

## Cane Ridge Revival

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### TOSSUPS

1. **Two characters in this play bet over whether a certain word ends with the letter “K” or “C”. In one speech in this play, one character claims that he “sucked on the same titty” as another character, in order to convince the latter to share his marijuana. One character in this play insists that her nephew be allowed to deliver an important spoken introduction, even though he has a stutter. This play’s first act ends with one character showing the scar he got when trying to stop eight or nine men from (\*) gang-raping his mother, and its second act ends with one character being stabbed for stepping on the shoes of a man who had his songs rejected. In this play, a man who earned his nickname in a dance contest, Slow Drag, plays together with the well-read Toledo and the hot-headed trumpeter Levee. For 10 points, name this play from August Wilson’s *Pittsburgh Cycle* centering on a recording session of the title singer’s band.**

ANSWER: **Ma Rainey’s Black Bottom**

2. **This person is the central figure in a print that shows a man with a ponytail with his back to the viewer emoting in front of a mirror, while a pointy-chinned man holding a book looks at the central figure, who wears a blue choker and raises her right arm. In one work, this person was painted with a black thread around her neck, sitting on a chair with scarlet upholstery, holding a fox-fur muff. This figure wears a dress with horizontal blue pinstripes and an enormous black hat in a work that inspired its painter to say (\*) “confound the nose, there’s no end to it!” Another painting of this person was signed on the hem of her dress; two figures in that painting hold a dagger and a goblet. This woman wears a pearl necklace with two knots in it and sits on a stone throne with two allegorical figures behind her. For 10 points, name this actress who is surrounded by dark clouds in a Joshua Reynolds painting of her as “the tragic muse”.**

ANSWER: Sarah **Siddons** [accept **Sarah Siddons as the Tragic Muse**, **Portrait of Mrs. Siddons**, or any number of titles involving her **Rehearsing in the Green Room**]

3. **In 2009, Mancuso et al used gene therapy to augment this trait in adult members of the genus *Saimiri*, which displayed an altered mf-ERG response. Due to a gene duplication event, one form of this trait is “routine” for the genus *Alouatta*. Cichlid diversity in Lake Victoria has been reduced because they cannot exhibit mate choice when this trait is impaired by eutrophication. Twelve specialized cell types mediate this trait in mantis shrimp. This trait is sexually dimorphic in platyrrhines because it is determined by a polymorphism of the M/L gene, while its advanced development among (\*) primates in general is likely the result of the advantage it provides in foraging for young leaves or ripe fruits. The Young-Helmholtz theory models this trait, which is partially impaired in protanopes and deutanopes. Its most common disorder is X-linked recessive. For 10 points, name this trait mediated by cone opsins.**

ANSWER: **color vision** [accept obvious equivalents like **seeing color**; accept **trichromacy** or **trichromatism**; prompt on “vision” or “sight” or “photoreception” or reasonable equivalents]

4. Modal notation was developed in this modern-day country in the 12<sup>th</sup> century as a means of notating rhythm. Though probably not originally from this country himself, Anonymous IV was an important source about two composers from here whose pieces are compiled in the *Magnus Liber*. A 1722 theory treatise from this country introduced the concept of viewing six and six-four chords as inversions of triads rooted in a “fundamental bass”. Two composers from this country, (\*) Perotin and Leonin, wrote *organa*, which are the earliest notated polyphonic compositions in Western music. The style of one composer from this country was opposed by supporters of Pergolesi’s *opera buffa* in the War of the Buffoons. That composer from here wrote such “lyric tragedies” as *Hippolytus and Aricia* and *Castor and Pollux*. For 10 points, name this country of origin of Jean-Philippe Rameau and of the composers of the Notre Dame School.

ANSWER: France

5. It’s not part of an underworld, but a body of water located near part of this location is fed by a river that flows from the antlers of a stag. Unlike Gullinkambi, the golden rooster living in this location crows at dawn because light has defeated darkness. Lettfeti and Gulltopp are among those who spend much of each day at this place, which is generally held to be synonymous with Vidofnir’s home (\*) Mimameidr. The horses of the Aesir bear their masters here to council. The four deer Dainn, Dvalinn, Duneyrr, and Durathror regularly eat at this location. Some scholars posit that Hoddmimis holt, where Lif and Lifthrasir will hide to survive Ragnarok, is in fact just this entity. Its name means a certain god’s “gallows,” because to learn the runes, Odin hung himself from here for nine nights. For 10 points, identify this giant ash tree that connects the worlds of Norse myth.

