Cane Ridge Revival

Head-Edited by John Lawrence Co-Edited by Seth Teitler, Matt Menard, Marshall Steinbaum, and Gautam Kandlikar Written by the University of Chicago and Dartmouth March 2014

Packet 7

TOSSUPS

- 1. The speaker of one poem by this author predicts, "The signs in the street and the signs in the skies / Shall make me a zodiac, guiding and wise" while contemplating a "specious electrical light." In another poem by this author, the speaker addresses an animal that was mourned "in silence and terror and truth" and entreats, "Sleep on, O brave-hearted, O wise man that kindled the flame." (*) Directions like "with a great deliberation and ghostliness" punctuate a poem by this author that describes "cake-walk royalty" and "A minstrel river / Where dreams come true" and claims that "Mumbo-Jumbo will hoo-doo you." Another poem by this discoverer of Langston Hughes describes a "master of us all" who "cannot sleep upon his hillside now" and paces in his "famous high top-hat." For 10 points, name this author of "The Eagle that is Forgotten," "The Congo" and "Abraham Lincoln Walks at Midnight." ANSWER: (Nicholas) Vachel Lindsay
- 2. Joseph-Marie Vien painted a replacement for this cycle, which features a work in which a bird is clutched by a putto about to stab it. In another work in this series, a woman leans against a column topped with a sculpture of a globe. A tambourine and an open music book sit above and to the left of a man with a red bow in his hair who sketches in the bottom-right corner of one work in this series. One painting in this series features a heart-shaped gap in the trees in the background, and a pink (*) parasol intertwined in the roses at the base of a statue of a putto tugging on Venus' robes. One painting in this series shows a woman placing a wreath of flowers on the head of man kneeling before her; that is *The Lover Crowned*. Commissioned for Madame du Barry's villa, for 10 points, name this group of paintings showing the development of a romantic relationship, by Jean-Honoré Fragonard. ANSWER: *The Progress of Love* [or *Les progrès de l'amour dans le cœur d'une jeune fille*]
- 3. Transgenic upregulation of this protein causes increased willingness to feed at the expense of predator avoidance in rainbow trout, which can express its "all fish" version. Arginine can be used to diagnose deficiencies of this non-ACTH protein as an alternative to the insulin tolerance test. Andrzej Bartke won the Methuselah Foundation's MPrize for mouse longevity by knocking out this protein's receptor, which is also defective in (*) Laron syndrome. Cows often develop mastitis after treatment with a recombinant analogue of this protein, the release of which is stimulated by its secretagogue ghrelin and inhibited by somatostatin. This protein stimulates the production of IGF-1 and is produced with the related prolactin in acidophilic cells of the anterior pituitary. For 10 points, name this signaling peptide that has anabolic effects on the liver, bone and skeletal muscle.

ANSWER: HGH [or human growth hormone; or somatotropin; or somatropin accept rBGH or recombinant bovine growth hormone or BST or bovine somatropin or bovine somatotropin]

4. This figure's grave was devised in a dream by his dog or his son, and was sealed with doors of diorite. This figure is told that he is like a fool whose "affairs lack counsel" and who is given "left-over yeast" during an episode in which he is repeatedly asked why he looks so exhausted and careworn. This figure overwhelms Agga with his radiance in one poem; in another, he is given a gift made from a felled tree in which the Anzud bird had taken up residence. That gift consisted of a (*) pukku and mekku, which disappeared into the Underworld. This man traverses the Mountain of Mashu and encounters two scorpion-people after he spends six days mourning a friend who had helped him slay the monstrous guardian of a cedar forest. For ten points, name this strongman who slays Huwawa and the Bull of Heaven, a king of Uruk.

ANSWER: Gilgamesh or Bilgames

5. In 1298, a merchant from this polity incorporated pioneering risk-sharing measures into his contract to transport Phocaean alum from Aigues-Mortes to Bruges. Braudel claims that this polity's control over the Piacenza fairs and manipulation of Spanish *juros* were instrumental in its success during a period he dubbed its namesake "century," which was abruptly brought to a disastrous end in 1575. The production of mastic was monopolized by the Maona of (*) Chios controlled by this polity, whose colonies of the Taman peninsula and Gazaria on the Black Sea were managed by the Bank of Saint George. The Adorno and Campofregoso families vied for control of this polity, whose oligarchical *alberghi* were created in 1528 by the "perpetual censor" and admiral Andrea Doria. For 10 points, name this polity nicknamed "La Superba," a maritime republic based in the Ligurian birthplace of Christopher Columbus.

