. This complexity class contains the post correspondence problem and the problem of determining whether a Turing machine will halt given an arbitrary input. For 10 points, name this kind of problem exemplified by the halting problem, for which no problem is guaranteed to produce a yes or no answer.

ANSWER: undecidable

9. In one poem by this author, a question "brings the priest and the doctor / in their long coats / running over the fields." This author wrote that "the women shared the secret like a happy funeral" and described a "sense of falling, like an arrow-shower sent out of sight" in one poem. In one of his poems, "such plainness of the pre-baroque hardly involves the eye," while another states that (\*) "man hands on misery to man." This poet, who described travelling on a "three-quarters-empty train" and watching celebrations at the stations in one poem ended another by stating "What will survive of us is love." One poem of this author warns that "they fill you with

the faults they had / And add some extra, just for you." For 10 points, name this poet of "Whitsun Weddings" and "An Arundel Tomb" who wrote "They fuck you up, your mum and dad" in "This Be The Verse." ANSWER: Philip <u>Larkin</u>

10. The Allegro con spirito opening of a composition by this man is disrupted by a minor ninth in the first bar. The finale of this composer's fourth symphony, composed in F minor, features the folk song A Birch Stood in the Meadow; earlier in that work, this composer of Souvenir de Florence uses brasses and bassoons to create a booming first movement "Fate" motive. In another of his works, the cello soloist gets progressively faster as he plays seven of the titular Variations (\*) on a Rococo Theme. This composer used "Down on the Mother Volga" to open his second symphony, but this composer of the Pathetique Symphony is best known for a noisy piece that utilizes cannon fire. For 10 points, name this Russian composer of the 1812 Overture.

ANSWER: Pyotr Ilyich Tchaikovsky

- 11. This book begins with a quote from RH Tawney about men who work the plow and live on their own, and this book contends that the "movie star and baseball player" have replaced the industrial magnate. This book calls the prestige system a "maze of misunderstanding" in a section on the "status panic" and its second chapter focuses on the "rhetoric of competition." This book's author writes that farmers make up a majority of the American small entrepreneur, and this work also discusses the (\*) "salesmanship mentality." This book famously includes a section on department store employees and concerns the alienation of a "new class." For 10 points, name this book whose title group is represented by men like insurance agents, a work of C. Wright Mills. ANSWER: White Collar: The American Middle Classes
- 12. At one banquet, this man allegedly mistook a fish for a man whose execution he had ordered. This man said of a deceased rival that there "wasn't a bone in this wretched fellow," and this ruler ended the tenure of the anti-pope Laurentius by supporting Symmachus. This king ordered the construction of the Basilica of Saint Apollinaris and patronized the scholar Cassiodorus. After this husband of Audofleda died, his daughter Amalasuntha held power until she was murdered in her bath, and this victor at the battles of (\*) Isonzo and Verona also ordered the death of the author of *Consolation of Philosophy*, Boethius. After winning a campaign at the behest of Emperor Zeno, this man stabbed Odoacer to death at a banquet. For 10 points, name this "great" Ostrogoth king who ruled from Ravenna after the fall of the Roman Empire.

ANSWER: <u>Theodoric</u> the Great (or <u>Theodoric the Great</u>; accept <u>Dietrich von Bern</u> from medieval German peasants; do not take "Theodoric Strabo" or any number with the name)

13. Crystallographic data on amyloid shows that they contain regions of tightly interdigitated beta sheets, which are zippers named for this type of interaction. R. W. Taft studied linear free energy relationships in aliphatic esters by adding a term to the Hammett equation to account for this type of interaction. (\*) *Tert*-butoxide is a stronger base than ethoxide but is less nucleophilic due to this type of effect, and this type of effect prevents tertiary alkyl halides from undergoing SN2 reactions. The totally eclipsed conformation of butane is less stable than the other eclipsed conformations because of this type of effect. For 10 points, name this type of effect in which are caused by interference between bulky functional groups.

ANSWER: steric effects or hindrance

14. In this novel, one character deals with the pain of "pissing ground glass" after contracting blennorrhea in the army. In this novel's first chapter, the protagonist grabs a maid's crotch while telling her that it is time for her to be tamed. The widower Xius dies in this novel after one character tries to buy his house, and that character wins a music-box for his love interest by buying all the tickets at a raffle. This book begins with the main character dreaming of (\*) birds shitting on him from a tree. The main events of this novel occur while a bishop is greeting the townspeople via steamboat and are precipitated by Bayardo San Roman returning Angela to

her mother. For 10 points, name this novella in which the Vicario twins murder Santiago Nasar for deflowering their sister, a work of Gabriel Garcia Marquez.

