**The Brief Wondrous Tournament of WAO** - Málà Yousufzai, served extra spicy **Editors:** Will Alston, Joey Goldman, James Lasker, Jason Cheng, Naveed Chowdhury, and Jonathan Luck, with writing assistance from Athena Kern and Shan Kothari.

## Packet by Ike, Wang et al and Oxford

### **TOSSUPS**

1. The narrator of a story titled for one these institutions cites from Aelius Lampridius in finding "some distorted echo" of a local custom in Elegabalus giving seashells to his dinner guests. Spies and astrologers gather at a latrine named Qaphqa in that story titled for one of these, which opens with its narrator describing how he lacks an index finger and has, like most of the city's residents, been to prison. In a story, one of these institutions affects with men with symbols of Aleph, Gimel, and Beth and is eventually taken over by a mysterious agency called (\*) "the Company." Jorge Luis Borges wrote a story about one of these institutions "in Babylon." Getting rid of one of these institutions is likened to wanting to live in caves by Old Man Warner in a story which Summers' coal company supplies a black box to use in one of them. For 10 points, a scapegoat is chosen with what kind of system in a Shirley Jackson story?

ANSWER: **lottery** [or **lotteries**; accept "The **Lottery** in Babylon" or "The **Lottery**"]

2. A coordination complex with this geometry would experience splitting that would stabilize the xy and  $x^2-y^2$  ["x squared minus y squared"] orbitals and destabilize the  $z^2$  ["z squared"] orbital. Molecules with this geometry result in rotational spectra with equally spaced peaks since, like spherical tops, they only have one rotational constant. Molecules with this property are found in the (\*)  $C\infty v$  [C-sub-infinity-v] or  $D\infty h$  [D-sub-infinity-h] point groups. Molecules with this geometry have infinite symmetry around one axis which leads to them having one more vibrational degree of freedom than a molecule without this geometry. The SP hybridization of acetylene leads it to having this geometry, which all diatomic molecules have. For 10 points name this geometry found around an atom whose two bonds are separated by 180 degrees.

ANSWER: linear

3. Description acceptable. Princeton's Mark Cohen criticizes the hypothesis that this cultural region was a paradise during a period termed "the coexistence," though he also argues that "counter-myths" about it presented by Bat Ye'or ["BOUGHT yay-"OR"] are incorrect. In the 11th century, kingdoms in this cultural region started paying paria tributes to ward off razzias from northern rivals. The last dynasty to unite this cultural region originated with a revolt by the Masmuda confederacy. Part of this nolonger-existing cultural region that bordered Septimania was conquered by Charlemagne, who established a local (\*) "march" to govern it. After its political fracture, this region was ruled by independent taifa kingdoms. This cultural region, home to the Mozarabs, was defined after being conquered by the exiled Umayyad prince Abd al-Rahman. For 10 points, identify this diverse medieval cultural region governed by Muslim dynasties like the Almoravids and Caliphate of Cordoba.

ANSWER: al-Andalus [or Andalusia, the derivative term, even though they're not exactly the same thing; accept answers that indicate Muslim Spain or Muslim Iberia or even Umayyad Spain; prompt on Spain or Iberia or Catalonia by asking "ruled by who?"] <Edited>

4. This river takes a 180-degree turn where it joins the Canoe at the site of Boat Encampment, from where the York Factory Express followed the path of this river downstream. The rocky terrain around this river's mouth has prevented the formation of a delta, so its unimpeded flow hits a sandbar at its mouth at Cape Disappointment. This river flows through the Tri-Cities area, passing by the cities of Richland and (\*) Kennewick. FDR Lake was created by America's most powerful electricity generating plant on this river, whose longest *tributary* [emphasize] flows through Jackson Hole and Hells Canyon before joining it and the Yakima at Pasco. The Grand Coulee Dam straddles this river, which is joined by the Willamette at Portland. For 10 points, name this river in the Pacific Northwest that forms the border between Washington and Oregon.

ANSWER: Columbia River < Edited>

- 5. The "old deep-rooted prejudice" of the "line" is argued to be the "physiological origin" of this movement in an article by the Uruguayan poet Jules Laforgue. An artist from this movement painted *Golden Summer*, one of many paintings done while based in a farmhouse in Eaglemont. Two prominent members of this art movement often visited and painted a "floating restaurant" whose name means the "frog pond." Sidney Dickinson coined the name of a group of Australian members of this movement called the the (\*) Heidelberg School. The name for members of this art movement came from a Louis Leroy article in *Le Charivari*. *The Boating Party* and *The Child's Bath* are works from an American-born member of this movement, Mary Cassatt. A depiction of a sunrise by Claude Monet gave its name to -- for 10 points -- what 19th-century French art movement?

