Cane Ridge Revival
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Packet 5

TOSSUPS

1. **In one work by this author, the central character counts that he farts three hundred and fifteen times in a single nineteen-hour span. In that work by this man, a woman reveals that she was going to put down her dog, thus saving from a mob the man who ran the dog over with his bicycle. One novel by him seems to have at least two shifting narrators, who may be the same person, as suggested by the sentence "if I am** (*) Mahood, I am Worm too." The narrator of another of his novels has a curved stick that he uses to pull things towards his bed, and tells the story of a boy called Sapo, but, finding the name absurd, changes it to Macmann when the character becomes a man. In a work by this author of *The Unnameable,* Father Ambrose assures that the son of an extremely fastidious detective, Jacques Moran, did not skip church. For 10 points, name this author of *Malone Dies* and *Molloy.*
ANSWER: Samuel (Barclay) **Beckett**

2. **A carcinogenic methyl-substituted derivative of this molecule is formed from the hydrolysis of the fungal toxin gyromitrin. This molecule's derivatives were used to produce early monoamine oxidase inhibitors, including a sulfate marketed as a treatment for cachexia and anorexia. This molecule reacts with enones or diketones in the most common pyrazole synthesis. As an alternative to acidic or basic workup, this molecule cleaves the (*)** N-alkylphthalimide intermediate in a reaction that converts haloalkanes to primary amines. Diethylene glycol is the most common medium for a basic reaction that is driven by this molecule's conversion to nitrogen gas; that reaction transforms carbonyls into alkanes. For 10 points, name this molecule employed in the Gabriel synthesis and Wolff-Kishner reduction, which is found in hypergolic rocket propellants and has the molecular formula N2H4.
ANSWER: **hydrazine** [accept **diazane**; accept **N2H4** or equivalents before mentioned; accept any hydrazine derivatives (if someone says that his/her answer is right, Google it to see if it's a hydrazine derivative)]

3. **Following an 1863 state supreme court decision empowering this state's Treasurer and Auditor, its governor resorted to funding this state through the so-called "Bureau of Finance," a safe in his office, with loans from politically friendly county governments and the War Department. Lincoln called this state's governor "the skeer'dest man I ever knew," and George Julian was a radical congressman from this state. In a letter to Edwin Stanton, this state's governor alleged that the (*)** Knights of the Golden Circle had plans to involve this state in a "North-Western Confederacy;" that letter was written by Oliver Morton and was carried to Washington by Robert Dale Owen. For 10 points, name this state where Owen's father founded the utopian community of New Harmony.
ANSWER: **Indiana**

4. **The Nine Saints were a group of missionaries in this country, which is home to the Garima gospels. The official Bible of this country's largest church contains three books about non-Hasmonean Maccabees, as well as the Book of Jubilees and the Book of the Covenant. A religion with priests called *kahen* is originally from this country, in which itinerant religious figures who perform white magic and exorcisms are known as *debteras*. This country is home to the church of Our Lady Mary of Zion, which claims to contain the the (*)** Ark of the Covenant. Frumentius was the first to evangelize in this country, which is the home of the Beta Israel community. The official name of this country's Orthodox Church contains the word Tewahedo, a word from its liturgical language of Ge'ez. For 10 points, name this country, where the Kingdom of Axum became one of the first officially Christian polities.
ANSWER: Federal Democratic Republic of **Ethiopia** [or ye-**Ītyōp̣p̣yā** Fēdēralāwī Dīmōkrāsīyāwī Rīpeblīk]

5. **The SNA/ESA was a method for measuring this quantity in the late 1960s, which was based on work Richard Stone did in the 1940s. The Penn effect is the overestimation of the ratio of this quantity between countries when market exchange rates are used in conversion. Simon Kuznets wrote an early report on calculating this quantity, which he divided into twelve sectors and measured the relative weight of each sector as this quantity increased. James Tobin and William Nordhaus created MEW, which they claimed was a better measure of** (*) welfare than this, and other alternatives as welfare measures include the human development index. The version of this quantity usually used in the United States today is the sum of consumption, investment, government spending, and net exports. For 10 points, name this measure of the total value of goods and services produced in a single country.
ANSWER: **national income** [accept more specific things like "**GDP**" or "**GNP**"]