ANSWER: Chronicle of a Death Foretold (or Crónica de una muerte anunciada)

- 15. One of this figure's sons is depicted with a wounded wrist in a painting by Polygnotus in the Lesche at Delphi. This figure purified Amphitryon of his blood guilt after the murder of Electryon. This figure's son Megareus battled against Eteoclus at the gate of Neïs, where Megareus was killed. This father of Lycomedes and Megara once claimed that "the whole breed of prophets certainly loves money," denying (\*) Tiresias's suggestion that he was opposing the will of the gods. The suicide of his son Haemon led his wife Eurydice to kill herself. This figure clashed with Antigone when he ordered that the corpse of Polyneices be left to rot on the battlefield as punishment for treason. For 10 points, name this king of Thebes who offered the hand of his sister Jocasta in marriage to anyone who could free the city from the Sphinx, leading Oedipus to fulfill a prophecy. ANSWER: Creon
- 16. One person with this trait was an abstract expressionist painter who killed himself by jumping off of the Staten Island ferry, and another person with this trait wrote a collection of stories about Jeremiah, who is taken away from his foster parents, in *The Heart is Deceitful Above All Things*. That man was a former truckstop prostitute from West Virginia named JT LeRoy. One person who had this trait was a university student named Martin Smid, whose death was seen as a cause of the Velvet Revolution. One person with this trait had their work published in the journal (\*) *Angry Penguins*, and wrote nonsense poems in *The Darkening Ecliptic*. The poet Ern Malley had this trait, and was created by James McAuley and Harold Stuart. For 10 points, name this trait, other examples of which include Lennay Kekua, a trait belonging to people created by fabulists. ANSWER: fake people (accept anything indicating that these people are not real)
- 17. One quantity called this and analogous to its classical variety is calculated by performing a Wick rotation on the generating functional of the correlation function of a Lagrangian and a source term yields. This quantity arises from the path integral by considering only closed paths over a time interval negative i h-bar times thermodynamic (\*) beta. The Helmholtz free energy is proportional to the log of this quantity, and the Fermi–Dirac and Bose-Einstein distributions are normalized by dividing by this quantity, which is given as the sum over microstates of e to negative beta times the state's energy. For 10 points, name this function symbolized Z that gives macroscopic information based on ways of dividing up microstates.

ANSWER: partition function

18. A poem near the end of this collection describes how "Impudent Life runs and dances, / Twists and turns, for no good reason" before a character proclaims "I shall lie down flat on my back / And wrap myself in your curtains, / O refreshing shadows!" The speaker of a poem in this collection exhorts his companion to "Think of the rapture / Of living together there!" for "There all is order and beauty, / Luxury, peace, and pleasure." The second poem in this collection describes a "prince of (\*) cloud and sky" that is "exiled on the earth" whose "giant wings prevent him from walking" after being captured by some sailors. A poem in the introduction of this collection describes a figure who "dreams of scaffolds as he smokes his hookah pipe," "Ennui!" and is addressed to the "Hypocritish reader, my fellow, my brother!" For 10 points, name this collection that includes sections like "Spleen and Ideal" and "Death," a work of Charles Baudelaire.

ANSWER: The **Flowers of Evil** (or **Fleurs du mal**)

19. One artistic movement in this city grew out of the Direct Art Group and one short film from that movement features a montage of bare trees. One of the founders of that group was sentenced to prison for covering himself in his own poop and masturbating during an art show. Along with those Actionists, another member of a movement in this city designed the Kubus armchair. One work from the founder of that group

in this city features a monkey baring its teeth and three nude women on the left with gold snakes in their hair. Another work by that man features a nude red-headed woman being showered with (\*) gold, and he also painted a work with a woman kneeling among green flowers who performs the title action with a man wearing a wreath. For 10 points, name this European city that contained a group of Secessionists led by Gustav Klimt, the capital of Austria.

ANSWER: Vienna, Austria

20. This practice was documented by a Greek diplomat named Emanuel Timoni, and John Fewster played a role in the development of this practice. Six prisoners were released from Newgate prison after they survived Charles Maitland's experiments with this practice. An expedition led by Francisco Balmis brought this practice to the Americas, and Lady Montagu introduced it to Europe from the Ottoman empire. A (\*) child named James Phipps was the first object of this practice in England; that instance of this practice was carried out by a man who had observed the blisters on the hands of Sarah Nelmes, a milkmaid. For 10 points, name this practice pioneered by Edward Jenner which protected recipients against a certain disease.