  ANSWER: Impressionism <Edited>
- 6. This author wrote an essay in which he wonders, if "sculpture could imitate different textures as well as painting," whether a certain figure would "necessarily have been draped." The protagonist of a play by this author discovers that a Christian Templar who saved his daughter from a fire was himself spared from execution by Saladin. An essay by this author states that while painting can only depict a single (\*) moment, poetry can only depict several moments in succession. When presented with a dilemma, the title character of a play by this author postulates that a father's plan was "to end the tyranny of a single ring." This author of the essay *Laocoön* wrote a play whose title pious Jewish merchant explains that Ring Parable shows that all three Abrahamic religions are worthy of respect. For 10 points, name this author of the play *Nathan the Wise*.

ANSWER: Gotthold Lessing [or Gotthold Ephraim Lessing]

7. In the 1920s, an immigrant of this nationality started the first yo-yo business in the U.S. Farm workers of this nationality and anti-immigration activists clashed during the Watsonville riots, which included a bombing of a center of this group in Stockton. Protecting the rights of people of this nationality was a major goal of an Organic Act passed in 1902 sponsored by Henry Cooper. People of this nationality were re-classified as aliens in 1946 by the (\*) Tydings-McDuffie Act. This nationality was largely exempted from the anti-Asian 1917 Immigration Act, since most of its members were U.S. subjects at the time. A leader of this nationality went into exile in Hawaii after the People Power Revolution, which ousted him and his wife Imelda. For 10 points, identify this ethnic group whose members in the U.S. may live in communities called "Little Manila." ANSWER: Filipinos [accept Pinoy; prompt on mestizos] <Edited>

- 8. Composite Fermion theory was originally used to explain the Moore-Read states associated with this effect. Mele and Kane tied a version of this effect to time-reversal-symmetry-protected edge states in topological insulators. Spin-orbit coupling in mercury telluride leads to the appearance of a version of this effect that does not require the presence of a magnetic field. The (\*) Laughlin wavefunction describes systems subject to this effect, whose strength is modified by a filling factor. Klaus von Klitzing won a Physics Nobel for his observations of this effect's creation of quantized conductance values that are multiples of e squared over h. For 10 points, name this quantum-scale version of a classical effect in which a potential difference is produced perpendicular to both an applied magnetic field and a current. ANSWER: quantum Hall effect [or integer quantum Hall effect or fractional quantum Hall effect or spin quantum Hall effect; prompt on "Hall effect"]
- 9. The author of this work says that the status of a group to which the subject belonged is best compared to an American audience with the status of a "Pittsburgh Yankee." In the introduction to this book, the author describes his wife Joan getting dysentery and being taken to a hospital in a limo. This book finds proof of the concept of "generativity" in its subject's transformation into a national figure a year after a mill-workers' strike, whose discussion constitutes half this book. The author says that writing this "psycho-historical" book caused him to "rediscover psychoanalysis in terms of (\*) truth, self-suffering and non-violence," whom its subject developed a "militant" form of after he was kicked off a train in South Africa, leading to the end of his "identity crisis." For 10 points, name this follow up to Young Man Luther, a book by Erik Eriksen about the "Middle-aged Mahatma." ANSWER: Gandhi's Truth: On the Origins of Militant Nonviolence <Edited>
- 10. In one story, a dwarf whose hair and body were made entirely out of this stuff named Fastachee taught mankind how to use it. Black and blue versions of this stuff came from the wings of the first turkey according to an Apache myth that describes how it ran from east to south to west to north. Many cultures describe how this stuff is produced by an old woman who secretly makes it by rubbing her body. This *solid* [emphasize] stuff was first discovered by Chac after he cracked open a rock; humanity is thus able to (\*) make this good indirectly by praying to Chac. In the *Popol Vuh*, Seven Macaw has his teeth replaced with this stuff by the Hero Twins so that he can't eat anything. In Aztec mythology, a son of Xochiquetzal named Centeotl, who had a yellow body, was in charge of this foodstuff. For 10 points, name this crop present in many Native American and Mesoamerican origin myths.

ANSWER: corn [prompt on less specific answers like crops] <Edited>

11. A form of this position is defended in a Peter Graham paper that takes issue with Helen Beebee's claim that this position allows the breaking of laws of nature. David Lewis posited a "Local Miracle" form of this position in a paper that refutes Peter van Inwagen's so-called "Consequence Argument." First- and second-order desires are arranged in a hierarchal system in one thinker's mesh theory of this position. The Principle of Alternative Possibilities is refuted using the example of Ms. White influencing the vote of Donald the Democrat in a Harry Frankfurt article that defends this doctrine. (\*) Daniel Dennett argued for this position in *Elbow Room* and the article "I Could Not Have Done Otherwise - So What?" This position champions the existence of a "soft" form of a certain concept. For 10 points, name this philosophical doctrine holding that free will and determinism are reconcilable.