ANSWER: Republic of <u>Genoa</u> [or Republica di <u>Genova</u>; or Repúbrica de <u>Zêna</u>; or République de <u>Gênes</u>; accept "La <u>Superba"</u> before mentioned]

6. This man attacked his intellectual opponents for their prior commitments to human perfectibility and innate equality, which he associates with the gulag, an approach one critic referred to as this man's "Lockean-Rousseauian-Cartesian scarecrow." This man drew on Norbert Elias' The Civilizing Process to argue that "exogenous forces" such as cosmopolitanism and the "escalator of reason" are responsible for the decline in violence and invoked the notion of differential support for the intelligence distribution by (*) gender in a predictable defense of Larry Summers. This man concurred with Noam Chomsky's concept of a "universal grammar" but argues that innate language is the product of evolution. For 10 points, name this Harvard linguist and cocktail party intellectual, the author of The Better Angels of Our Nature and The Language Instinct.

ANSWER: Steven Pinker

7. They're not Indians, but on their first birthday, some members of this ethnic group are seated in front of a table and allowed to pick from objects like a book and scissors to foretell their future. Members of this ethnic group venerate the dead by preparing a five-rowed table of food in front of a photograph or tablet. The bilingual Methodist hymnal Come, Let Us Worship is utilized by this ethnic group, whose Presbyterian church is the fastest-growing in the US. A Pentecostal (*) Full Gospel Church serving this ethnic group is the world's largest megachurch. One member of this ethnic group outlined "indemnity" in Exposition of the Divine Principle, a guide to a new religious movement that began among these people; that religion's members take the Family Pledge and hold mass weddings. For 10 points, name this ethnic group that makes up the majority of the Unification Church founded by Sun Myung Moon.

ANSWER: Korean [accept <u>Hanguk</u>-in or <u>Hangukye</u>; accept <u>Chosŏn</u>-in; accept <u>Koryo</u>-saram; accept <u>Korean-Americans</u> or any other specific Korean immigrant groups]

8. An anecdote in one work by this author describes a student who remains silent during an oral exam, except to ask repeatedly to change exam questions. A conversation with a constable about fixing a bridge on his property causes one of this author's characters to realize that he is "unoriginal". That title character from one of this author's stories suddenly begins telling his life story to the man he's sharing a bed with, while they are guests at a country house. In one story by him, the tale of a (*) goblin haunting an old paper-mill and the tale of a carpenter who was nearly enchanted by a laughing mermaid until he made the sign of the cross are told by superstitious peasant boys as they sit round a fire cooking potatoes in the title meadow. For 10 points, name this Russian author who included the stories "Hamlet of the Shchigrovsky District" and "Bezhin Lea" in his collection A Sportsman's Sketches.

ANSWER: Ivan (Sergeyevich) Turgenev

9. The speed of light is raised to this power in the expression for the momentum distribution function given by the relativistic Maxwell-Juttner equation. The speed of light is also raised to this power, and multiplied by charge squared times acceleration squared, in the Larmor radiation formula. The one-particle partition function for a quantum ideal gas equals this power of the thermal de Broglie wavelength times the volume, leading to a pre-exponential factor of the square root of 2pi m k T raised to this power in the momentum function in a (*) Maxwell-Boltzmann distribution. One of Kepler's laws states that the square of angular frequency is proportional to this power of the semi-major axis length. A watt equals a kilogram meter-squared times seconds to this power. For 10 points, identify this exponent with which the strength of a bar magnet's dipolar far field falls off, differentiating it from the more common inverse-square.

ANSWER: inverse-cube [or negative 3rd power, do not accept just "cube" or "3rd-power"]

10. WARNING: TWO ANSWERS REQUIRED

These two powers signed the commercial Treaty of Balta Limani, which overturned the political accommodation in the Convention of Kutahya that had severely weakened one of them. William Harborne and Edward Barton represented one of these powers at the court of the other, where they transmitted correspondence between two rulers that referred to their common rejection of idolatry. The rejection of a proposal by Menshikov that would have created a de-facto protectorate over the (*) Orthodox was urged by Stratford Canning, who thus goaded one of these powers into war to serve the interests of the other. Edward Codrington committed professional suicide by leading the forces of one of these powers to victory over the other at the Battle of Navarino, as that represented a setback for the Congress System and his power's long-run interest in the preservation of the other power. For 10 points, name these two powers whose last war with one another included Allenby's Palestine campaign and the Battle of Gallipoli.