ANSWER: <u>inoculation</u> against <u>smallpox</u> (accept <u>vaccination</u> against <u>smallpox</u> or <u>variolation</u> against <u>smallpox</u> or other equivalents; prompt on "inoculation/vaccination/variolation" without mention of smallpox; prompt on "curing/eradicating smallpox"; accept inoculation/vaccination/variolation with cowpox, even though that doesn't strictly apply to all the clues)

21. Miles Godwin became the first man to serve as both a Republican and a Democrat in this political position. The first African-American holder of this position was Douglas Wilder, and a recent holder of this position got in hot water for taking money from Johnnie Williams as part of the Star Scientific (\*) Scandal. The Democratic National Committee chairman from 2009 to 2011 had previously held this post and that man would go on to defeat George Allen in a 2012 Senate race. The current holder of this office defeated Ken Cuccinelli in a 2013 election. For 10 points, name this political post that has a one term limit and is currently held by Terry McAuliffe.

ANSWER: **Governor of Virginia** (accept equivalents)

#### **Bonuses**

- 1. This political party was founded by Arthur Griffiths and during the 1980s and 90s it utilized the Armalite and ballot box strategy. For 10 points each:
- [10] Name this Irish political party, currently headed by Gerry Adams, that was heavily linked to the IRA and is currently the second largest party in Northern Ireland.

ANSWER: Sinn Féin

[10] This party founded by Eamon de Valera broke from Sinn Fein in 1926 and was the dominant party in Irish politics for the next 75 years. After huge losses in the 2011 elections this party is currently the third largest party in the Dail.

ANSWER: Fianna Fail The Republican Party (prompt on "Republican Party")

[10] Fianna Fail broke with Sinn Fein over this policy. This policy required those elected by Sinn Fein to decline to take office in Northern Ireland.

ANSWER: abstentionism (accept word forms)

- 2. Answer some questions about video game franchises that seem to put out new entries every year. For 10 points each:
- [10] Call of Duty: Modern Warfare 2 featured a controversial level where you massacre Russian civilians in one of these locations for no reason. The level featured lots of escalators and has returned in more recent Call of Duty games.

ANSWER: airport or terminal

[10] Another franchise that releases games almost every year is this one, which lets players catch things like Pikachu, Golbat, Pinsir, and something called a "Zoroark."

ANSWER: Pokémon (or Pocket Monsters, or Poketto Monsutaa)

[10] The NBA Live Franchise stopped coming out every year in 2011, thanks to this cancelled title that was set to replace NBA Live. It was cancelled thanks to hilarious glitches like players getting stuck and freezing in Christ-like poses at center court.

ANSWER: NBA Elite 2011

- 3. Endosymbiotic theory explains the origins of chloroplasts by endocytosis of these organisms, and nitrogen fixation occurs in their heterocysts. For 10 points each:
- [10] Name this phylum of photosynthetic bacteria named for their color.

ANSWER: cyanobacteria (accept blue-green algae)

[10] These protists have undergone secondary endosymbiosis with red algae. They are the only eukaryotes known to lack histones.

ANSWER: dinoflagellates

[10] Apicomplexans such as this organism have also undergone endosymbiosis with red algae. Artemisinin kills the virulent *falciparum* and *vivax* species of this organism.

ANSWER: Plasmodium

- 4. The last of these works ends by exhorting "To the rushing water say: I am," while another salutes "ancient sarcophagi" "from whom my sentiment rarely strays." For 10 points each:
- [10] Name this two-part collection of poems, the first of which begins "Tree arising! O pure ascendence!"

ANSWER: Sonnets to Orpheus (or Die Sonette an Orpheus, prompt on "poems by Rainer Maria Rilke," I guess)

[10] This shorter poem by the same author as *Sonnets to Orpheus* describes a missing head "with eyes like ripening fruit" and ends by stating "You must change your life."

ANSWER: "Archaic Torso of Apollo" (or "Archaïscher Torso Apollos," accept reasonable translations like

## "Torso of an Archaic Apollo")

[10] This German poet of collections like *The Book of Hours*, *The Book of Images*, and the *Duino Elegies* wrote *Sonnets to Orpheus* and "Archaic Torso of Apollo."