6. **In a story named for this object, an unnamed married couple have an argument when it is discovered that the husband forgot to buy coffee, broke all the eggs in the grocery bag, and bought this object. In a play named for this object, a chest dragged out of the ocean by a slave after a shipwreck contains childhood toys that prove that one character is another's long-lost daughter. In that play named for this object, the pimp Labrax pursues a woman who takes shelter in the temple of Venus; that woman,** (*) Paleastra, is reunited with Daemones. In another play named for this object, Ronald Kentley's corpse is hidden in an on-stage chest during a party hosted by Charles Granillo and Wyndham Brandon, who wish to commit the perfect murder to prove their superiority. For 10 points, name this object which titles a Katherine Anne Porter short story, a play by Plautus, and a Patrick Hamilton play based on the Leopold and Loeb case.
ANSWER: **rope** [or *Rudens*]

7. **This quantity can be shown to equal magnetomotive force times mu-nought times a material's permittivity times vector potential divided by circuit length, because MMF divided by this quantity gives the reluctance. One form of this quantity is the third adiabatic invariant of plasma physics. The constant of proportionality in the equation for the voltage across a Josephson junction is the reciprocal of the smallest (*)** quantum of this quantity. This quantity equals the line integral of the magnetic vector potential. The B-field is sometimes called the density of this quantity. According to Faraday's Law of Induction, emf equals the negative time-derivative of this quantity, and one of Gauss' laws demonstrates that it is zero for a closed surface. For 10 points, identify this quantity, denoted phi, which measures the amount of B-field through a surface.
ANSWER: **magnetic flux** [prompt on partial answer, accept **phi-sub-B** before mention]

8. **This musician first came to prominence after recording "All or Nothing at All" with Harry James. Jimmy Van Heusen wrote the title songs for two of this man's albums with arranger Billy May, the first of which focused on travel-themed songs. Axel Stordahl was his primary arranger at Columbia records, before this man switched to Capitol records and recorded with Nelson Riddle. Along with Jack Leonard, he was the primary singer for the (*)** Dorsey band during the 1940's. He introduced a song that begins: "Fairy tales can come true / It can happen to you", and a song which declares: "When there was doubt / I ate it up and spit it out". This singer of "Young at Heart" and the album *Come Fly With Me* recorded "In the Wee Small Hours of the Morning" shortly after his marriage to Ava Gardner failed, and he introduced the songs "Strangers in the Night" and "My Way". For 10 points, name this singer, the leader of the Rat Pack.
ANSWER: (Francis Albert) "Frank" **Sinatra**

9. **The Pinakes was written by one resident of this kingdom, which imported and settled Galatian mercenaries. A ruler of this kingdom took the cult name of "New Dionysus" and employed a group of legionaries known as the *Gabiniani*; that king was known as the "flute-player" for his love of music. The Letter of Aristeas states that one ruler of this kingdom commissioned the translation of the (*)** Septuagint after receiving a letter from seventy-two Jewish scholars. This state's army contained native troops known as *machimoi*, many of whom revolted after the battle of Raphia, at which one of its rulers defeated Antiochus III. A civil war between two half-sisters in this state resulted in a member of its royal family, Arsinoe IV, being paraded in the streets of Rome in a triumph for Julius Caesar. For 10 points, name this state that lost all its independence after Actium, when its ruler Cleopatra committed suicide.
ANSWER: **Ptolemaic Egypt** [accept either or both underlined parts; accept **Ptolemaike** Basileia or **Ptolemaic** Kingdom; accept Hellenistic/Greek **Egypt**; accept **Aegyptus**; accept **Aigyptos**; accept **Kemet**; accept **Mesr**]

10. **One servant of this god and his wife produces two-headed snakes that can enter women, causing diseases that can be cured by unraveling multicolored balls of yarn. The date of a festival to this god was moved to coincide with the feast day of St. John the Baptist. This god's wife cries silver tears and regulates women's menstrual cycles. This god was served by virgin girls who tended a sacred flame under a high priestess ritually married to this god, who may have been tied to a hitching post during the Raymi festival. He was never a ruler of humans, but this god's father has a name meaning "Sea (*)** Foam" and destroys a race of disobedient giants in a flood. He's not a creator god, but this god's children Pacha Camaq and Manco Cápac are instructed to build him a temple after going into a cave and retrieving *tapac-yauri*, a golden staff. For 10 points, name this husband of Mama Quilla and son of Viracocha, the Incan sun god.
ANSWER: **Inti**