ANSWER: Yggdrasil [accept Mimameidr before mention]

6. Chorlitz and Molotschna were colonies founded by these people in response to increased taxation under Frederick William II and an invitation to European settlement issued by Catherine the Great. A subset of these people practice communal property ownership and they formed in response to a tax levied to support the counter-attack to the first Ottoman siege of Vienna, when (\*) that subset of this group was led from Tyrol to Moravia by Jacob Hutter. After they had thrown out the aristocracy, Prince-Bishop Franz von Waldeck led an attack on radical members of this group that resulted in the hanging of Bernhard Knipperdolling and John Bockelson in cages from the Munster Cathedral in 1535, and this group is thought to have emerged in the Black Forest as a reaction to the violence of the Peasants’ War. For 10 points, name this radical Protestant movement that includes followers of Menno Simons and that rejects infant Baptism.

ANSWER: Anabaptists [accept word forms; anti-prompt on “Amish” and “Mennonite” before Simons is mentioned]

7. A 2005 book by Robert Bruegmann defends the egalitarian nature of these places. Bennett Berger wrote an article on “the myth” of them based on his studies in California, arguing the purpose of such a myth was a more general cultural criticism. Kenneth Jackson examined what made the American version distinct from the rest of the world in *Crabgrass Frontier*. Based on his study of one of these places in New Jersey, Herbert Gans argued the stereotype of (\*) “homogeneity” was better described as “compatibility,” and that the hyperactive sociability described by people like William Whyte was greatly exaggerated. Lewis Mumford hated these places and complained that people who lived here conformed “in every outward and inward respect to a common mold.” For 10 points, name these places like Levittown, residential communities within commuting distance of a larger city.

ANSWER: suburbs [or suburbia; or sprawl before “the myth”]

8. One author from this country wrote a novel about a doctor taking a cruise liner from Australia to accompany the corpse of a woman to whom he had refused an abortion. In a novel featuring the trial of a carpenter who stabbed and mutilated a prostitute, this nation’s emperor’s 70<sup>th</sup> year of reign is celebrated by the Parallel Campaign, which proclaims this country’s cultural superiority to one of its neighbors. One author from here created a protagonist who builds a (\*) cone-shaped house in the forest for his sister and a protagonist who descends into self-destructiveness after being called a “loser” by Glenn Gould. Besides the authors of *Amok* and *Correction*, one writer from this country wrote of the mathematician Ulrich in the unfinished 1000-plus page novel *The Man Without Qualities*. For 10 points, name this country of origin of Stefan Zweig, Joseph Roth, Thomas Bernhard, and Robert Musil.

ANSWER: Republic of Austria [prompt on “Austria-Hungary” or “Austro-Hungarian Empire”]

9. After incorrectly positing that mass was equivalent to electromagnetic mass, this physicist borrowed an earlier formula and proposed that  $E$  equals three-fourths  $mc^2$ . This man derived Newton's laws from Maxwell's equations in a paper putting forth an "Electromagnetic Foundation of Mechanics." Shortly after J.J. Thomson discovered the electron, this scientist performed a similar experiment on positively-charged canal rays, separating particles by their charge-mass ratio in a primitive mass spectrometry. One of this man's laws states that his namesake constant  $b$ , expressed in units of (\*) meter-Kelvins, gives the location of the maximum specific intensity times the temperature of a certain object. Max Planck combined one of this man's approximations with the Rayleigh-Jeans law to resolve the ultraviolet catastrophe. For 10 points, name this German physicist, whose namesake displacement law describes the peak wavelength of light radiated by a blackbody at a given temperature.

ANSWER: Wilhelm (Carl Werner Otto Fritz Franz) Wien

10. A 1971 article analyzes how financial difficulties radicalized aspiring writers during the run-up to this conflict, causing them to produce highly polemical pamphlets. One study of this conflict focuses on changes in the ownership of farmland during it and posits an alliance between the rural bourgeoisie and its urban counterpart. A different work on this conflict argues that the sale of titles antagonized elites, leading to a breakdown of the "divide and rule" strategy, and it also discusses the use of "maximalist language" by different groups seeking to become "the voice of the people." David Bell has argued that the government response to one uprising during this conflict was an example of total war and not, as Reynald Secher claimed, a (\*) genocide; both of them consider a disputed letter attributed to Westermann and the activities of the "infernal columns" of Turreau in the Vendée. For 10 points, identify this conflict which was the subject of classic works by Thomas Carlyle and Alexis de Tocqueville.