ANSWER: compatibilism [prompt on soft determinism but do not accept "free will" or "(hard) determinism"] < Edited>

12. The Resident-General of this region was assassinated at a railway station during a meeting with Vladimir Kokovstov in 1909. Censorship was relaxed in this region under the so-called "Cultural Policy" implemented by a governor who later became Prime Minister and was killed during the February 26th incident. Hundreds of thousands of people left this region in the 1930s to work on the island of Sakhalin. Shortly after the death of its last ruler, massive protests erupted throughout this region in 1919 during the (\*) March 1st Movement. People in this colony were forced to abandon their native-language names as part of an effort to culturally unify it with a neighboring country and its "Co-Prosperity Sphere." During World War 2, this colony supplied the largest greatest number of the forced military prostitutes called "comfort women." For 10 points, name this colony of Japan from 1910 to 1945, which was governed from Seoul.

ANSWER: Korea [or Hanguk; or Kankoku; or Joseon; or Chosen] <Edited>

13. At the same concert that premiered a piece in this genre by Prokofiev, Igor Stravinky made his debut as a conductor premiering his own *Octet for Wind Instruments*. Karel Halir helped popularize a piece in this genre whose *Allegro vivacissimo* third movement was called "atrociously Russian." Under the baton of Hans Richter, Adolph Brodsky premiered that piece in this genre in Vienna. Trumpets and trombones are not included an A minor piece in this genre which unusually contains a third-movement *passagalia* among its four movements, and which also include a second movement featuring the D-S-C-H motif. (\*) David Oistrakh played a piece in this genre by Prokofiev at Joseph Stalin's funeral. A *Canzonetta* second movement appears in the Tchaikovsky piece in this genre, which was called music that "stinks" by Eduard Hanslick and is in D major. For 10 points, identify this type for piece for orchestra and a soloist such as Jascha Heifetz or Joshua Bell.

ANSWER: violin concerto

- 14. A protagonist given the nickname "Marcel" returns to this occupation after his relationship with "C." falls apart and later hesitates when Lentz wishes to kill the personality of a neural net named Helen. A novel centered on this occupation ends with the narrator repeatedly asking himself "What did you expect?" and pits its protagonist against his wife Edith and Hollis Lomax. This central occupation of Richard Powers' *Galatea* 2.2 is also the occupation of a man who is close friends with (\*) Murray Siskind and tries to find the source for the drug Dylar. The protagonist of *Stoner* has this job, as does a character who grows terrified of death during an "Airborne Toxic Event" and specializes in Hitler Studies. For 10 points, give this occupation held by Jack Gladney in Don Delillo's *White Noise*. ANSWER: professors
- 15. This discipline's namesake "descent" technique was used on differential algebraic structures arising from solutions to differential equations to generate a Picard-Vessiot theory. A proof using the Krull-Schmidt theorem shows that certain finite and infinite structures in this discipline have bases ["base"-"ease"] that consist of conjugates of single elements; those normal bases always exist for this theory's namesake structures. For certain finite structures, there exists a bijection between their intermediate fields and (\*) subgroups of this theory's namesake groups according to this discipline's fundamental theorem. This theory, which is concerned with automorphisms of field extensions, is used to show that higher-order equations generally lack solvability. For 10 points, identify this theory from abstract algebra named for a Frenchman who died in a duel at the age of 20.

  ANSWER: Galois theory

16. Long-term use of hydralazine, procainamide, and isoniazid can induce a condition extremely similar to this one. High levels of EC4d and BC4d are a specific and selective indicator of this condition. Belimumab treats this condition by inhibiting the cytokine BlyS ["bliss"]. This condition often causes nephritis with "wire-loop" shaped lesions. Although not rheumatoid arthritis, this condition is commonly treated with (\*) DMARDs [D - mards] and antimalarials. According to the ACR, this condition exists when 4 of a set of 11 symptoms are present, which include the presence of anti-Smith and antinuclear antibodies. A butterfly-shaped rash on the cheeks is a common symptom of, for 10 points, what notoriously difficult to diagnose autoimmune disease that was named for its facial lesions resembling a wolf bite?

