

Cane Ridge Revival

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Packet 15

TOSSUPS

1. **One form of this quantity can be found with Jourawski's equation, which states that it is equal to force times the first moment of inertia over the product of thickness and the second moment of area. The fact that this quantity's value at a point for any three distinct planes completely determines this quantity's value at that point is known as Cauchy's (*) fundamental theorem of it. A graphical representation of the application of Cauchy's fundamental theorem to calculate this quantity's in-plane and normal components for a plane with arbitrary orientation is given by Mohr's circle. Like pressure, this quantity is measured in pascals, and it is found in the numerator of the standard definitions of the shear modulus and Young's modulus. For 10 points, identify this measure of how much force per unit area adjacent parts of an object exert on each other, which causes strain.**

ANSWER: stress [accept specific types like shear stress]

2. **In one story by this author, a character describes how a decapitated head declaring "I'm innocent" put Kaiser Wilhelm I off ordering executions. A character created by this author receives coded telegrams from Paris, signed "Margot", and delivers a stirring speech on the plight of the Chinese worker, leading him to be hired by the Communist party leader, Bayer, before he is blackmailed by his valet, Schmidt. In one of his stories, the depressive Peter has an intense but bickering friendship at a beach resort with (*) Otto Nowak. With an older author, he wrote a verse-drama in which Michael Ransom climbs the title peak in Ostnia. This author of *The Last of Mr. Norris* created the cabaret singer Sally Bowles, and he co-authored *The Ascent of F6* with his mentor and lover, W.H. Auden. For 10 points, name this English author who included the volume *Goodbye to Berlin* in his *Berlin Stories*.**

ANSWER: Christopher (William Bradshaw) Isherwood

3. **Two of these instruments play a cadenza together above string trills near the end of the "Prélude à la nuit" from Ravel's *Rapsodie Espagnole*. *Bachianas Brasileiras No. 6* is a duo for flute and this instrument. The French horn call between the first and second subjects of the first movement of Beethoven's Fifth Symphony is re-scored in the recapitulation for this instrument, though conductors often opt to undo the re-scoring. This instrument introduces the primary melody of "The Story of the Kalendar Prince", the second movement of Rimsky-Korsakov's (*) *Scheherazade*. Two of these instruments are the first pair to play in "The Game of Pairs" from Bartok's *Concerto for Orchestra*. Mozart's earliest woodwind concerto is a piece in B-flat for this instrument, which depicts the Grandfather in Prokofiev's *Peter and the Wolf*. For 10 points, name this low-pitched double-reed woodwind instrument.**

ANSWER: bassoon [do NOT prompt on or accept "contrabassoon"]

4. **In the introduction to one book, this man defended his reasoning a posteriori by comparing social science to what astronomers do. He argued that the inability of producers to continue maintaining a quasi-monopolistic status would lead to a breakdown of capitalism in the essay "Structural Crisis," which appears in a recent collection he coauthored with four other people, *Does Capitalism Have a Future?* In the first of a four volume series, this former head of the Fernand Braudel Center describes how increasing epidemics and climate change led to the failure of feudal society and forced Europeans to embrace an expanding capitalism. This man criticized modernization theorists for focusing on (*) nation-states as units of society, arguing we should rather examine the international division of labor between a wealthy core and a periphery with raw commodities and cheap labor. For 10 points, name this creator of world-systems theory.**

ANSWER: Immanuel (Maurice) Wallerstein

5. This man was proclaimed ruler by Amid al-Molk Kondori, whom he later had executed in Marv al-Rud, and this man prosecuted a campaign against his uncle Qutulmish, whose son Suleiman contested this man's throne. During one battle, this ruler captured a commander who had sent part of his force to besiege Khliat. This man succeeded his father Chaghri Beg as governor of Khorasan. Like his son Malik-Shah, this man employed the author of the Siyasatnama, Nizam ul-Mulk. This man supposedly said (*) "My punishment is far heavier. I forgive you, and set you free" after winning a battle in which Andronikos Doukas spread a fake rumor about the death of the emperor Romanos IV, whom this man captured. For 10 points, name this second sultan of the Seljuk Empire and victor at the Battle of Manzikert.