ANSWER: <u>England</u> and the <u>Ottoman</u> Empire [accept "<u>UK</u>" or "<u>Britain</u>" for <u>England</u> and <u>Turkey</u> for the <u>Ottoman</u> Empire.]

11. One of these works by this composer opens with a fugue on a theme in C-sharp minor, which begins "G-sharp — B-sharp — C-sharp". In one of these works by this composer, a G-major movement marked "Alla danza tedesca" precedes a slow movement in E-flat that takes its name from a type of simple, melodious air. A movement from one of these works by this composer alternates episodes in D major and 3/8 time, marked "with renewed strength", with imitative sections in the (*) Lydian mode of F. Those movements from these works are the "Cavatina" from Opus 130 and the "Heiliger Dankgesang" or "Holy Song of Thanksgiving" from Opus 132. The Grosse Fuge was originally the finale of one of these works. Three of these works make up the composer's Opus 59, and are dedicated to Count Razumovsky. For 10 points, name these chamber works by the composer of the Eroica Symphony.

ANSWER: Ludwig van **Beethoven's String Quartets** [accept obvious equivalents, such as "string quartets by Beethoven"]

12. Lintott et al. proposed that Hanny's Voorwerp represents the first observation of a "light echo" from one of these objects, which is thought to have ejected matter from the adjacent IC 2497. Examples of these objects that are older than the re-ionization epoch are seen through an intervening medium that is largely neutral hydrogen, in contrast to more recent examples of these objects that display a (*) Lyman Alpha Forest. The fact that the luminosity of these objects varies on a timescale of weeks or months combined with the fact that they shine continuously implies that they are powered by the gravitational energy of matter accreting onto super-massive black holes. For 10 points, name these distant active galactic nuclei whose name derives from their extremely high energy output in combination with a point-like emission spectrum.

ANSWER: quasars [prompt on "active galactic nuclei" before mention]

13. During an altercation in the 1960 Presidential campaign, Lady Bird Johnson was almost smacked with a sign in this city, and falsely claiming she had been "pushed from behind by a Negro," Cora Frederickson actually did hit Adlai Stevenson over the head with a placard in this city. That incident occurred after he delivered a speech to its United Nations Association which was heckled by the founder of the National Indignation Convention and other followers of disgraced General Edwin Walker, who lived in this city. Jeanne Kirkpatrick delivered the "Blame America First" speech in this city. A fight over federal judicial appointments, including that of (*) Sarah Hughes, was supposed to have been resolved by a public rapprochement between Ralph Yarborough and Lyndon Johnson in this city, and so they were riding in the same car when Governor John Connally was shot in the car just ahead. For 10 points, name this city in which JFK was assassinated.

ANSWER: **Dallas**

14. A barber in this novel attacks a sub-editor for the Guardian after repeatedly losing the Missing Ball Competition, making him distrust newspapers so much that he tears up a winning sweepstake ticket. Following the death of his dog, a character in this novel who receives exactly three votes every election becomes a preacher and orders people to stone him. After failing the Cambridge Senior School Certificate Examination, Elias becomes an "aristocratic" scavenging (*) cart-driver in this novel, which describes the clownish pyrotechnicist Morgan and the Ramayana-reading mechanic Uncle Bhakcu. Other characters in this novel include a carpenter who tries to make "the thing without a name," Popo, and a poet who writes only one line of his twenty-two year masterpiece, B. Wordsworth. For 10 points, name this novel about the calypso-quoting residents of a slum in Port of Spain, written by V. S. Naipaul.

ANSWER: Miguel Street

15. In one shot in this film, the camera closes in on two birds in a cage as we hear a window being smashed, a woman screaming, and a mob chanting their desire to capture the protagonist. When one character in this film stumbles while carrying potatoes and is helped up by two men who had previously thrown tomatoes at her, she wonders whether this is a sign that persecution is over. One character in this film suffers amnesia from the crash of a plane that ran out of gas while Commander (*) Schultz accidentally flew it upside-down. The Prelude from Lohengrin plays in a scene in which the title character dances with an inflatable globe. After the invasion of Osterlich, its protagonist delivers a speech of hope over the radio, addressing his beloved, the washerwoman Hannah. For 10 points, name this 1940 film in which a Jewish barber resembles the title leader, Adenoid Hynkel, both played by Charlie Chaplin.