ANSWER: the French Revolution [or La Revolution Francaise; anti-prompt on "Vendée Revolt" or "War in the Vendée" before named]

11. The festival date for one form of this deity is first attested in the Philocalian calendar. Virus Lupus was appointed to a college of pontiffs serving this deity by a ruler who constructed a massive temple to this deity on the Campus Agrippae following a victory over the Palmyrenes. In iconography, this deity is depicted along with a figure who was born from a rock while they engage in a banquet on top of the hide of a (\*) slain bull. The feast of the winter solstice was associated with the symbolic birth of this god, who is depicted dining alongside Mithras after the tauroctony. This god's epithet means "unconquered" and in association with his cult, emperors wore a radiant crown. For 10 points, name this syncretic Roman sun god, who was given an official cult during the late Empire.

ANSWER: Sol Invictus [do NOT accept or prompt on "Sol Indiges"]

12. Helicoplacoids disappeared during this period, and the organisms that evolved during it completely replaced the iconic quilted *Dickinsonia* of the Ediacaran biota. The shift from entirely horizontally-oriented burrows to vertical burrows alongside a decline in the global prevalence of stromatolites during this period signify its "substrate revolution," which is thought to be related to the breakup of Pannotia and the immersed cratons it left behind. The Taconic Orogeny (\*) began toward the end of this period. Chance determined evolutionary descent from *pikaia* rather than *hallowicgenia* during this period based on the "experimental" interpretation put forward by Stephen Jay Gould to explain the soft fossil lagerstätte in the Burgess Shale, although more recent interpretations of that find classify its fossils as ancestors of living phyla. For 10 points, name this first period of the Paleozoic era which saw a namesake "explosion."

ANSWER: Cambrian period

13. One company in this industry collapsed on "Black Monday" of 1977. John F. Kennedy attacked a group of executives in this industry led by Roger Blough for attempting to fix prices. The Chicago Police Department opened fire on unarmed protesters and their families in the Memorial Day Massacre during a 1937 strike in this industry. A different strike prompted Charles Sawyer to seize the factories of a company based in (\*) Youngstown, Ohio, resulting in a Supreme Court case. The first billion-dollar corporation was created when J.P. Morgan purchased a company in this industry that had earlier hired Pinkerton agents to break up the Homestead strike. For 10 points, identify this industry included such executives as Henry Clay Frick and Andrew Carnegie.

ANSWER: steel [accept anything with the word "steel"]

14. This poet referenced *Lohengrin* in a poem about a creature under whose wings “the new Poetry” is born. This author of “The Swan” also wrote about a “sea-dog” who sleeps in “the siesta of the tropics” after “thinking of the beaches/of a vague, distant, misty land.” This poet wrote a work in which the speaker is led by a “friendly fairy” and tells her, “I want to feel within my soul profound, deep, and boundless inspiration: light, warmth, aroma, life.” That poem, (\*) “Autumnal,” forms part of a section called “The Lyrical Year” in a collection by this author. This author of “Symphony in Gray Major” also wrote a work in which the speaker tells the title figure that “it is with the voice of the Bible, or the verse of Walt Whitman” that he should come to the title figure, who he later calls an “Alexander-Nebuchadnezzar.” For 10 points, name this *modernista* poet of “To Roosevelt” and the collection *Azul*...

ANSWER: Ruben Dario

15. Clara Driscoll led a team of women in creating a celebrated daffodil design in this medium. Four 210-foot-tall works of this kind extend to a cross in the ceiling in a building in Rio de Janeiro. The attempted murder of King Chilperic and his subsequent protection by the Bishop of Tournai are depicted in a series in this medium by Arnold Njimegen. Saints Cyril, Methodius, and Wenceslas all appear in a work of this type in Prague by Alphonse Mucha. William (\*) Morris collaborated in this medium on a *Worship of the Shepherds* with Edward Burne-Jones, who also produced a Nativity series in this medium for Trinity Church in Boston. The most famous modern practitioner of this medium used them in lampshades, and created the “favrite” variety through treatments of metal oxides. For 10 points, name this medium revived by Louis Comfort Tiffany, which might be found in the windows of Gothic Cathedrals.