ANSWER: Alp Arslan [or Diya ad-Dunya wa ad-Din Adud ad-Dawlah Abu Shuja Muhammad Alp Arslan ibn Dawud or Muhammad ibn Dawud Chaghri; accept "bin" for "ibn" if some crazy person doesn't answer with his nickname]

6. "Violent relaxation" occurs in the final step of this process when the orbits of individual objects become random. A discredited "top-down" model for this process assumes that a homogeneous gas cloud collapses uniformly, which is inconsistent with observations of characteristic R-process spectral lines in the thin disk and halo that imply the latter is older. One phenomenon that drives this process creates tidal streams and polar rings, and that phenomenon is one candidate explanation for (*) lenticulars. One instance of the final stage in this process will occur in approximately 3.4 billion years, when the disks of Andromeda and the Milky Way are repeatedly disrupted and the two merge into a giant elliptical. For 10 points, what is this process by which small clusters of stars and dust come into being and become large?

ANSWER: galaxy formation or galactic evolution [accept synonyms and word forms; accept "galactic merger" before "top-down."]

7. This book's description of the extramarital affairs of Agrippa II and its description of Theudas as a rebel in Jerusalem have suggested to some scholars that its author knew the *Antiquities* of Josephus. A passage in this book quotes Psalms 2 in claiming that the line "Why do the heathen rage and imagine a vain thing?" was spoken through David by the Holy Spirit. In this book, the worship of the God that "does not dwell in temples made by human hands" is advocated in a speech inspired by an (*) altar dedicated "To an Unknown God." Those passages from this book are The Believers' Prayer and the Areopagus Sermon. Though it is not the Gospel of Luke, this book opens with a dedication to Theophilus. This book describes the election of Matthias to replace Judas and the conversion of St. Paul. For 10 points, name this fifth book of the New Testament, which describes the deeds of the followers of Christ.

ANSWER: Acts of the Apostles

8. The head of this organization often repeated the line "God made the country but man made the towns," and a key early victory for it was the defeat of Myron Herrick's reelection as Governor of Ohio. H.L. Mencken wrote that the "janissaries" of this organization "understood the soul of the American politician... they knew his whole concept of honesty and honor was... his insatiable yearning for a job." This organization pushed for a congressional investigation of the German-American Alliance, and the ratification of the (*) 16th Amendment was a critical victory for this organization, laying the groundwork for its future success by providing an alternative federal revenue source. This organization supported "Local Option" laws, and the 1927 death of its president Wayne Wheeler was a severe blow to its cause. For 10 points, name this male-dominated evangelical organization that led the political coalition in favor of Prohibition.

ANSWER: Anti-Saloon League

9. **This choreographer portrayed men hunting for birds played by women in a ballet version of Ralph Vaughan Williams' *The Lark Ascending*. An abstract ballet based on tempo changes, titled *Speeds*, is one of the key repertory pieces of this choreographer's dance company, of which Ulysses Dove was once the lead dancer. One ballet by this choreographer features a so-called "yellow" section, named as such for the color of costumes worn by dancers who use stools in their portrayal of participants in a (*) church service. Lester Horton mentored this choreographer, whose company was taken over by Judith Jamison after his death from AIDS. A ceremonial baptism is performed in "Take Me to the Water", the central section of his ballet *Revelations*, which is danced to melodies from spirituals. For 10 points, name this founder of a namesake American Dance Theater company, an African-American choreographer.**

ANSWER: Alvin Ailey

10. **A poem titled for these objects describes life as a place "Where your face burns and tickles with cobwebs / Broken across it, and one eye is weeping". The speaker of that poem titled for these objects claims "you'd think the inner dome of heaven had fallen" after seeing "heaps of broken glass to sweep away." One of these objects is treated with "smiles / And [...] soft deceitful wiles" in a poem that concludes with the speaker's deceased foe (*) outstretched on the ground "When the night had veiled the pole". The speaker of one poem imagines "some boy too far from town to learn baseball" who rode these objects "down over and over again" until the stiffness was taken out of them. Another of these objects grows from its speaker's wrath and is watered with fears. For 10 points, name these objects that are swung in a Robert Frost poem and a "Poison" example of which grows in a William Blake poem.**

ANSWER: trees [anti-prompt on "birches"]