ANSWER: The **Great Dictator**

16. In this work, "cunning" is defined as part of the fraudulence inherent in the act of sacrificing to the gods. This work discusses how film characters possess only "pseudoindividuality", which allows them to be smoothly reintegrated into the universal, thus making genuine tragedy impossible. This work's opening chapter states that efforts to destroy mythology through reason caused reason itself to become mythology, and illustrates the dichotomy between the pursuit of manual labor and the enjoyment of art in an analysis of (*) Odysseus and his crew resisting the song of the Sirens. It discusses the "mass deception" of the public by the standardization of popular culture in its chapter on the "culture industry". For 10 points, name this work which discusses how fascist barbarism was built on the progressive ideology of the title intellectual movement, a work of Max Horkheimer and Theodor Adorno.

ANSWER: **Dialectic of Enlightenment** [or **Dialektik der Aufklärung**]

17. Cook et al. used this reaction to convert an oxazoline into a seven-membered nitrogen heterocycle in a synthesis of the PKC inhibitor balanol. A green variant of this reaction can cleave plant oils like oleate esters. The efficiency of a catalyst for this reaction was increased by replacing one of its two bulky phosphine ligands with 3-bromopyridine. One experiment concerning this reaction found that it produced a statistical distribution of terminal (*) alkyl groups, providing evidence against a pairwise mechanism. This reaction can cause the polymerization of norbornene in order to relieve its ring strain. A metallocyclobutane intermediate is produced in the ring-closing form of this reaction according to the Chauvin mechanism, which was first demonstrated in complexes of carbenes. For 10 points, name this reaction catalyzed by a ruthenium complex named for Grubbs, an exchange of substituents across two double bonds.

ANSWER: <u>olefin metathesis</u> [accept <u>alkene metathesis</u>; prompt on partial answer; accept <u>ring-opening metathesis</u> polymerization or <u>ROM</u>P; accept <u>cross-metathesis</u> or <u>CM</u>; accept <u>ethenolysis</u>; accept <u>Shell higher olefin</u> process or <u>SHOP</u>; accept <u>acyclic diene metathesis</u> polymerization or <u>ADME</u>T; accept <u>ring-closing metathesis</u> or <u>RCM</u> before mentioned; prompt on "polymerization" or related answers]

18. This character claims, "The brain may / devise laws for the blood, but a hot temper leaps / o'er a cold decree" before recoiling at the word "choose." This character asserts that "the crow doth sing as sweetly as the lark / When neither is attended" while listening to music at the end of the play in which she appears. This character wishes, "Let all of his complexion choose me so" after a dark-skinned Moroccan (*) suitor finds a scroll claiming "all that glisters is not gold" instead of her portrait. After describing "an attribute of God himself" "enthroned in the hearts of kings," this character is lauded as "a Daniel come to judgment." This heiress of Belmont demands that her husband return a ring that he gave to her while she was disguised as a lawyer who gave a speech about the "quality of mercy." For 10 points, name this wife of Bassanio who prevents Shylock from taking a pound of Antonio's flesh in *The Merchant of Venice*.

ANSWER: **Portia** [accept **Balthazar**]

19. Institutions run by these people began to mill grain and press oil from it after being granted exemption from taxes under a man who took power during the Xuanwu Gate Incident. Emperor Saga patronized one of these people who worked at Xi Ming, while another of them, Ennin, chronicled a campaign carried out against these people at the instigation of Han Yu by Emperor Wuzong. A diary kept by Fa Xian, one of these people, is the origin of a legend that demons and dragons inhabit the island of Ceylon. Another of these people fled from Chang'an to the court of a Turkic ruler at Turfan in defiance of an edict by (*) Taizong, an emperor of the Tang dynasty. Xuanzang, one of these people, undertook a trip to India that was fictionalized by Wu Cheng'en in "Journey to the West." For 10 points, name these people you could find in Zen temples.