ANSWER: Rainer Maria Rilke (or René Karl Wilhelm Johann Josef Maria Rilke)

- 5. Answer some things about heroes from the Poetic Edda. For 10 points each:
- [10] This blacksmith married the Valkyrie Hervor and was imprisoned by the king Nidud. As revenge, he killed the king's sons, making goblets from their skulls and jewelry from their eyes and teeth.

ANSWER: **Völund** (accept **Wayland**)

[10] Another hero of the Poetic Edda is Helgi Hundingsbane, who is sometimes considered the son of this figure. This figure's sister once smeared honey on his face, allowing him to kill a wolf by biting off its tongue.

ANSWER: Sigmund

[10] This better known son of Sigmund is the slayer of the dragon Fafnir and the lover of Brynhild. He rides through a ring of fire on his horse Grani to win the hand of Brynhild for Gunnar.

ANSWER: Sigurd (accept Siegfried)

- 6. A D minor composition by this man is marked *vivacissimamente* and evokes the rapid movement of a train by asking the pianist to play over 100 half-notes per minute. For 10 points each:
- [10] Name this French composer of the aforementioned étude *Le chemin de fer*, as well as études in all the major and minor keys. Each movement of his sonata *The Four Ages* represents a man growing ten years older.

ANSWER: Charles-Valentin Alkan

[10] Alkan's *Le chemin de fer* supposedly influenced this orchestral piece by Arthur Honegger in which rapid snare drums and pizzicatos contribute to the sensation of the title locomotive chugging along.

ANSWER: Pacific 231

[10] Composer Steve Reich, who used a string quartet and melodies on tape to record *Different Trains*, is associated with this school of music, along with John Adams and Philip Glass.

ANSWER: minimalism (accept equivalents)

- 7. Answer some questions about delicious things in astronomy. For 10 points each:
- [10] Spaghettification occurs near these objects. They are characterized by only their mass, charge, and angular momentum according to the no hair theorem, and they are always hidden behind event horizons.

ANSWER: black holes

[10] This Belarusian cosmologist described how gas on supergalactic scales will collapse fastest on the shortest axis, resulting in his namesake pancakes. He's also the second namesake of an effect where photons gain energy by interaction with high energy electrons.

ANSWER: Yakov Borisovich Zel'dovich

[10] This moon's terrain resembles a cantaloupe. Unlike the smaller moons Nereid and Proteus, this moon's orbit is retrograde.

ANSWER: Triton

- 8. Name some stuff combining two of Dan Puma's favorite things, Latin American history and dogs. For 10 points each:
- [10] Nevado was a dog owned by this general and first president of Gran Colombia. The victor at the Battle of Boyaca along with Santander, he is known as "The Liberator."

ANSWER: Simón Bolívar

[10] Nevado was unfortunately killed at this battle that secured Venezuelan independence. Fought in 1821, it pitted Miguel de la Torre's Royalists against Bolívar's forces.

ANSWER: Battle of Carabobo

[10] Nevado was given to Bolívar during this campaign through Venezuela in the first half of 1813. The Battle of Cucuta was fought during this campaign that started in Cartagena and ended in the capture of Caracas.

ANSWER: Admirable Campaign (accept Campaña Admirable)

- 9. At the beginning of this novel, the protagonist is disturbed when he miscounts the amount of money in each of his pockets and goes down a waterfall, where he meets an old man who turns off the waterfall's sound. For 10 points each:
- [10] Name this novel, which alternates between that man's job as a Calcutec working for the System and another character's job as a "Dreamreader" who reads dreams from unicorn skulls in the Town.

# ANSWER: Hard-Boiled Wonderland and the End of the World

[10] This novel by the author of *Hard-Boiled Wonderland and the End of the World* details the school teacher K.'s longing for the writer Sumire. Unfortunately for him, Sumire runs off to Greece with the Korean woman Miu and then disappears, and he never sees her again.

ANSWER: Sputnik Sweetheart

[10] Hard-Boiled Wonderland and the End of the World and Sputnik Sweetheart are novels by this Japanese author of Norwegian Wood.

ANSWER: Haruki Murakami

- 10. More than ever, the Chinese are turning to internationally-renowned firms to complete architectural work. For 10 points each:
- [10] Prolific Swiss firm Herzog & De Meuron collaborated with artist Ài Wèiwèi on the design of an athletic stadium also known as the Bird's Nest, which is located in this city.

ANSWER: Běijīng

[10] Běijīng's China Central Television Tower, which features two slanted towers connected by a cantilever, was designed by OMA, a firm headed by this Dutch architect. His theories are outlined in *Delirious New York*.