11. **This entity experiences a "through-space" interaction based on its proximity to an alkene in foiled carbenes. Attack on this entity is prevented by steric hindrance in "frustrated" species, hindering the formation of a dative adduct. This entity is denoted 1 sub e in the trihydrogen cation, which raises its energy by forming a cyclic structure on a correlation diagram. The electron (*) affinity can be approximated by the eigenvalue of this entity, which is low-lying in soft species. The C-O IR stretching frequency is decreased when a C-polarized example of this entity interacts with a metal's d sub xz. The major reason that carbonyls are useful ligands is that their degenerate example of this entity can act as a pi acceptor. In the first excited state, an electron is promoted to this entity, which is the site of reactivity for Lewis acids. For 10 points, name this frontier orbital that forms bonds with the HOMO.**

ANSWER: LUMO [or lowest unoccupied molecular orbital; prompt on "frontier orbitals" or "FMOs"; prompt on "molecular orbitals" or "MOs"; prompt on sigma, pi, delta, s, p or d "orbitals" of any number; prompt on Lewis "acids" by asking, "With what entity do they react?"]

12. **This philosopher argued that giraffes are as socially constructed as bank accounts, for even if giraffes exist causally independently of humans, we define what they are. He described thinkers who are skeptical of epistemology and oppose the normalization of discourse as "edifying" rather than "systematic" philosophers. He argued against defining knowledge as an accurate representation of reality and for defining it as "what it is better for us to believe" in a work urging us to abandon the title (*) "ocular metaphor". This author of *Philosophy and Social Hope* wrote that Proust overcame the shame of his own finitude by ironizing his "final vocabulary" in a work whose third title concept is achieved by extending our conception of "we" to include others. For 10 points, name this contemporary American pragmatist philosopher of *Philosophy and the Mirror of Nature* and *Contingency, Irony, and Solidarity*.**

ANSWER: Richard (McKay) Rorty

13. At the Met, this character gets up and yells to Radamès and Aida that they should stop singing to conserve oxygen. An elderly maid who fears that lightning will strike her kidneys often calls the black telephone of this character, who gets divorced from his Parisian wife after she is committed for samaritrophia. While hospitalized, this character claims that everything there is to know about life is in *The Brothers Karamazov*, but it isn't enough anymore. This son of a senator proposes telling babies that Earth's only rule is, "God damn it, you've got to be kind." (*) Norman Mushari attempts to prove that this volunteer firefighter is insane so his second cousin Fred of Pisquontuit, Rhode Island will take over his fortune. This title character of a novel also called *Pearls Before Swine* introduces Billy Pilgrim to the works of Kilgore Trout. For 10 points, name this alcoholic philanthropist created by Kurt Vonnegut.

ANSWER: Mr. Eliot Rosewater [accept either; accept Mr. Z]

14. One of these people, Béatrice de Planissoles, was accused of witchcraft and induced to testify against her lover, the priest Bernard Clergue, by Jacques Fournier, who served as Bishop of Pamiers and later as Pope Benedict XII. Clergue justified seducing his string of married members of this group with reference to its prohibition on sex within marriage. Emmanuel LeRoy Ladurie's microhistory is about the village of (*) Montailou, a holdout for these people long after the fall of Montségur. These people held that the physical world was created by the demiurge *Rex Mundi*, and their most ardent believers, who had received their one sacrament of *Consolamentum*, were known as *bonhommes* or *parfaits*. The assassination of the papal envoy Pierre de Castelnau by agents of Raymond of Toulouse sparked Simon de Montfort's crusade against these people. For 10 points, name this heretical religious group of southwestern France mostly rooted out in a 13th-century genocide.

ANSWER: Cathars or Albigensians

15. In one painting by him, a dog urinates on the legs of a mustachioed blind man, who is selling matches. In one painting by him, a woman in an orange dress and cape, with a prominent sore on her lip, extends her naked right breast, and a man with a giant head has an anus for a mouth. In that work by him, on the back of a bent-over hag rides a child in pale yellow wearing a mask with a toothbrush mustache; those figures are in front of a figure in a skeleton suit wielding a scythe, with all three of these figures forming the shape of a (*) swastika. A saxophonist leans towards a dancing couple who stand to the right of a woman with giant pink ostrich feathers in the central panel of a work by him, whose left panel shows a WWI veteran with two wooden legs begging for money. For 10 points, name this leading artist of the New Objectivity movement, the painter of *Seven Deadly Sins* and the *Metropolis* triptych.