ANSWER: stained glass [prompt on “glass”; be generous, and prompt on “windows” too before “lampshades,” since most of these clues are about stained-glass windows]

16. This work claims that the study of language was placed in a “quadrilateral” with corners of proposition, articulation, designation and derivation, in the chapter “Speaking.” It argues that knowledge based on resemblance was replaced after the Renaissance by knowledge based on identity and difference. This book’s preface describes its author’s laughing response to a fictional Chinese encyclopedia that divides animals into absurd categories like “drawn with a...camelhair brush” in a passage by (\*) Borges. It argues that fields such as natural history and general grammar are not ancestors of modern biology and linguistics, because all knowledge is limited to the *episteme* of its era. It precedes its author’s turn towards a “genealogical” approach to history in works like *Discipline and Punish*. For 10 points, a description of Velasquez’s *Las Meninas* opens what “archeology of the human sciences” by Michel Foucault?

ANSWER: *The* Order of Things [or *Les Mots et les choses*]

17. The “nitroalkane anomaly” results when charge differences make these entities imbalanced. The vibrational partition function can be used to find the characteristic loose vibrational mode of these entities, which can move either perpendicular to or along the diagonal on square plots that represent them as dots. One model of these entities is based on minimizing the one-way (\*) flux coefficient. These entities have one imaginary frequency and can be found using the Synchronous Transit-Guided Quasi-Newton method. Differences between them determine the product ratios of conformers. Double daggers represent these saddle points of potential energy surfaces, which resemble the species closest in free energy according to Hammond’s postulate. For 10 points, name these unobservable entities whose energy content equals that of the reactants plus the activation energy, represented by the peaks on a reaction coordinate.

ANSWER: transition states [accept activated complexes; accept TST; do not accept intermediates]

18. When one character in this novel is delighted by a bird she thinks is a cardinal, the protagonist informs her that it is a coppery-tailed trogon while they sit in an unkempt garden where he later finds a sign asking people not to let their children destroy it. One character in this novel watches a girl play with an armadillo outside a bar where she discusses her relationship with a guitar-playing journalist who spent a year sailing on the *Philoctetes*. Peter (\*) Lorre's remake of *The Hands of Orlac* plays at the cinema in this novel, whose characters are haunted by an abyssal barranca and often discuss the Battle of the Ebro. Pariah dogs shadow this novel's strychnine-imbibing protagonist, who competes with his half-brother Hugh for the affections of his ex-wife Yvonne. For 10 points, name this novel about an alcoholic British consul in Quauhnahuac, set on the Day of the Dead and written by Malcolm Lowry.

ANSWER: *Under the Volcano*

19. After the killing of Dular Bombogor, the Evenks were incorporated into this institution. Within this institution, groups of 300 men were known as *niru*. Some components of this institution were divided into "Plain" and "Bordered" types, and defectors were incentivized to join this institution by marriages into the Aisin Gioro family. The inability of this institution to effectively respond to rebellions prompted the levying of the *likin* tax, and this organization operated alongside the (\*) Green Standard Army. Cao Xueqin served in the Plain White branch of this institution, which was expanded to include Mongols and Han Chinese by Hong Taiji, the successor of this institution's creator, Nurhaci. For 10 points, name this institution under which Manchu families were grouped for military organization.

ANSWER: Eight Banners [or jakun gusa; or baqi; accept basically anything involving the banner system; accept things like the Manchu army until "Green Standard Army" and prompt thereafter; prompt on "Qing army" or "Chinese army" but do NOT accept "People's Liberation Army" or "Manchukuo Army" or anything pre- or post-Qing]

20. This company has been accused of using bribery to secure a \$2.2 billion deal in Austria. A June 2012 ruling by the WTO held that this company received illegal governmental subsidies in the form of "launch aid" for several of its projects. In 2012, a plan to merge this company with a major British rival failed. In 2014, this company was reorganized to take the name of its largest division. This company planned to partner with an (\*) American company to construct a factory in Mobile, Alabama as part of its winning bid in a Defense Department competition, but, much to the chagrin of John McCain, that contract was later revoked and awarded to this company's primary competitor. That competition was for the KC-X tanker. For 10 points, identify this company, headquartered in Toulouse, which produces products like the Ariane 5 and the A380.

ANSWER: EADS [or the European Aeronautic Defence and Space Company; also accept Airbus Group]

McCain criticized Boeing first for improprieties in the bidding process, and later for cost overruns.