ANSWER: Buddhist <u>monks</u> [accept <u>priests</u> for monks; prompt with "I need an occupation" if only "Buddhist" or variants is given; accept <u>Mahayana</u> or any specific Mahayana sect in place of or in addition to "Buddhism"]

20. A 1971 paper by Peter Diamond showed that there's no reason for this activity to exist in the general equilibrium of a model of costly search, contrary to Stigler. Phillip Nelson argued the cost of this activity serves as a signaling mechanism, explaining why it is more commonly used for experience goods than search goods. Another theory of this activity argues that it serves as a complementary good through "prestige effects;" that approach was developed by Becker and Murphy. The (*) "Torches of Freedom" campaign was an attempt by Edward Bernays to apply Freudian theories to this activity. Vance Packard attacked this activity in a book that repeated the false story of a movie theater flashing pictures of popcorn on the screen in *The Hidden Persuaders*, and J.K. Galbraith said that this activity "manufactures demand." For 10 points, name this activity done to encourage consumers to buy a product.

ANSWER: <u>advertising</u> [accept word forms; prompt on "marketing," "public relations," "propaganda," and similar. Accept "price dispersion" and equivalents before "Phillip"]

1. We like special relativity because it explains stuff that actually happens. For 10 points each:

[10] Hafele and Keating tested time dilation in a 1971 experiment involving atomic clocks that were transported on these vehicles.

ANSWER: aboard air planes

[10] Another demonstration of time dilation relies on shooting these particles at near-light speed and timing how long before they appear to decay. These particles have the longest known decay time besides the neutron.

ANSWER: muons

[10] The first verification of time dilation was this experiment, which fired hydrogen ions at a detector and measured the change in their wavelength. Its results demonstrated that the Lorentz factor needed to be included in the classical redshift equation.

ANSWER: Ives-Stilwell experiment

2. The narrator has a conversation with a famous novelist after both of them choose not to receive the Eucharist in this author's story "A Visit to Morin." For 10 points each:

[10] Name this author who described a baker offering a boy an electric train if he steals communion wafers in "A Hint of an Explanation." Mr. Ferraro employs Miss Saunders to perform indulgences in his story "Special Duties."

ANSWER: (Henry) Graham Greene

[10] Graham Greene much more famously explored Catholic faith in this novel, whose title references the doxology. In this novel, the whisky priest evades the anti-religion lieutenant in the Mexican state of Tabasco

ANSWER: The **Power and the Glory**

[10] Sandy becomes a nun and writes *The Transfiguration of the Commonplace* in this novel by a different author. In this novel, Mr. Lloyd's portraits resemble the title character, who dislikes Catholicism despite her love of Italy.

ANSWER: The Prime of Miss Jean Brodie

3. His Livre pour Orchestre is divided into four chapters, separated by interludes. For 10 points each:

[10] Name this modern Polish composer of the tone poem Mi-parti and a Concerto for Orchestra.

ANSWER: Witold Lutoslawski

[10] This other modern Polish composer of the St. Luke Passion wrote the tone-cluster-filled Threnody for the Victims of Hiroshima.

ANSWER: Krzysztof (Eugeniusz) Penderecki

[10] This 19th-century Polish composer and violin virtuoso is famous for his two violin concertos, in F-sharp minor and D minor respectively, and for his showpiece *Légende*.

ANSWER: Henryk Wieniawski

4. Diamond and Dybvig model these events as liquidity crises arising from stochastic timing of the desire to consume. For 10 points each:

[10] Charles Kindleberger and others argued for a lender of last resort to stave off these events, where depositors worried about a bank's solvency withdraw their deposits even if they don't need the money themselves.

ANSWER: bank run

[10] One of the earliest proponents of a lender of last resort was this author of *Lombard Street: A Description of the Money Market*. He was the editor of *The Economist* for most of the 1860s and 70s.

ANSWER: Walter Bagehot

[10] One critique of the Diamond and Dybvig model is that it suffers from this indeterminacy, since it has no way of predicting whether a run will or won't actually happen. Roger Myerson has argued that this situation is characteristic of the world, rather than a modeling flaw, and Schelling's concept of a "focal point" is one way around this situation.

ANSWER: multiple equilibria [accept equivalents, including specifically "two equilibria"]

5. The earliest of these lined the springs of lakes Xochimilco and Chalco. For 10 points each:

[10] Name these so-called "floating gardens" used by inhabitants of the Valley of Mexico to grow crops in shallow lake beds and similar locations.

ANSWER: chinampas

[10] There were an awful lot of chinampas in this Aztec capital city located on Lake Texcoco, where they were created by fencing in sections of the lake bed. This city was the site of the Templo Mayor.

ANSWER: Tenochtitlan

[10] The Aztec Empire was composed of the alliance of Tenochtitlan, Texcoco, and this other city, which participated in the conquest of Azcapotzalco. Following that conquest, this city's ruler took the title, "Lord of the Tepanecs."