ANSWER: (William Heinrich) Otto Dix

16. David Riesman claimed these places became more professionalized and more narrowly focused on self-perpetuation in a book co-authored with Christopher Jencks. A 1963 lecture about them said the "modern" type described by Abraham Flexner had been replaced by institutions that were actually several communities with differing goals. In a recent book, William Bowen argued the inability to substitute capital for labor in these institutions implies stagnant productivity and hence increasing cost per unit, an example of what he and William Baumol called "cost disease." (*)

Clark Kerr delivered the Godkin Lectures on "the uses" of these institutions, and Bowen's book argues MOOCs would allow them to remain affordable. Thorstein Veblen criticized the influence of businessmen in these places in the United States. For 10 points, name these institutions of higher learning.

ANSWER: universities or colleges [prompt on "schools"]

17. This complex is disrupted by site-directed mutagenesis of its conserved helix 10 histidines, which act as axial ligands in *Chlamydomonas*. The Ycf4 domain directs the assembly of this complex, which is localized to non-appressed regions. Under iron-deficient conditions, flavodoxin reacts with this complex, which shares a common ancestor with a complex containing FMO and the operon-encoded homodimer P840 found in green sulfur bacteria. Superoxides are formed when this complex is intercepted by (*) Paraquat. Fx, Fa, Fb, A0 and A1 are major reaction sites in this complex, which uses the world's strongest biological reducing agent to form NADPH. This complex facilitates electron transfer from plastocyanin to ferredoxin and contains the reaction center P700. For 10 points, name this complex in the thylakoid electron transport chain that was discovered before one that splits water.

ANSWER: photosystem I [or PSI; or plastocyanin/ferredoxin oxidoreductase; accept P700 before mentioned; prompt on "chloroplasts"; prompt on "thylakoid electron transport chain" before mentioned; prompt on "photosystems"; antiprompt on "light harvesting complex" or "LHC"]

18. When a mother in this play starts bragging about her baby, another character says that if the child were his, he'd fry it and eat it. One character in this play says that in the town in which they live, knowing foreign languages is like having a sixth finger. A character in this play who dreamed of becoming a professor gets a job on the District Council, because his wife is sleeping with the chairman. After two years sober, an incompetent old doctor gets drunk and fails to help people on the night of a (*) fire, which blazes in this play's third act. In this play, the wife of a Latin teacher has a love affair with Vershinin, whose regiment leaves town in the final act. Captain Solonyok kills Baron Tuzenbach in a duel at the end of this play, whose protagonists constantly dream of returning to Moscow. For 10 points, Irsha, Masha, and Olga are the protagonists of what play by Anton Chekhov?

ANSWER: Three Sisters [or Tri sestry]

19. This man supported the involvement of Alexandre Millerand alongside the Marquis de Galliffet in the Waldeck-Rousseau cabinet, which caused a break with this man's revolutionary counterpart Jules Guesde, the leader of the "intransigents." This man supported the Left-Radical "*Bloc Gauche*" of Emile Combes from outside the cabinet and was critical in passing the 1905 law on *laïcité*. Editing (*) *L'Humanité* was a key part of this man's power in his decentralized party. Along with Clemenceau and Zola, this man was a leader of the Dreyfusards. The nationalist Raoul Villain assassinated this man in August of 1914. For 10 points, name this anti-militarist leader of the French Socialist party who tried to organize a general strike to halt World War I.

ANSWER: Jean Jaurès

20. The Black Woodpecker was sacred to this god, who is mentioned alongside a group of deities in the Arval Hymn. A sheep, pig, and goat were sacrificed to this god in the Suovetaurilia, and the 24th day of his month was the date of the festival of the king's flight. A horse was sacrificed to this god on the 15th of October and its head fought over while its tail was hung in the Regia, which also housed a set of sacred (*) spears dedicated to this god. Augustus erected a temple to this god as "Avenger." The "leaping" priests or Salii of this god danced with the ancilla shields. This god was identified with Liber and paired with Venus at the Lectisternum. For ten points, name this member of the Capitoline Triad along with Jupiter and Quirinus, worshipped by the Flamen Martialis and identified with the Greek Ares.

ANSWER: Mars [prompt very grudgingly on "Ares" because in hindsight it's a bit mean to make people play "guess which name for these often-syncretized gods we want!"]