## BONUSES

1. These entities are formed because the motion they cause in their medium creates an induced EMF, which produces further mechanical effects. For 10 points each:

[10] Identify these magnetohydrodynamic waves whose Swedish discoverer found that their speed is equal to magnetic field strength divided by the square root of mu-nought times density.

ANSWER: Alfvén waves

[10] Alfvén waves can occur in this medium. This fourth state of matter is basically highly ionized gas.

ANSWER: plasma

[10] This plasma phenomenon manifests itself as the movement of charge through the ionosphere near the poles, causing the Aurora Borealis. Its constituent charged particles move along the geomagnetic field lines.

ANSWER: Birkeland currents

2. In her parents' house there is a duplicate of almost every item of furniture, most notably the two clocks, so that this character will never want for furniture upon her marriage. For 10 points each:

[10]. Name this character whose arrival prompts the local vicar to stop the extant fiddle based choir and replace it with organ music. Her great secret is that she accepted a second engagement while already affianced.

ANSWER: Fancy Day [accept either]

[10] Fancy Day was created by this British author *Tess of the D'Urbervilles* and *The Return of the Native*.

ANSWER: Thomas Hardy

[10] Fancy Day and Dick Dewy's relationship is the central action of this early novel by Thomas Hardy, which he considered titling for the town of Mellstock's church choir.

ANSWER: Under the Greenwood Tree

3. Its third "Entr'acte" was re-used by its composer for his Impromptu in B-flat and for the slow movement of his *String Quartet No. 13*. For 10 points each:

[10] Name this set of incidental music for an 1823 play by Helmina von Chézy. It is often paired with its composer's overture to *Die Zauberharfe*, which is consequently named for this piece.

ANSWER: *Incidental music to* Rosamunde, *Fürstin von Zypern*, *Op. 26*

[10] Parts of this composer's incidental music to *Rosamunde* is sometimes used to "complete" his two-movement *Unfinished Symphony*.

ANSWER: Franz (Peter) Schubert

[10] Schubert wrote his *Fantasy in F minor* and three *Marches Militaires* for this combination of performers.

ANSWER: piano duet [or piano four-hands; prompt on "two pianists", until they make clear that this is two pianists and one piano; do NOT prompt on or accept "piano duo" or "two pianos"]

4. This observation was used to justify the import substitution industrialization, or ISI, promoted by many Latin American countries after World War II. For 10 points each:

[10] Name this observation made by two economists in 1950 that the terms of trade for raw commodities deteriorates over time, putting developing countries at a structural disadvantage in international trade.

ANSWER: Singer-Prebisch thesis

[10] The policy argument for ISI is consistent with this concept as the motivation for international trade. This concept holds that countries will export whichever good is cheapest for them to produce.

ANSWER: comparative advantage

[10] Comparative advantage does not explain why similar countries trade similar goods, which is why trade models in the Krugman tradition assume this property holds. A Cobb-Douglas function displaying this property will have exponents sum to more than one.

ANSWER: increasing returns to scale

5. In 661, Ali was assassinated while praying at the Great Mosque in this city after he briefly made it the Rashidun capital. For 10 points each:

[10] Name this garrison city where the scholars Maytham al-Tammar and the Companion Kumayl ibn Ziyad spent most of their lives. This Iraqi city was the birthplace of Abū Hanīfah, the founder of the Hanafi school.

ANSWER: al-**Kūfa**

[10] The growth of urban centers like Kūfa on the periphery of the Arabian Peninsula allowed these people, exemplified by Abū Hanīfah, to gain power. This Arabic term refers to non-Arab converts to Islam.

ANSWER: **mawali**

[10] Andrew Watson proposed that Islamic urbanization was driven by an agricultural revolution, part due to the implementation of this practice, which ancient Egyptians accomplished with canals used to channel the Nile flood.

ANSWER: basin/surface **irrigation** [prompt on any answers related to watering crops]

6. One common example of this proof technique in combinatorics establishes a lower bound for Ramsey numbers by considering random colorings of complete graphs. For 10 points each:

[10] Name this nonconstructive proof technique which can be used to show an object with a given property exists by, for example, considering the expectation of an associated indicator random variable.

ANSWER: **probabilistic method**

[10] This eccentric Hungarian mathematician was a pioneer of the probabilistic method. He also famously collaborated with hundreds of other mathematicians and popularized the idea of “proofs from the book.”