ANSWER: system **lupus** erythematosus [accept **SLE**] <Edited>

17. Description acceptable. Domitian built a structure to house these events underneath the Vatican, but he dismantled it and used its pieces to replace burned-over chairs at the Circus Maximus. A book by the historian Frontinus claims that the material for one of these events in Trastevere was supplied by the "Alsietina" structure. A description of one of these events by Cassius Dio notes that it took place alongside the equally-lavish venatio, and other ludi. Suetonius's account of one of these events organized by Claudius is the only confirmed use of the phrase "Hail Caesar, those who are (\*) about to die salute you" - that event of this sort celebrated the draining of the Fucine Lake. Nero built a wooden amphitheatre exclusively for staging these events, whose preparation might have involved using a hypogeum to allow for flooding. Naumachiae was the name given to -- for 10 points -- what gladiatorial events in which participants would use triremes or quinqueremes in combat?

ANSWER: mock naval battles [or any answer indicating any kind of fake/gladiatorial battles with ships or battles with boats; accept equivalents; accept naumachiae before "Naumachiae" is read; prompt on gladiator contests; prompt on fights in the coliseum or any answers not indicating the presence of boats or water] <Edited>

18. In a story exemplifying filial piety, a parrot is given favor by one of these figures after it gives its mother a proper burial. The form of a lighting-wielding one of these figures called Shukongōshin is usually taken by *noi* guardian statues found in Japan; in China, statues with similar roles take the form of the general Guan Yu depict one of these called Skanda. These figures are supposed to cultivate *karuna*. A text claims that demons are actually these figures who have disguised themselves in order to employ the doctrine of (\*) skillful means, a concept demonstrated elsewhere by the parable of the burning house. In China, an originally male example of these figures became the female Guanyin. These individuals are not prominent in Theravada Buddhism, which instead emphasizes *arhats*. For 10 points, name these individuals in Mahayana Buddhism who have opted to delay their own enlightenment in order to assist the spiritual journeys of other beings.

ANSWER: bodhisattvas [prompt on deities or goddesses before "karuna"] < Edited>

19. One character in this work cries and "in the middle of her salty howling, nimbly spears a small flatfish and pelicans it whole" after her husband, when asked whether he prefers Fred or Arthur, first replies Bach and then Palestrina. A man in this work whose leg was scythed off while sleeping, is thought of as having died "of drink and agriculture" by his son, Eli Jenkins. This work begins with a voice describing the "bible-black" town and the "sloeblack, slow, black, crowblack, (\*)

fishingboatbobbing sea." A lino salesman and a man who died drinking bleach are the two husbands we see Mrs. Ogmore-Pritchard dream about nagging in this play, much of which is narrated by the mournful Captain Cat. This play is set in Llareggub. For 10 points name this radio play by Dylan Thomas about a fictional Welsh fishing village.

ANSWER: *Under Milk Wood* 

20. This man's biographer Marshall Fine claims he wrote a full length novel to provide the backstory for characters in a film he directed. A dimly lit bar scene from that film by this director features characters competing to sing the most emotional song, while Ben Gazzara's character hectors the woman next to him for singing "too cute" and "without soul." The two title characters of another film by this director meet when one of them, during a shift as a parking attendant, prevents the other's blind date from beating her up. This man was nominated the best director Oscar for a film in which (\*) Peter Falk's character institutionalizes his wife, played by Gena Rowlands, for her strange behaviour. This director played Guy opposite Mia Farrow in Rosemary's Baby, and he directed Husbands as well as Minnie and Moskowitz. For 10 points, name this Greek-American director of A Woman Under the Influence. ANSWER: John Cassavetes < Edited >

# TIEBREAKER/EXTRA TOSSUPS

1. Brendan Kennelly's update of this play includes a character asking "What does it matter if I fuck/ some tricky itchy stinking weasel?" Testimony from Holocaust survivors and atomic bomb victims were added to Charles Mee's 2.0 "remaking" of this play. At its opening, a woman is told "Lift thy head, unhappy lady, from the ground" as she awakens and asks "What woe must I suppress?" A conversation between Poseidon and Athena, who wishes to give joy to her "former foes" opens this play, which describes how (\*) Polyxena is sacrificed at a tomb. This play, which was part of a trilogy along with Alexandros and Palamedes, was likely written as a response to the massacre on Melos. It includes a scene in which Talthybius brings in the corpse of the baby Astyanax, who had been thrown to his death from a wall. For 10 points, name this play by Euripides whose title characters include Hecuba and Cassandra.