ANSWER: Remment Lucas Koolhaas

[10] This firm, which designed the Willis Tower and the Burj Khalifa, is presently working on the incredibly efficient Pearl River Tower in Guangzhou. One of its architects won the commission to design One World Trade Center.

ANSWER: **Skidmore**, **Owings & Merrill** LLP (or **SOM**)

- 11. In one reaction, this compound and oxalyl chloride are added to an alcohol to oxidize it ketone or aldehyde. For 10 points each:
- [10] Name this organosulfur polar solvent that stains your skin and is used in the Swern oxidation.

ANSWER: **dimethyl sulfoxide** (accept **DMSO**)

[10] Another useful solvent is DMF, an amide derivative of this simplest carboxylic acid. It is named for its natural occurrence in ants' venom.

ANSWER: formic acid

[10] DMSO is also widely used as one of these agents which may function by lowering the glass transition temperature. Glycols are also commonly used.

ANSWER cryoprotectants

- 12. The frame narrative of one of his novels is an extremely long letter to a fiancée breaking off their engagement, and that letter tells of the title character's adventures with Clithero and drinking blood. For 10 points each:
- [10] Name this author of *Arthur Mervyn* who wrote about the title sleepwalker in *Edgar Huntly*. He also wrote *Wieland*; *or*, *the Transformation*.

ANSWER: Charles Brockden Brown

[10] Another early American author was William Hill Brown, the author of this novel. This work focuses on the

subtly-named Jack Worthy and his libertine friend Thomas Harrington, who discovers that his mistress Harriet Fawcett is his sister.

ANSWER: The **Power of Sympathy** 

[10] A third early American Brown, William Wells Brown, wrote *Clotel*, a novel which features the daughter of a slave and a holder of this position. A more recent holder of this position wrote of his life up to his enrollment in Harvard Law School in *Dreams from My Father*.

ANSWER: presidents of the United States of America

- 13. This book's four parts include sections on self-defeating theories and responsibilities towards future generations. For 10 points each:
- [10] Name this book that discusses thought experiments like the "dilemma of the commuter" and the "teletransporter" and discusses the mere addition paradox, which posits that it is better to have a large population of somewhat happy people than to have a smaller group of people, who are generally happier.

ANSWER: Reasons and Persons

[10] Reasons and Persons is by this British analytic philosopher who argued against the "repugnant conclusion" of utilitarianism.

ANSWER: Derek Parfit

[10] Parfit's most recent book, *On What Matters*, transmutes three different kinds of ethical theories into his own "triple theory." One philosopher whose work was incorporated was this Englishman who wrote *De Corpore* and *Leviathan* 

ANSWER: Thomas **Hobbes** 

- 14. This ruler defeated the Yaroslav the Wise at the Battle of Bug River and his long war with Henry II was ended with the Peace of Bautzen. For 10 points each:
- [10] Name this member of the Piast Dynasty that established the Prince's Law and was succeeded by Mieszko II. ANSWER: <u>Bolesław I</u> Chrobry (prompt on "Bolesław"; accept <u>Bolesław the Great</u>; accept <u>Bolesław the Valiant</u>; accept <u>Bolesław the Brave</u>; accept <u>Bolesław Chrobry</u>)
- [10] Boleslaw I was the first king of this country that was later partitioned three times. Its other rulers include the Jagiellonian Dynasty and its current capital is Warsaw.

ANSWER: Poland

[10] The last Piast ruler, Louis of Poland, was a member of this cadet branch of the Capetians. This house included many rulers of Sicily and Naples like Joanna II and Charles I of Sicily.

ANSWER: Capetian House of **Anjou** (accept **Angevin** Dynasty)

- 15. Answer the following about major schools of Buddhism in Japan. For 10 points each:
- [10] Members of this school venerate the Amit-ābha Buddha, who was once a monk named Dharmak-āra. This school consists of two major sects, known as Jōdo-shū and Jōdo-Shinshū.

ANSWER: Pure Land Buddhism (or Jōdo bukkyō)

[10] This other school of Buddhism emphasizes the pondering of koans while practicing meditation. The Rinzai sect of this school emphasizes kensho, a form of self-awareness attained through satori.

ANSWER: **Zen** Buddhism

[10] One of the central texts of this school is the Mahāvairochana Sutra, which contains a dialogue between its namesake Buddha and his disciple Vajrasattva. It was founded by Kūkai, who established its first monastery at Mount Kōya.