ANSWER: Paul **Erdos**

[10] This useful result in probability theory says that the probability of at least one event in a collection is no greater than the sum of their individual probabilities.

ANSWER: **union bound** [or **Boole's** Inequality]

7. This figure wears the Ring of the Fisherman and a cloak called the mantum and once donned a special tiara. For 10 points each:

[10] Name this leader of the Holy See elected by conclaves of the College of Cardinals. Celestine V and Benedict XVI are the only people to resign from this position, whose current holder is Francis.

ANSWER: the **pope** [or **Bishop of Rome**; or il **Papa**; accept **papacy**]

[10] As Bishop of Rome, the pope has an ecclesiastical seat at this oldest major basilica, which is located near a former papal palace that has hosted four ecumenical councils. This basilica allegedly contains Peter and Paul's heads.

ANSWER: Papal (Arch)basilica of **St. John Lateran** [or (Arci)basilica di **San Giovanni in Laterano**; or Sacrosancta Papalis Archibasilica Maior Sanctissimi Salvatoris et Sanctorum **Iohannis Baptistae et Evangelistae apud Lateranum**, omnium Urbis et orbis ecclesiarum Mater et Caput]

[10] The Lateran Palace contains this wood-and-marble structure, which pilgrims climb on their knees to obtain plenary indulgences. During the Passion, Jesus stood on this structure, which was brought to Rome by St. Helena.

ANSWER: **Scala Sancta** [accept **Holy Stairs** or **Holy Staircase**; accept **Scala Pilati** or **Stairs of Pilate** or anything else indicating it's a staircase related to Pontius Pilate]

8. For 10 points each, name these urban political bosses of the 19th century.

[10] Washington DC was forced to declare bankruptcy after incurring road-paving expenses in 1874 thanks to this man's development policy. He was subsequently removed from office by Congress, which thwarted Grant's attempted re-appointment.

ANSWER: Alexander Robey **Shepherd**

[10] This man served as Mayor of New York City twice. During his first term, this man was arrested by the state-appointed Metropolitan police department, and during his second, he suggested that New York secede from the US.

ANSWER: Fernando **Wood**

[10] Wood was “Grand Sachem” of this organization, where Aaron Burr was a forbear and William Tweed and Carmine DeSapio were successors. This was the main Democratic political machine in New York City.

ANSWER: **Tammany** Hall [there were in fact two distinct organizations: **Tammany** Hall and the **Tammany** Society. The distinction is unimportant.]

9. Name some composers who wrote both classical and Hollywood music. For 10 points each:

[10] This American composer wrote scores for the Steinbeck adaptations: *Of Mice and Men* and *The Red Pony*. You may know him better for the ballets *Rodeo* and *Appalachian Spring*.

ANSWER: Aaron **Copland**

[10] This composer wrote George Harvey Bone's fictional *Concerto Macabre* for the film version of *Hangover Square*, as well as the iconic scores for the Alfred Hitchcock films *Psycho* and *North by Northwest*.

ANSWER: Bernard **Hermann** [or Max **Herman**]

[10] This Hungarian composer wrote the score for Hitchcock's *Spellbound*, but is better known for his score to *Ben-Hur* and for a Violin Concerto he wrote for Jascha Heifetz.

ANSWER: Miklós **Rózsa**

10. Answer some questions about nuclear physics... in 20<sup>th</sup> century drama, for 10 points each.

[10] In this Michael Frayn play, Werner Heisenberg, Niels Bohr, and Bohr's wife Margarethe reminisce about their meeting in 1941.

ANSWER: **Copenhagen**

[10] Friedrich Dürrenmatt wrote about three scientists hiding out in Mahtilde von Zahnd's sanatorium in his play *The Physicists*. Durrenmatt was from this country, whose other authors include Max Frisch and Gottfried Keller.

ANSWER: **Switzerland** [or **Swiss Confederation**]

[10] The physicist Kerner is a defector and double agent in this Tom Stoppard play in which the title spymaster must figure out if Ridley is a traitor.

ANSWER: **Hapgood**

11. Donald Cram successfully observed this molecule by photochemically degrading alpha-pyrone inside a hemiacarcerand. For 10 points each:

[10] Name this molecule that rapidly dimerizes by acting as both a diene and dienophile in the Diels-Alder reaction at temperatures as low as 35 K. This unstable molecule is the simplest [n]-annulene.