ANSWER: The Trojan Women <Edited>

2. After this scientist noted discrepancies in his data with that of his colleague Friedrich Argelander, he was inspired to propose the recurrence relation "Q sub v minus one of X minus Q sub v plus one of X equals 2 times O sub v of X" which generates functions named for this mathematician. Solving this man's namesake differential equation when it has a singularity at the origin yields equations of the form "Y sub v of x = cosine of v pi(\*) J sub v of x minus J sub negative v of x all divided by sine v pi, where v I the order and J is this man's namesake functions of the first kind. Sirius A and Sirius B were shown to be a binary by this astronomer, who was the first to measure the distance to an extrasolar star. The solution to Laplace's equation in cylindrical coordinates are often expressed using the functions named after, for 10 points, what German astronomer and mathematician?

ANSWER: Friedrich Bessel

### **BONUSES**

- 1. In 2006, a ballot proposition known as "[this state's] Civil Rights Initiative" banned the use of affirmative action in admission to this state's schools. For 10 points each:
- [10] Name this state where Barbara Grutter and Jennifer Gratz both sued a university over its affirmative action policies, which were defended by Lee C. Bollinger.

ANSWER: Michigan

[10] The court ruled in *Grutter v. Bollinger* that a race-conscious admissions policy like that of the University of Michigan Law School was not impermissible under this landmark case, which upheld Affirmative Action but ruled against fixed quotas.

ANSWER: <u>Bakke</u> v. <u>Regents</u> of the University of California [accept either underlined portion]

[10] More specifically, the court drew on the concurrence of this justice in the *Bakke* case. This long time swing justice wrote a secret memorandum to the US Chamber of Commerce outlining a plan for protecting free enterprise.

ANSWER: Lewis F. Powell < Edited >

2. Noel Malcolm, who compiled the Clarendon Edition of this philosopher's works, argues that the design of the engraved title page of one work by this thinker is derived from the works of Jean François Niceron. For 10 points each:

[10] Identify this philosopher of *Leviathan*, the title page of which depicts the the state as a massive person comprised of myriad smaller figures.

ANSWER: Thomas **Hobbes** 

[10] Noel Malcolm argued in *Aspects of Hobbes* that it was poet Charles Cotton who translated this text from Latin into English. It's the first text in which Hobbes asserted that in the state of nature man would be a *bellum omium contra omnes*.

ANSWER: *De Cive* [or *Of the Citizen*; or *On the Citizen*]

[10] In *Reason and Rhetoric in the Philosophy of Hobbes*, this thinker recontextualised the ideas of Hobbes by situating his work against the humanist education he received. This recipient of the Balzan Prize also wrote the earth-shattering two-volume *Foundation of Modern Political Thought*.

ANSWER: Quentin Skinner < Edited>

- 3. According to this theorist, the development of "dynamic density" in society led to the increasing domination of the division of labor in our lives. For 10 points each:
- [10] Name this French theorist, who described four different types of the title action in his Suicide.

ANSWER: Emile **Durkheim** 

[10] Durkheim's *Rules of the Sociological Method* states that sociology should focus on the study of these things, which "impose an external constraint" on an individual. They are sometimes defined as "states of collective mind."

ANSWER: social facts

[10] This other thinker called language the most perfect example of a "social fact" since it is "psychic" and imposes its force upon the human will. This thinker co-wrote an investigation into the human "classificatory function" titled *Primitive Classification* with Durkheim.

ANSWER: Marcel Mauss < Edited >

4. Reading this philosopher inspired a certain poet's fluid use of a term that generally corresponds to the idea that all creatures in the universe dynamically "self", or act out their identity. For 10 points each: [10] Identify this philosopher who inspired the notion of *inscape*. A poem about this philosopher's "Oxford" calls him he "who of all men most sways my spirits to peace" and concludes that he "fired France for Mary without spot."

ANSWER: John **Duns Scotus** 

[10] This poet used the words *inscape* and *instress* in his private journals, and was a lifelong friend of Robert Bridges. He is best known for employing sprung rhythm in poems like "The Windhover" and "Pied Beauty."

ANSWER: Gerard Manley **Hopkins** 

[10] A late set of poems by Hopkins are known collectively as the "terrible sonnets" for their shared themes of desolation. This terrible sonnet closes with its speaker declaring "That night, that year / Of now done darkness I wretch lay wrestling with (my God!) my God."

ANSWER: "Carrion Comfort"

5. For 10 points each, answer the following about objects of interest to paleoclimatology, the study of Earth's climate throughout prehistory:

[10] Much of the data from paleoclimatology comes from pollen, grains, and chemicals preserved in this solid substance. "Cores" of this substance are often examined from mountainous regions.