BONUSES

1. Answer some questions about post-WWII American poetry, for 10 points each:

[10] This poet of the “Wichita Vortex Sutra” began his poem *Howl* with the line: “I saw the best minds of my generation destroyed by madness”.

ANSWER: (Irwin) Allen **Ginsberg**

[10] This poet described a girl who “cast herself into such a pure depth, / Even a father could not find her” when sad, in a poem he wrote for a student killed by a horse. One of his poems opens: “I knew a woman, lovely in her bones”.

ANSWER: Theodore (Huebner) **Roethke**

[10] This poet imagined a world where humans need not labor any longer in his poem “All Watched Over by Machines of Loving Grace”. The title poem of another of his collections, *The Pill Versus the Springhill Mine Disaster*, concludes “I think of all the people / lost inside of you.”

ANSWER: Richard (Gary) **Brautigan**

2. In the lower left corner of this painting can be seen the head of a donkey and the man riding it. For 10 points each:

[10] Name this portrait of a forlorn-looking man in a white clown costume wearing white shoes with large red bows.

ANSWER: **Pierrot**, formerly known as **Gilles** [accept either]

[10] *Pierrot* was one of many paintings of clowns by this French Rococo artist, who also painted *Gersaint's Shopsign*.

ANSWER: Jean-Antoine **Watteau**

[10] Blue-and-white-striped Tuscan columns support a portico under which a large crowd watch a dancing couple in this Watteau painting.

ANSWER: *The **Pleasures of the Dance*** [or *Les **Plaisirs du Bal***]

3. Cystic fibrosis affects an unusual eukaryotic ABC-class channel that primarily transports this ion, which names a type of mucus-secreting cell in freshwater fish gills. For 10 points each:

[10] Name this anion that is exchanged with bicarbonate in erythrocytes. The elasmobranch rectal gland allows this anion to enter epithelial cells through the NKCC, which transports it with potassium and sodium.

ANSWER: **chloride** [or **Cl** minus; I guess accept **chlorine**]

[10] Fish chloride cells contain sugars that test positive in assays with peanut agglutinin, whose binding is inhibited by these ganglioside glycans. Flu viruses use hemagglutinin to attach to these selectin-binding acids.

ANSWER: **sialic** acids [accept N-acetyl**neuraminic** acid or (4S,5R,6R,7S,8R)-**5-amino-4,6,7,8,9-pentahydroxy-2-oxo-nonanoic** acid or anything with a prefix in front of “neuraminic acid”; accept **NANA** or **Neu5Ac**]

[10] Fish osmoregulatory cells are radically remodeled during smolting, which is partially mediated by this immunosuppressive molecule. This molecule's synthesis in the zona fasciculata via 11 beta-hydroxylase is stimulated by ACTH.

ANSWER: **cortisol** [or **hydrocortisone**; or (11-beta)-**11,17,21-trihydroxypregn-4-ene-3,20-dione**; accept **corticosterone** or (11-beta)- 11, 21- **dihydroxypregn- 4- ene- 3, 20- dione** which is essentially the same as cortisol in all respects; prompt on “glucocorticoids” or “GCs”; prompt on “steroids” or “hormones”]

4. This group is composed of the “unblessed ones” who prefer to harm humans rather than help them. For 10 points each:

[10] Name this host of fairies, the malevolent portion of the Daoine Sidhe. This court includes redcaps and sluaghs and may gather at night to pinch people or lead them astray at the sites of abandoned battlefields.

ANSWER: **Unseelie** Court

[10] Disgruntled members of the Unseelie Court may switch unbaptized babies with these fairy children. Babies suspected of being these impostors should be promptly thrown into the fire or exposed to cooked eggshells.

ANSWER: **changelings** [accept **stocks** or **fetches**]

[10] Those concerned about changelings may want to keep this material in the freezer, since it repels fairies when cold. Talismans made of this material should be hung with both ends pointing upwards.

ANSWER: **iron** [or **Fe**; accept **horseshoes**]

5. Name some works important to the French Revolution for 10 points each.

[10] This work argued that its title group constituted a “complete nation”, noting that it already performed all the essential functions of society, and gave three demands for the restructuring of the legislature.

ANSWER: ***What is the Third Estate?*** [or ***Qu'est-ce que le tiers-état?***]

[10] This document's seventeen articles included statements that “men are born free and remain free and equal in rights” and that “law is the expression of the general will”, and therefore that every citizen could participate in its formulation.