ANSWER: Shingon Buddhism (accept Japanese Esoteric Buddhism or Orthodox Esoteric Buddhism)

16. In the limit of long collision times, a fluid description of plasma becomes less appropriate and this equation is useful. For 10 points each:

[10] Name this equation which describes the time evolution of a plasma's velocity distribution.

ANSWER: Vlasov equation

[10] Alfvén's theorem states that the lines of this field follow the motion of the plasma, which is why it is sometimes called the flux-freezing theorem. This field is perpendicular to the electric field in propagating light waves.

ANSWER: magnetic field

[10] The collisionless two-fluid model in magnetohydrodynamics assumes that this time scale is short compared to other macroscopic time scales. This period is given by 2 pi times mass divided by the particle's charge and the magnetic field. It is notably independent of the particle's velocity.

ANSWER: cyclotron period

17. A large cat-like creature looks up at the central figure in this painting and bats and owls fly around that figure's head. For 10 points each:

[10] Name this painting whose title is inscribed on a desk.

ANSWER: The Sleep of Reason Produces Monsters (accept El Sueno de la razon produce monstrous)

[10] The Sleep of Reason Produces Monsters is part of this Spanish artist's Los Caprichos. He also painted Saturn Devouring His Child as part of his Black Paintings.

ANSWER: Francisco Jose de Goya

[10] Goya painted one of these traveling up a hill in one his *Black* Paintings. One of these is also depicted beside two men in Gustave Courbet's *The Meeting*.

ANSWER: dog (accept pero or puppy)

18. Answer the following about historical and literary sources of Shakespeare's *King Lear*, none of which are thankfully *Gorboduc*. For 10 points each:

[10] Perhaps the earliest known version of the King Lear story appears in the *Historia Regum Britanniae*, a work of this 12th century chronicler.

ANSWER: **Geoffrey** of Monmouth (or **Galfridus** Monemutensis)

[10] Shakespeare, like many other writers of his day, relied on this man's *Chronicles of England, Scotland, and Ireland* when writing his historically based works.

ANSWER: Raphael Holinshed

[10] Much of the subplot involving Edmund and Edgar was inspired by the story of a king of Paphlagonia included in this author's *Arcadia*. He also wrote the sonnet sequence *Astrophel and Stella*.

ANSWER: Philip Sidney

19. The JN-25 code was broken before this battle in which the *Kaga* and *Soryu* were sunk. For 10 points each:

[10] Name this World War II naval battle of the Pacific Theater where the US scored a major victory and sank four Japanese aircraft carriers.

ANSWER: Battle of **Midway** 

[10] This admiral was supposed to lead US forces at Midway, but had to back out after getting a severe case of either shingles or psoriasis. The leader of the Third Fleet, he would lead the *Missouri* into Tokyo Bay.

ANSWER: William F. "Bull" Halsey

[10] Halsey alternated command of the Third Fleet with this man, under whose command those ships would become the Fifth Fleet. The victorious commander at Midway, he was also the winning commander at the Battle of the Philippine Sea.

ANSWER: Raymond Ames Spruance

20. Chris Ray is trying to decide whether to get Snickers or Milky Ways at the candy store. Help him figure out which one he wants. For 10 points each:

[10] To decide, he might want to use these curves that represent the preferences of a consumer. They plot points of

equal utility along the curve.

## ANSWER: indifference curves

[10] Uh, oh. The store is almost out of Milky Ways and both Chris Ray and Arun Chonai want them. They might want to use one of these economic constructs that contain indifference curves. They deal with how to properly allocate resources between two consumers.

## ANSWER: Edgeworth box

[10] If Arun and Chris's indifference curves touch then they are labeled as this man' namesake optimality, in which it is impossible for either of them to be better off. This man also has a namesake principle and distribution.

ANSWER: Vilfredo Federico Pareto

21. It's 2 a.m., and Isaac Hirsch is writing an extra bonus on literature he likes. For 10 points each:

[10] This most recent novel by Thomas Pynchon came out in November 2013. It is loosely about fraud investigator Maxine Turnow and her investigation of a shady internet business, with 9/11 looming in the background.

ANSWER: **Bleeding Edge** 

[10] This American anarchist author loved nature and hated machinery. He wrote about working at a remote park ranger station in *Desert Solitaire* and about a post-apocalyptic Arizona in *Good News*.

ANSWER: Edward Abbey

[10] Speaking of 9/11, this American author wrote about Keith Neudecker surviving the attacks in *Falling Man*. He's more famous for writing *White Noise*.

ANSWER: Don DeLillo