ANSWER: ice

[10] The ratio of two isotopes of this element in ice cores indicates the temperature of the ocean's surface in past climates. Urey suggested that this element's isotope ratio in snail shells could also be used to deduce past climates.

ANSWER: oxygen

[10] Another proxy for paleoclimate data are these viscous sediments that contain organic matter. Since they develop at the bottom of oceans during anoxic events, they are thought to be a good source of data on the oxygen content of past oceans.

ANSWER: sapropels

6. Eilmer, an astrologer from this location, supposedly was inspired by the legend of Daedalus to create a pair of artificial wings and try to take flight. For 10 points each:

[10] Name this medieval abbey whose monk William described the aforementioned anecdote in his *Gesta Regum Anglorum*, or the *Deeds of the English Kings*.

ANSWER: Malmesbury [accept Eilmer of Malmesbury or William of Malmesbury]

[10] In his book on William of Malmesbury, Rodney Thomson argues that William was one of the first historians to employ "ratiocination" when incorporating other sources into his writing, such as the letters of this ecclesiastical scholar who taught in Charlemagne's court at Aachen in the late 8th century.

ANSWER: Alcuin of York

[10] William controversially defended the conquest of England by a duke of this French region due to the English peoples casual religious observance and "sins of the flesh." Of course, that duke of this region was William the Conqueror.

ANSWER: Normandy [accept Norman Conquest] <Edited>

- 7. Answer the following about the wonderful physics of nickel, for 10 points each.
- [10] The pure nickel used in physical experiments is produced by this process, in which nickel oxide combines with carbon monoxide to form nickel carbonyl, which decomposes at high temperatures to yield pure nickel.

ANSWER: Mond process

[10] Electrons fired at a nickel target by Davisson and Germer resulted in a diffraction pattern like those of photons, confirming this idea which also predicted a diffraction pattern for electrons fired at a double slit

ANSWER: wave-particle <u>duality</u> [or <u>de Broglie hypothesis</u>]

[10] Madame Wu's most famous experiment observed the polarization of gamma rays emitted by the decay of cobalt-60 into nickel-60 to resolve this problem where two particles with the same mass, spin and lifetime had opposite parity.

ANSWER: <u>Tau-Theta</u> puzzle [prompt on <u>Parity Violation</u>]

- 8. After Isaac Dan der Grimnebulin gives a caterpillar a hallucinogen, it transforms into a slakemoth and eats the brain of Isaac's fellow scientist in this author's first fantasy and steampunk novel set in the land of Bas-Lag. For 10 points each:
- [10] Name this author, a member of the New Weird movement whose novels include *Perdido Street Station* and *The City & The City*. This writer for *The Guardian* has also written political histories, such as *Between Equal Rights*.

ANSWER: China Mieville

[10] New Weird traces its roots back to the horror stories of this author, such as "At the Mountains of Madness" and several other stories featuring Cthulu and the Old Ones.

ANSWER: Howard Philipps **Lovecraft** 

[10] Giant naked mole rats terrorize the Earth, forcing humanity to travel using these objects in a novel by China Mieville. Guy Haines and Anthony Bruno "swap murders" while using one of these title conveyances in Patricia Highsmith's first novel.

ANSWER: trains [accept Railsea; accept Strangers on a Train]

- 9. This term was first used by Pierre Gueguen, but was later appropriated by Michel Tapie in his book *Un Art Autre* to describe a submovement within Art Informel. For 10 points each:
- [10] Name this French painting movement that takes its name from a word meaning "blotch." Its practitioners sought to move away from the geometric abstraction, instead creating abstract art inspired by the human mind.

ANSWER: Tachism [or Tachisme]

[10] Maurice Denis used the term *tachisme* to describe the "wild" style of these artists. Other painters associated with this style include Henri Matisse and Raoul Dufy.

ANSWER: Fauvism [or Fauve]

[10] Maurice Denis was more involved with this group of painters that slightly predated the Fauves. This group included Pierre Bonnard and Édouard Vuillard. It was spearheaded by Paul Serusier, who painted *The Talisman* on a cigar-box.

ANSWER: Les Nabis < Edited >

- 10. In 1999, this leader was convicted by a Dutch court *in absentia* for cocaine trafficking, though the lack of an extradition treaty between his country and the Dutch has allowed him to avoid serving time. For 10 points each:
- [10] Name this dictator who instigated the "Telephone Coup" by dismissing his country's government by phone. Though he was ousted in 1992, he returned to power in 2010 as president of Suriname.

ANSWER: Desi Bouterse

[10] Desi Bouterse fought a civil war in Suriname called the Interior War against descendants of Africans who escaped from slavery, who are known by this name. In Jamaica, members of group waged two namesake wars against their former masters.