ANSWER: 1,3-**cyclobutadiene** [accept **[4]-Annulene**; accept **CBD**; accept **C4H4**]

[10] Cyclobutadiene is known for possessing this property, which can be identified by the presence of non-bonding electrons on Frost circles. Cyclooctatetraene avoids this property as it takes on a non-planar tub conformation.

ANSWER: **antiaromaticity** [accept word forms; do not accept "aromaticity"]

[10] Antiaromatic molecules have 4n of these electrons, which are named for and contained in bonds formed from p orbitals. These electrons are delocalized in stabilized conjugated systems of double bonds.

ANSWER: **pi** electrons [accept **pi** bonds]

12. This man wrote a sarcastic reply to the Duke of Bedford and Earl of Lauderdale, claiming that being spoken ill of by them was more flattering than any praise could be. For 10 points each:

[10] Name this man, who parodied Bolingbroke's attack on the established Church with an attack on any sort of organized government in *A Vindication of Natural Society*.

ANSWER: Edmund **Burke**

[10] Along with the far scarier and wackier Joseph de Maistre, Burke is viewed as one of the founders of this political persuasion, usually opposed to liberalism.

ANSWER: **conservatism**

[10] This author of *Of Human Conduct* and "On Being Conservative" presented a long list of what it meant to be conservative, including things like preferring "the familiar to the unknown" and "present laughter to utopian bliss."

ANSWER: Michael (Joseph) **Oakeshott**



13. This character is forced to read a death-sentence poem parodying “Ash Wednesday” before he is shot with a gun nicknamed “chum”. For 10 points each:

[10] Name this character who writes a play titled *The Enchanted Hunter* after encountering two other characters at The Enchanted Hunters hotel.

ANSWER: **Clare Quilty** [accept either name]

[10] Clare Quilty is the antagonist of Humbert Humbert in this novel by Vladimir Nabokov.

ANSWER: **Lolita**

[10] The only major laudatory review for Nabokov’s *Pale Fire*, at its release, was from this author, famous for her feud with Lillian Hellmann. She used her time at Vassar as the basis for her novel *The Group*.

ANSWER: Mary (Therese) **McCarthy**

14. This city was built on Mount Mithridat, and in later times it would be known as Kerch. For 10 points each:

[10] Name this city, from which the Archaeonactids and Spartacids ruled the Bosporan kingdom. It was heavily damaged by an earthquake in 70 CE and destroyed by the Huns in 370 CE.

ANSWER: **Pantikapaion** [or **Panticapaeum**]

[10] Pantikapaion and the Bosporan kingdom were located on this peninsula jutting out into the Black Sea. The ruins of Chersonesos can be found in the city of Sevastopol on this peninsula, which was known as Taurike to the Greeks.

ANSWER: **Crimean Peninsula** [or **Krim**]

[10] The Bosporan kingdom conducted trade with these Iranic peoples, many of whom served as cavalry in Bosporan armies. These people originally displaced the Cimmerians and would later be displaced by the Sarmatians.

ANSWER: **Scythians** [or **Skythoi**; or **Scythi**; or **Iskutae**]

15. She pioneered soaking the canvas in acrylic paint in her 1952 painting, *Mountains and Sea*. For 10 points each:

[10] Name this Abstract Expressionist who painted several stacked masses of shades of orange against a green background in *Tangerine*.

ANSWER: Helen **Frankenthaler**

[10] Frankenthaler was one of the seminal figures of this style, sometimes classified as an off-shoot of Abstract Expressionism. Mark Rothko was a painter in this style, which emphasized solid planes of different shades.

ANSWER: **color field** painting

[10] Along with Kenneth Noland, this painter was one of the prominent members of the Washington Color School. He poured paint diagonally across the corners of canvases in his *Unfurled* series, and overlapped lines of color in his *Veil* series.

ANSWER: Morris **Louis** (Bernstein)

16. The program which led to the existence of this database was authorized by an order from Roger Vinson. For 10 points each:

[10] Identify this database, whose records are supposedly kept for five years. A review group convened by President Obama recommended that it be transferred to a private third-party, with access granted only when a Section 215 order is obtained.

ANSWER: **MAINWAY** [or descriptive answers like the **NSA's database of call** metadata]

[10] Slides about this program, which Edward Snowden revealed, advertise its ability to collect emails, chat messages, and VoIP data from the servers of “providers” like Google and Facebook, prompting denials from these companies that they created back doors for the NSA.