ANSWER: ***Declaration of the Rights of Man*** and the Citizen [or ***Déclaration des droits de l'homme*** et du citoyen]

[10] Over one million copies of this angry newspaper were distributed to the soldiers of the French Revolutionary Army, with whom it became extremely popular. Edited by Jacques Hébert, it contained articles like “Fuck the Pope”.

ANSWER: ***Le Père Duchesne*** [or ***Father Duchesne*** or ***Old Man Duchesne***]

6. This country recently legalized the activities of certain vigilante militias. For 10 points each:

[10] Identify this country, where vigilantes recently seized control of the towns of Tierra Colorada and Apatzingan. The militias are to be incorporated into this country's Rural Defense Corps.

ANSWER: **Mexico**

[10] The militia that seized Apatzingan did so in opposition to this cartel, which issued a moratorium on violence during a visit by Benedict XVI. It is most active in the Michoacan state, where it extorts money from avocado farmers.

ANSWER: **Knights Templar** [or **Caballeros Templarios**]

[10] The militias were legalized by this current president of Mexico, who represents the PRI. He succeeded Felipe Calderon in 2012.

ANSWER: Enrique **Peña Nieto**

7. Vasques secretly poisons Hippolyta's wine at the wedding of Soranzo and this character. For 10 points each:

[10] Name this character that marries Soranzo on the advice of Friar Bonaventura but is killed by Giovanni, her brother with whom she had an incestuous affair.

ANSWER: **Annabella**

[10] Annabella is the title character in *Tis Pity She's a Whore*, by this Jacobean dramatist of *The Broken Heart*.

ANSWER: John **Ford**

[10] In this John Ford play based on the murders committed by the composer Carlo Gesualdo, Fiormonda tells her brother, Philippo Caraffa, about the mutual attraction between his wife, Bianca, and Fernando.

ANSWER: ***Love's Sacrifice***

8. In one of these models, baryon number minus lepton number is a conserved quantity. For 10 points each:

[10] Identify these types of models, which would combine the electroweak and strong forces into one single interaction.

ANSWER: GUTs [or Grand Unified Theory]

[10] The first Grand Unified Theory was put forth in 1974 by Howard Georgi and this physicist. With Salam and Weinberg, this man theorized electromagnetism and the weak force could be unified above a certain temperature.

ANSWER: Sheldon Glashow

[10] The Georgi-Glashow model embeds the Standard Model gauge groups in this single gauge group. It has rank 4, and can be thought of as the group of square unitary matrices with determinant one that are of a certain size, under the operation of matrix multiplication.

ANSWER: SU(5) [or special unitary group of degree 5, need all underlined parts of that answer]

9. One country's withdrawal from this system prompted disaster on "Black Wednesday." For 10 points each:

[10] Name this system, introduced in 1979 to stabilize the wild exchange fluctuations that characterized the 1970s after the end of Bretton Woods and to force contractionary German monetary policy on Italy.

ANSWER: European Exchange Rate Mechanism

[10] This currency was forced to withdraw from the Exchange Rate Mechanism in 1992 when the Conservative government under John Major recognized it could not keep it above its lower limit in value without a ruinous monetary contraction.

ANSWER: pound sterling

[10] This investor became known as the "man who broke the Bank of England" for making over \$1 billion in profits by short selling the pound on Black Wednesday.

ANSWER: George Soros [or Soros György; or Schwartz György]

10. In art this archangel of wisdom is typically depicted as carrying either an open flame or a book in one hand. For 10 points each:

[10] Name this angel, who apocryphally rescued John the Baptist from being murdered by Herod's men. Typically, either he or Camael is represented as the angel with the flaming sword who expelled Adam and Eve from Eden.

ANSWER: Uriel

[10] In the Torah, an angel with a flaming sword blocks the path of this man down the road. This son of Beor informed king Balak on how to make the Israelites curse themselves.

ANSWER: Balaam [or Bil'am]

[10] The animal owned by Balaam that was able to see the angel with the flaming sword was this kind of quadruped. In Matthew, Jesus rides into Jerusalem on the back of one of these animals.