ANSWER: Tlacopan

6. Continuous functions whose domain have this property are necessarily equicontinuous. For 10 points each:

[10] That fact can be proven because a finite epsilon-net can always be constructed covering a space of this type. A continuous function whose domain has this property also necessarily attains its supremum and infimum.

ANSWER: compactness

[10] If you're working in everyone's favorite metric space, Rn, then a set being compact is equivalent to its being closed and bounded, according to this theorem.

ANSWER: **Heine-Borel** Theorem

[10] This similar theorem states that in Rn, bounded sequences in closed sets necessarily have convergent subsequences. It follows from Heine-Borel and the fact that compact and sequentially compact are equivalent in a metric space.

ANSWER: Bolzano-Weierstrass Theorem

7. In South Asia, members of this denomination perform musical poetry called *qawwali*. And six suprasensory organs called the *lataif-e-sitta* are distinguished by this sect. For 10 points each:

[10] Name this Muslim denomination whose *turuq* include the Bektashi and Mevlevi orders., and which emphasizes mystical practices like the whirling performed by dervishes.

ANSWER: **Sufi**sm [or **tasawwuf**]

[10] The Darqawa order led a revival of ascetic Sufism in this country, which Clifford Geertz contrasted with Indonesia in *Islam Observed*. Fatima al-Fihri founded the madrasa al-Karaouine in this country in 859.

ANSWER: Kingdom of **Morocco** [or Al-Mamlakah al-**Maġrib**iyah]

[10] Many Muslims in the Maghreb undertake pilgrimages to the tombs of these Sufi leaders, who originally lived in monastic fortresses called ribats. These possess high levels of *baraka* and effectively serve as saints.

ANSWER: marabouts [accept pious ones]

8. Led by Sarah Bagley, the female textile workers of this town went on several strikes between 1835 and 1846, among the first industrial actions in US History. For 10 points each:

[10] Name this planned factory town, the densest industrial agglomeration in the US during the first Industrial Revolution.

ANSWER: **Lowell**, Massachusetts

[10] Industrialization in New England took off when this apprentice from the Derbyshire weaving industry memorized his mill's design and took off for Rhode Island, in violation of a prohibition on exporting that intellectual property.

ANSWER: Samuel Slater

[10] Bagley went on to become the first woman employed in this industry. Its leading figure in the US was a virulently anti-immigrant, pro-slavery portraitist and candidate for mayor of New York, who refused to share credit with Alfred Vail for the invention that gave rise to this industry.

ANSWER: telegraphy

- 9. This musician's band wrote most of their pieces as "head arrangements" based on riffs, some of which were produced in collaboration with co-arranger Eddie Durham. For 10 points each:
- [10] Name this Kansas City-style jazz pianist, whose namesake orchestra scored hits with tunes like "Jumpin' at the Woodside" and "April in Paris".

ANSWER: (William James) "Count" Basie

[10] Basie's signature tune was this 12-bar blues number, which begins with a solo for Basie in F major, before a modulation to D-flat major for the rest band, in which key it then stays.

ANSWER: "One O'Clock Jump"

[10] Basie's legendary rhythm section consisted of Basie himself on piano, Freddie Green on guitar, Walter Page on bass, and this drummer, who emphasized cymbal work over bass-drum pounding.

ANSWER: (Jonathan David Samuel) "Jo" Jones

10. Answer the following about air combat in poetry, for 10 points each:

[10] This author of "The Second Coming" wrote "Those that I fight I do not hate / Those that I guard I do not love" in "An Irish Airman Foresees His Death."

ANSWER: William Butler Yeats

[10] This Randall Jarrell poem mentions that the title character was washed out "with a hose" after waking to "black flak and the nightmare fighters" "six miles from earth."

ANSWER: "The Death of the Ball Turret Gunner"

[10] In his most famous poem, this American serving in the Canadian Air Force wrote that he has "done a hundred things / You have not dreamed of" after slipping "the surly bonds of Earth" and touching "the face of God."

ANSWER: John Gillespie Magee

11. Name some things involved in the synthesis and characterization of proteins, for 10 points each.

[10] The Strecker synthesis forms amino acids by attacking carbonyls with salts of this anion, which reacts with alkyl halides to form nitriles. The Nazis generated the toxic gas Zyklon B by reacting this anion with sulfuric acid.