ANSWER: **PRISM**

[10] The NSA cooperates with its counterparts in Australia, Canada, New Zealand, and Britain, which together comprise this intelligence-sharing group. This group operated the ECHELON system, and its members are party to the UKUSA Agreement.

ANSWER: **Five Eyes**

17. *Drosophila* with this phenotype are unaffected by otherwise-embryonic lethal mutations in the MSL proteins MOF and MLE. For 10 points each:

[10] Name this phenotype possessed by *Drosophila* that can form an active, dimeric transcription factor because they possess *sis-A* and *sis-B* in excess of *deadpan*. Flies with this phenotype produce the proteins TRA and SXL.

ANSWER: **female** *Drosophila* [accept equivalents]

[10] *Drosophila* sex determination is regulated by “alternative” forms of this process, which can code for multiple protein products by skipping exons. This post-transcriptional process modifies mRNA via a lariat created by snRNPs (SNURPS).

ANSWER: alternative **splicing** [accept word forms]

[10] The TRA protein accomplishes dosage compensation by binding to *dsx* and allowing this process to occur at a site following exon 4. This process is initiated by a transferase after CPSF binds to the sequence AAUAAA.

ANSWER: **polyadenylation** [or **adding a poly(A) tail**; or **adding** a sequence of **adenine** (or **adenosine**) repeats; accept any equivalents; prompt on “cleavage”; prompt on any partial answer about adenine or adenosine]

18. The narrator of one work sees this man’s name upon the cross’s horns, and this man is chosen to command after the hermit Peter responds to his speech in the first book of another work. For 10 points each:

[10] Name this man who Dante sees after William of Orange and a Saracen named Renouard in the Cross of Souls in *Purgatorio*. In another work, Tancredi begs him not to arrest another character for the murder of Prince Gernando.

ANSWER: **Godfrey** of Bouillon [or **Goffredo** di Buglione or **Godefroy** de Bouillon]

[10] Godfrey of Bouillon leads the First Crusade in *Jerusalem Delivered*, by this 16<sup>th</sup> century poet, who worked for the Duke of Ferrara until he threw a temper tantrum at the Duke’s wedding and got thrown into a madhouse.

ANSWER: Torquato **Tasso**

[10] In *Jerusalem Delivered*, Armida’s spell over Rinaldo is ended by one of these objects. M.H. Abrams argued that Neoclassical aesthetics conceived as literature as one of these objects, as opposed to the Romantic conception of illumination.

ANSWER: **mirror** [prompt on “shield”, since the mirror in *Jerusalem Delivered* is used as a shield]

19. A ruler of this dynasty led a campaign against the Ottoman Murad II before being killed at the Battle of Varna. For 10 points each:

[10] Name this dynasty that briefly ruled Bohemia and Hungary during the reigns of Vladislaus II and Louis II. The Landshut Wedding commemorates the marriage of a woman from this dynasty to George of Bavaria.

ANSWER: **Jagiellonian** dynasty [accept anything involving **Jagiello** or **Jogaila**]

[10] The Jagiellonian dynasty more famously ruled these two countries, which united to form a single commonwealth in the Union of Lublin. Forces from these two kingdoms repulsed the Teutonic Knights at Grunwald. Name both.

ANSWER: **Poland** and **Lithuania** [accept **Polska**, **Polonia**, and other names for **Poland**; accept **Lietuva**, **Litwa**, and other names for **Lithuania**]

[10] In this series of 1385 prenuptial agreements, Jogaila, Grand Duke of Lithuania, converted to Christianity and was betrothed to the underage queen regnant Jadwiga of Poland.

ANSWER: **Union of Krewo** [or **Act of Kreva**; or **Unia w Krewie**; or **Krevo sutartis**]

20. Signs that this period is at hand include widespread desire to accumulate private property and rampant sexual experimentation. For 10 points each:

[10] Name this dark age of discord that is currently happening. This age only lasts 432,000 years because of a shortage of dharma and will be followed by the coming of a savior on the white horse Devadatta.

ANSWER: **Kali Yuga**

[10] After the Kali Yuga, the lower ten of these fourteen realms will be annihilated in a dissolution called pralaya. They include the paradise Svarga and the home of the nagas, Patala.

ANSWER: **lokas**

[10] The highest loka is the dwelling of this member of the Trimurti, who grew extra heads to check out his future consort Saraswati. This creator emerged from Vishnu's navel onto a lotus on the naga Shesha.

ANSWER: **Brahma**