ANSWER: maroons

- [10] During the Interior War, maroon guerrillas blew up towers that powered one of these structures at Afobaka village. A hydroelectric one, the Itaipu, straddles the border between Brazil and Paraguay. ANSWER: <u>dams</u> [accept Itaipu or Afrobaka <u>dams</u>] < Edited>
- 11. A recent trend in fine dining is the creation of culinary foams, which are valued for their low-calorie content and gourmet appeal. For 10 points each:
- [10] Culinary foams are often prepared by vigorously beating the white proteins of these ingredients and whisking. In other recipes, these are often poached or shirred.

ANSWER: **egg**s [accept **egg** whites]

[10] Culinary foams came into the vogue after this Spanish chef and head of the elBulli restaurant pioneered their use in such dishes as "deconstructed martinis" and "hot potato foams."

ANSWER: Ferran Adria

[10] Ferran Adria is also partly responsible for the popularity of this cooking method, which Heston Blumenthal tried to make the Little Chef chain of service station restaurants adopt for cooking eggs. It involves vacuum sealing food and cooking it for extended periods in a heated water bath.

ANSWER: sous-vide <Edited>

- 12. This compounds prevents the formation of the mitotic spindle by binding to tubulin. For 10 points each:
- [10] Name this compound, which is a toxic product of the autumn crocus used to treat Behçet's disease and familial Mediterranean fever.

ANSWER: **colchicine** [accept **Colcrys** from capitalist swine]

[10] The biosynthesis of colchicine involves these two amino acids, which like tryptophan, contain aromatic rings.

ANSWER: **phenylalanine** and **tyrosine** [accept in either order]

[10] Aromatic amino acids can be formed through the shikimate pathway, which is initiated by a kinase, an enzyme which transfers one of these groups, three of which are found on the energy currency of the cell, ATP.

ANSWER: phosphate

- 13. This poet wrote about "dying like thirsty larks upon a mirage" in his poem "Agony", which appears in his collection *Allegria*, an expansion of his earlier collection *The Joy of Shipwrecks*. For 10 points each:
- [10] Name this Italian poet and one-time member of the Futurist movement.

ANSWER: Giuseppe **Ungaretti** 

[10] Giuseppe Ungaretti and Salvatore Quasimodo were two poets of this Italian movement, whose name alludes to the dense style of a certain "thrice-great" mythological figure.

ANSWER: **Hermetic**ism

[10] Another poem by Ungaretti consists of six cantos of meditations on this concept. It is said to be slave to "fate, chance, kings, and desperate men" in a poem by John Donne that implores it to "be not proud." ANSWER: **Death** 

- 14. The tuning of the sympathetic strings on the Hardanger Fiddle inspired the opening of this group of pieces. For 10 points each:
- [10] Name this set of pieces, among which is an "Arabian dance" with tambourines. Strings accompany a dialogue between flute and oboe in another movement from this set of pieces, which includes "Aase's Death."

ANSWER: **Peer Gynt** incidental music/suite

[10] *Peer Gynt* is a piece by this composer and includes his "In the Hall of the Mountain King." ANSWER: Edvard **Grieg** 

[10] The third movement of Grieg's Piano Concerto in A minor is in part based on Norwegian folk tunes which use this mode, often known as the dominant mode because it is built on the dominant fifth of the major scale.

ANSWER: mixolydian mode

- 15. Academic linguists are obsessed with Pirahã, and with good reason. Well, really it's mainly Daniel Everett who's obsessed, but answer these questions anyways, for 10 points each.
- [10] Everett claims that Pirahã has no abstract words to represent this concept. Brent Berlin and Paul Kay created seven classifications for "basic" types of it.

ANSWER: **color** [accept **colorless** green ideas]

[10] According to Everett, Pirahã can be communicated via this method. Languages that are communicated through this unusual method are most common in West Africa, and exemplified by Silbo from the Canary Islands.

ANSWER: whistling [accept word forms]

[10] Another of Everett's wacky hypotheses is that Pirahã actually borrowed all of its words of this type, which in English include "he," "you," and "I."

ANSWER: personal pronouns < Edited>

- 16. This man stirred up controversy at the Sixth International by claiming that colonialism was an antiprogressive force, since it encouraged collaboration with feudal elites. For 10 points each:
- [10] Name this Finnish communist theorist, who co-wrote a series of "Theses on the Situation in Japan" with Nosaka Sanzo. He led an unrecognized pro-Soviet puppet government in Finland after the Winter War.