ANSWER: donkey [or ass; or onager]

11. This composer's *Piano Concerto in G* opens with a whip-crack, and his other piano concerto was written for the one-handed pianist Paul Wittgenstein. For 10 points each:

[10] Name this French composer of the repetitive *Bolero*.

ANSWER: (Joseph-)Maurice Ravel

[10] The first movement of this Ravel piece is in 8/8 time, subdivided as 3 + 2 + 3, and is modeled on a Basque dance called the *zortziko*. The second movement of this piece is named for the Malaysian poetic form "pantoum".

ANSWER: piano trio [or trio for piano, violin, and cello]

[10] The third movement of Ravel's piano trio is in the form of this Spanish dance, which, like a chaconne, is based on a recurring triple-meter bass *ostinato*. The finale of Brahms' *Symphony No. 4* is also in this form.

ANSWER: passacaglia

12. For 10 points each, name the following from computability theory and the theory of formal languages:

[10] According to a thesis attributed to their namesake and Church, the set of languages accepted by these powerful automata captures the intuitive notion of computability.

ANSWER: **Turing Machine**

[10] Variants of this result apply to languages accepted by weaker automata. One variant says that, for a given DFA, any sufficiently long accepted string has sections that can be removed or repeated an arbitrary number of times with the result still being accepted.

ANSWER: **Pumping Lemma**

[10] In describing regular expressions, this man's namesake star operator denotes repeating a string 0 or more times. He also names a pair of recursion theorems in computability theory concerning semantically fixed points of computable functions.

ANSWER: Stephen **Kleene**

13. This ideology was the basis of the Republican party's opposition to slavery, since it held that the interests of employers and workers are aligned. For 10 points each:

[10] Eric Foner argues that this self-improving ideology was the foundation of the Freedmen's Bureau and that it found expression in Abraham Lincoln's life story, since he had once been a rail-splitter.

ANSWER: "**free labor**"

[10] Foner traced the free labor ideology in part to this conflict, which occurred in the counties around Albany beginning in 1839. In 1846, the movement growing out of this conflict successfully unseated governor Silas Wright.

ANSWER: **Anti-rent** War

[10] Foner further argued that Reconstruction failed because of the flaws inherent in free labor, which are evident in the reception of the former abolitionist James Pike's widely-circulated attack on this state's Reconstruction government, *The Prostrate State*.

ANSWER: **South Carolina**

14. During his trip to India, Allen Ginsberg was influenced by some of this movement's writers, including Shakti Chattopadhyay and Samir Roychowdhury. For 10 points each:

[10] Name this post-colonial Bengali-language literary movement of the 1960s, which was centered in Kolkata. This movement's poet Debi Roy pioneered the use of "logical breaks."

ANSWER: **Hungry Generation** [or **Hungrvalism**; or **Hānri jēnārēśāna**]

[10] Hungryalist poet Malay Roy Choudhury wrote a poem in which this animal's "abdomen shivers in the hiss of female urination." One poisons Dr. Shroff in *A Fine Balance*, while a mongoose kills two in *Rikki-Tikki-Tavi*.

ANSWER: **snakes** [or **serpents**; or **cobras** or **Naja** and specific species of true cobra or king **cobras/Ophiophagus** since all the aforementioned snakes are cobras; accept **elapid**s; accept **nāga** or variants]

[10] Durga's role as both a mother goddess and a warrior symbolizes the central conflict in this novel by Rabindranath Tagore, in which Bimali steals rupees from her husband Nikhil to fund the Swadeshi supporter Sandip.

ANSWER: *The* **Home and the World** [or **Ghôte Baire**; or **At Home and Outside** or other translations]

15. This sculptor's *St. Roch* is currently in the SS. Annunziata church of Florence. For 10 points each:
[10] Name this Late Gothic German sculptor who also created an Annunciation for the St. Lorenz Kirche in Nuremberg and a massive *Death of The Virgin* for the St. Mary's Church in Cracow.

ANSWER: Veit **Stoss**

[10] Stoss is best known for creating these types of works, of which his *Death of the Virgin* is an example. Jan and Hubert Van Eyck depicted The Adoration of the Lamb in a work of this type named for Ghent.

ANSWER: winged **altarpiece** [or **retable**]

[10] Stoss and his contemporary Tilman Riemenschneider mostly worked in this medium, the primary medium for Gothic altarpieces. This medium was also used for designing *misericordia* in Gothic churches.