ANSWER: **cyanide** [or **CN** minus one]

[10] An important protecting group in peptide synthesis is BOC, which contains an ester derivative of this bulky organic group. This group's steric hindrance allows its alkoxide to act as a strong base but not a nucleophile.

ANSWER: <u>tert-butyl</u> [or <u>t-Bu</u>tyl; prompt on "butyl" or "Bu"; accept <u>tert-butoxide</u>]

[10] Once polypeptides are synthesized, dynamic light scattering can be used to determine this parameter, defined as the degree of heterogeneity in their component molar masses.

ANSWER: polydispersity index [accept word forms; accept molecular weight dispersity or MWD]

12. This essay opens with a brief overview of the approach to science taken by such figures as Bacon, Kepler, and Darwin. For 10 points each:

[10] Name this essay which ends with a comparison of the methods of "tenacity" and "authority" with the scientific method, suggesting the last of these as the best way of achieving the title overcoming of doubt.

ANSWER: "The Fixation of Belief"

[10] "The Fixation of Belief" is by this American pragmatist polymathic philosopher and semiotician, who also wrote "How to Make Our Ideas Clear".

ANSWER: C(harles) S(anders) Peirce

[10] Peirce's semiotics divides signs into three classes: icons, which resemble their object; symbols, which are connected to their object only through convention; and these signs, which are connected to their object by existential or physical connection.

ANSWER: index [or indexical sign]

- 13. This character becomes terrified after accidentally grabbing George Willard's shoulders while giving an impassioned speech. For 10 points each:
- [10] Name this berry-picker, who was formerly a schoolteacher named Adolph Myers, before one of his mentally disabled students falsely accused him of molestation.

ANSWER: Wing Biddlebaum [accept either name]

[10] Wing Biddlebaum is the protagonist of "Hands" the first story of Winesburg, Ohio, by this American author.

ANSWER: Sherwood (Berton) Anderson

[10] Near the end of this short story by Sherwood Anderson, a hunter happens upon the corpse of the long-suffering Mrs. Grimes, who died while carrying meat home from the butcher while accompanied by some dogs.

ANSWER: "Death in the Woods" [JL]

- 14. Name some languages once used in the ancient Middle East, for 10 points each:
- [10] This language, named for a polity ruled by Sargon the Great, was the lingua franca of the Babylonian empire. This Semitic language was written in cuneiform, and works in it include Gilgamesh, the Amarna Letters, and Enuma Elish.

ANSWER: Akkadian [or lišānum akkadītum]

[10] This Semitic language was the official language of communication in the Persian Empire. Its Syriac dialect was a major liturgical language for early Eastern Christians, and the Pahlavi scripts were based on its alphabet.

ANSWER: Aramaic [or 'Armayya]

[10] This language was used by the Mitanni kingdom as well as its namesake Northern Mesopotamian invaders, and it is notably related to Urartian. The earliest known text in this language can be found on the Louvre Lion.

ANSWER: Hurrian

- 15. He made many paintings of the flowers in his garden in Utenwarf, and depicted a bearded face wearing a troubled expression in his woodcut, *The Prophet*. For 10 points each:
- [10] Name this German painter who depicted many frenzied nude women surrounding the title idol in his Dance Around the Golden Calf.

ANSWER: Emil Nolde [or Emil Hansen]

[10] Emil Nolde was one of the founding members of this German Expressionist movement, along with Fritz Bleyl and Ernst Ludwig Kirchner.

ANSWER: *Die <u>Brücke</u>* [or *The <u>Bridge</u>*]

[10] The fourth founding member of *Die Brücke* was this German painter of *Woman with a Bag*, who depicted a very angular street in *Houses at Night*,

ANSWER: Karl Schmidt-Rottluff

- 16. This movement opposes the Israeli occupation of the Palestinian territories and draws its inspiration from a similar initiative undertaken against Apartheid South Africa. For 10 points each:
- [10] Name this three-word movement that refers to escalating treatment of Israeli settlements and and their products. Scarlett Johanson ran afoul of this movement for working as a spokeswoman for SodaStream, whose factory is in Ma'ale Adumim.

ANSWER: $\underline{Boycott\text{-}Divestment\text{-}Sanctions}$ [or \underline{BDS}]

[10] This academic organization adopted a resolution in support of BDS in December 2013, though the larger Modern Language Association did not go as far in separating itself from Israeli academics at its January 2014 meeting.