ANSWER: Otto (Wille) Kuusinen

[10] Finns ignored Kuusinen's puppet state, along with many other Soviet advances, and established a postwar doctrine of aiming to survive as a democratic society in the Soviet orbit named for these two Prime Ministers. *Name either*.

ANSWER: Juho Kusti Paasikivi OR Urho Kekkonen

[10] Nonetheless, the term "Finlandization" gained traction in this country as a term for a democratic state that kowtowed to the Soviets. Its Chancellor Willy Brandt resigned after a Stasi agent was found in his cabinet.

ANSWER: Federal Republic of <u>West Germany</u> [or <u>Federal Republic of Germany</u>; or <u>Bundesrepublik</u> <u>Deutschland</u>; prompt on Germany or Deutschland] <Edited>

- 17. An Adult Swim programme set in Compton about Jesus having this trait has a title character played by Gerald Johnson who says lines like "fuck you homeboy, I still love your bitch-ass, by default." For 10 points each:
- [10] African-American theologian James Cone has argued that because "God has made the oppressed condition God's own condition" he can be described as having this ethnic and physical characteristic in the context of American racism.

ANSWER: blackness

[10] A 2011 book by James Cone strongly linked these two images, one from African-American history and one from the Bible. He has said that white theologians have written thousands of books on one of these objects without realising the link suggested by Hebrews 6:6.

ANSWER: The **Cross** and the **Lynching Tree** 

[10] Cone's doctoral thesis was on this author of *Church Dogmatics* who issued the Barmen declaration. This theologian attacked Emil Brunner's natural theology in the essay "No!" which starts with the "Angry Introduction."

ANSWER: Karl Barth < Edited >

18. Early hints about the birth of bebop can be heard in this man's recording of the Johnny Green number "Body and Soul." For 10 points each:

[10] Name this bebop jazz musician who got his start with Fletcher Henderson's band and later recorded the album *Duke Ellington Meets [this man]*. He led a band with Roy Eldridge.

ANSWER: Coleman Hawkins

[10] Coleman Hawkins is credited with popularizing this instrument in the jazz world. Other players of this instrument included Lester Young and Wayne Shorter.

ANSWER: tenor saxophone

[10] This jazz musician got his start in Hawkins' band. Outtakes from a recording session with Hawkins and John Coletrane appear on an album titled [this man's] *Music*, which opens with the track "Abide With Me."

ANSWER: Thelonius Monk < Edited >

19. Answer the following about the creative writing faculty at Princeton, for 10 points each.

[10] This grande dame of the department is the author of the novel *A Garden of Earthly Delights* and the short story "Where Are You Going, Where Have You Been?"

ANSWER: Joyce Carol Oates

[10] The Korean-American novelist and former head of the department Chang-Rae Lee first gained fame as a student at Oregon for his senior thesis about the domestic spy Henry Kwang's struggles to define his identity, which became this debut novel of his.

ANSWER: *Native Speaker* 

[10] In this novel by a former Princeton creative writing teacher, Coleman Silk gets accused of racism when he uses the word "spooks" to describe absentees in his lecture, not knowing those students are African-American.

ANSWER: *The Human Stain* (by Phillip Roth)

- 20. In biological aldol reactions, aldolases form these functional groups when a lysine residue in the active site attacks a carbonyl. For 10 points each:
- [10] Name this functional group characterized by a carbon-nitrogen double bond. They are sometimes called Schiff bases.

ANSWER: imines

[10] An open imine is an intermediate in this rearrangement of a glycosylamine to a 1-amino-1-deoxy-ketose thought to be central to the Maillard reaction.

ANSWER: Amadori rearrangement

[10] The Amadori rearrangement affects this general class of compounds which can exist in open and closed-chain forms. Examples such as glucose and fructose can be visualized using Fischer or Haworth projections.

ANSWER: <u>carbohydrate</u>s [or <u>sugar</u>s; accepte <u>monosaccharide</u>s; accept <u>aldose</u>s]

### **EXTRA BONUSES**

1. The OpenAtom molecular dynamics / quantum chemistry application was written using this framework. For 10 points each:

[10] Name this extension of C++ developed by students under Laximant Kale at the University of Illinois. It is often used in parallel applications in scientific research.

ANSWER: Charm++

[10] So-called "Chares" features in Charm++ endow it with qualities from this programming paradigm, which emphasizes human readable code written in the namesake instantiations of classes. This paradigm enforces abstraction and polymorphism.

ANSWER: object-oriented programming

[10] Another parallel object-oriented API, CUDA, was developed by this company and is designed to be run on its graphics cards. This company's OptiX engine is supposedly a real-time ray-tracing API.

ANSWER: Nvidia