Answer: **wood** [accept things like "**limewood**" or "**linden**"; prompt on "sculpture", "carving", etc.]

16. This man divided grammatical rules into internal ones governing how words can interact with other words and "application-rules" that connect words to the external world. For 10 points each:

[10] Name this author of *The General Theory of Knowledge*, who defended his philosophy against criticisms by Max Planck in "Positivism and Realism".

ANSWER: (Friedrich Albert) Moritz **Schlick**

[10] Schlick was a member of this group of Logical Positivists influenced by Wittgenstein's *Tractatus*. Other members included Friedrich Waismann and Rudolf Carnap.

ANSWER: **Vienna Circle** [or **Wiener Kreis**]

[10] Waismann and Carnap began developing a logical theory of this field after reading the fifth chapter of the *Tractatus*. Carnap developed a measure for this based on assigning equal weight to groups of first-order sentences called structure descriptions.

ANSWER: **probability**

17. This reaction adds a hydroxyl group to the more substituted carbon atom of an alkene and proceeds through an intermediate similar to a bromonium ion. For 10 points each:

[10] Name this two-step electrophilic addition reaction that forms an alcohol by reacting an alkene with a certain acetate salt that is subsequently removed by sodium borohydride.

ANSWER: **oxymercuration-demercuration** [accept **oxymercuration-reduction**; prompt on partial answer]

[10] Oxymercuration-demercuration is an anti-addition, contrasted with syn. One syn-addition forms diols by reacting double bonds with the tetroxide of this densest element, a third-row transition metal.

ANSWER: **osmium** [or **Os**]

[10] Mercuric salts are also useful for removing this acid-stable protecting group from a carbonyl. Aldehydes can be deprotonated and react with electrophiles as "masked acyl anions" after being converted to this group, which can be reduced to an alkane using Raney nickel.

ANSWER: **dithioacetals** [accept **dithianes** or **dithiolanes** or **dithioketals**]

18. The 1950's was a good decade for French literature. For 10 points each:

[10] Anne Dubreuilh has an affair with Lewis Brogan in this 1954 novel about a circle of French intellectuals. Its author's lover Jean-Paul Sartre was fictionalized as Anne's husband, Robert.

ANSWER: *The* **Mandarins** [or *Les* **Mandarins**]

[10] In 1952, this author's early autobiographical novel *Jean Santeuil* was posthumously published. He may be better known for creating such characters as Odette de Crecy and Charles Swann.

ANSWER: (Valentin Louis Georges Eugène) Marcel **Proust**

[10] This 1954 novel by Françoise Sagan describes the amoral Cecile's attempts to break up the romantic relationship between her father, Raymond, and his new girlfriend, Anne Larsen.

ANSWER: **Bonjour Tristesse**

19. This document called for an end to civil war in North Yemen and a continued state of belligerency with Israel. For 10 points each:

[10] Name this rejectionist document issued during the 1967 Arab League summit following the conclusion of the Six-Day War. The third part of this document outlines the “Three Noes” policy.

ANSWER: Khartoum Resolution

[10] Following the issuance of the Khartoum Resolution, Egypt continued its conflict with Israel until 1970 in this border war that primarily consisted of artillery and aircraft duels along the Suez Canal and in the Sinai.

ANSWER: War of Attrition [or Harb al-Istinzāf; or Milhemet haHatashah]

[10] The War of Attrition came to an end during the tenure of this first female Prime Minister of Israel. This Alignment and Labor Party politician ordered Operation Wrath of God and was in office during the Yom Kippur War.

ANSWER: Golda Meir [or Golda Meverson; or Golda Mabovitch]

20. California pursued this policy with the Lanterman-Petris-Short Act, which led to a ballooning of its prison population. For 10 points each:

[10] Name this policy of moving people out of mental asylums and into theoretically less coercive environments.

ANSWER: deinstitutionalization [accept word forms]

[10] This proponent of deinstitutionalization argued what was often treated as insanity was actually a logical response to contradictory messages from family and society at large in books like *The Divided Self*.

ANSWER: Ronald David Laing

[10] Laing focused on this mental disorder he claimed was not biological but caused by the “double-bind” placed upon patients. Risperidone is used to treat this disorder, whose sufferers may experience hallucinations and feelings of persecution.

ANSWER: schizophrenia