ANSWER: **American Studies** Association [or **ASA**]

[10] The New York State Legislature is currently considering a bill that would cut funding to any academic that contributes to the ASA. That bill is sponsored by this longtime Speaker of the New York State Assembly.

ANSWER: Sheldon Silver

- 17. This scientist coined the term "ghost of competition past" to describe interspecific competition as an evolutionary force that can segregate species even if they do not currently occur sympatrically. For 10 points each:
- [10] Name this ecologist who conducted experiments on *Chthamalus* and *Balanus* barnacles in intertidal zones. He codified Grime's intermediate disturbance hypothesis and, like Janzen, predicted that most seedlings would die off in the dense areas near their parent trees in tropical forests.

ANSWER: Joseph Hurd Connell

[10] Connell's barnacle experiments modeled the formation of these ecological roles, which may be "fundamental" or "realized." Hutchinson described these roles, which do not overlap according to Gause's law of competitive exclusion.

ANSWER: ecological <u>niches</u>

[10] Niche partitioning is often studied using the Caribbean *Anolis* genus of these animals. The *Sceloporus* genus of these animals exists in alternative color morphs that illustrate frequency-dependent selection.

ANSWER: <u>lizard</u>s [accept <u>Lacertilia</u>; prompt on "Squamata" or "reptiles" or "chordates" or other less specific answers; antiprompt on specific lizards]

- 18. The marionette comedy *Revenge of Truth* plays during a story in this collection that describes an old woman whose dying wish after a carriage accident is to see her step-granddaughter Rosina di Gampocorta. For 10 points each:
- [10] Name this collection that features a story in which Agnese interrupts a duel between Giovanni and Prince Potenziani. A baron recalls his affair with the young Nathalie in this collection's story "The Old Chevalier."

ANSWER: Seven Gothic Tales

[10] Seven Gothic Tales was written by this Danish author of "Babette's Feast." If you go to Nairobi, you have to pay to photograph the house she lived in for the seventeen years that are recounted in her memoir Out of Africa.

ANSWER: Isak <u>Dinesen</u> [or Karen (von) <u>Blixen</u>-Finecke; or Karen Christenze <u>Dinesen</u>; accept Tania <u>Blixen</u>; accept <u>Osceola</u>; accept Pierre <u>Andrézel</u>]

[10] The title activity is code for relaying anti-Nazi information to Sweden in this other Scandinavian work. Trond remembers a summer with his father after meeting an acquaintance who shot his twin in this Per Petterson novel.

ANSWER: Out Stealing Horses [or Ut og stjæle hester]

- 19. Bishop Warin of Beauvis proposed an oath against attacking churches to Robert the Pious as part of this movement, which was first manifested at councils in Auvergne and Aquitaine. For 10 points each:
- [10] Name this tenth- to twelfth-century social movement aimed at protecting property, expanding church power and limiting warfare. The Council of Elne-Toulouges banned contact with excommunicates as part of this movement

ANSWER: <u>Peace of God</u> movement [or <u>Pax Dei</u>; or <u>Paix de Dieu</u>; accept <u>Truce of God</u> or <u>Treuga Dei</u>] [10] The Peace of God was strongly supported by this Benedictine super-monastery that gained power through a system of dependent priories. Peter the Venerable was a leader of this abbey, which promoted namesake anti-simony reforms in the 11th century.

ANSWER: <u>Cluny</u> Abbey [accept <u>Cluniac</u> reforms or <u>Clunian</u> reforms]

[10] Cluny was located in this region. A duke of this region attempted to promote a crusade that never took place at the 1454 Feast of the Pheasant, and he wore a robe worth three times what he'd paid for the office to the ceremony where he assumed ownership of the Bishopric of Liege.

ANSWER: **Burgundy** [or **Bourgogne**]

- 20. According to Stesichorus, a shepherd of this name informed Geryon of the theft of his cattle. For 10 points each:
- [10] Identify this name, which was also borne by a hubristic son of Iapetus who was banished to Tartarus after Zeus struck him with a thunderbolt.

ANSWER: Menoetius

[10] Another Menoetius in mythology was the father of this Trojan War hero. He and Menoetius took shelter with Peleus after he killed Clysonymus, and this man became very good friends with Peleus' son.

ANSWER: Patroclus

[10] Patroclus died on the battlefield of Troy while impersonating this hero, whose mother Thetis had earlier done a poor job of properly dipping him in the river Styx.

ANSWER: Achilles