11. **This man divided society into realms whose meanings and structures were each determined by a specific axial principle. He called the 1960s counterculture a "counterfeit culture" and saw it as an offshoot of the "porno-pop" that had replaced high modernism. In the foreword to a reprint of one of his books he called himself a "socialist in economics, a liberal in politics, and a conservative in culture," a statement in line with his belief that the techno-economic, the polity, and the culture were in an adversarial relationship with one another. This man argued capitalism's success in producing material wealth had brought culture from the Protestant ethic to a hedonistic (*)** "psychedelic bazaar" that undermined it. He predicted that future labor would be "a game between persons" rather than manufacturing physical objects in the post-industrial society. For 10 points, name this author of *The Cultural Contradictions of Capitalism*.
ANSWER: Daniel **Bell**

12. **If, for a group of shapes in the plane with a property denoted by this adjective, any three of them have non-empty intersection, then all of them have non-empty intersection, according to Helly's theorem. The barycentric coordinates of a point are selected based on this kind of combination of a number of reference points. The union of all simplices in the Delaunay triangulation is a set described by this adjective, as are linear combinations with non-negative coefficients summing to one. (*)** Jensen's inequality can be used on functions described by this adjective, and the gift-wrapping algorithm computes this kind of hull. A set has this property if any line segment connecting two points is contained entirely within the set, and polygons with this property only have interior angles of less than pi radians. For 10 points, what term is given to functions whose secants lie entirely above them, because they have positive second derivative?
ANSWER: **convex**ity [accept word forms]

13. **In one scene in this story, a character stares at a writing desk upon which sits a letter in German saying: "Dear God, life is hell." One character in this story gets furious when another character gives the correct answer of "Meet you at the corner" in response to a riddle he had already asked. In this story, a character first encountered at the rehearsal of a children's choir says "I hope you return from the war with all your faculties intact", which leads into a section written in the (*)** third person in which the narrator describes himself after his breakdown, and calls himself "Sergeant X". This story ends with the protagonist finding a broken wristwatch in an envelope containing a letter from the title character, whom he met during a break from GI training. For 10 points, name this story about an encounter with a soon-to-be shell-shocked soldier and the title precocious English girl, one of J.D. Salinger's *Nine Stories*.
ANSWER: "**For Esmé—With Love and Squalor**"

14. **One work in this location shows Pope Gregory IX in a niche holding a volume of canon law on one side and Justinian being given his law code. That work in this location contains Fortitude, Prudence, and Temperance seated in the upper lunette. In another work in this location, a figure in white holding a lyre and a scroll with her name on it leans on the real doorframe of this location. That painting here features Apollo sitting on a rock and playing a violin and is titled (*)** *Parnassus*. One painting in this room depicts the medieval Church Doctors, Dante Alighieri, and Savonarola sitting around an altar, arguing about the nature of transubstantiation. Heraclius leans pensively on a stone block while writing, in the most famous painting in this room, in which Plato points up and Aristotle points down. For 10 points, name this room in the Vatican containing *La disputa del Sacramento* and *The School of Athens*.
ANSWER: **Stanza della Segnatura** [accept **Raphael Rooms** or **Stanze de Raffaello**; prompt on "Papal Palace" or "Palace of the Vatican" or "Apostolic Palace" or "Palace of Sixtus V"]

15. **This philosopher claimed one cannot move a single grain of sand from its place without changing the entire universe, arguing that any moment determines and is determined by every other moment. This thinker is taught that sensations are really mathematical points that our perception extends into surfaces, in an extended dialogue between himself and a Spirit that appears to him at midnight in a work divided into three books titled "Doubt", "Knowledge", and "Faith". He argued that the two possible foundations of philosophy were the pure (*)** thinghood of Kant, which he labeled as a dogmatic form of realism, and the pure selfhood of his own philosophy, which he labeled as the true "transcendental idealism" apart from Kant's, and which is founded on the action of the self positing itself. For 10 points, name this author of *The Vocation of Man*, whose philosophy was called *Wissenschaftslehre*.
ANSWER: Johann Gottlob **Fichte**

16. **One member of this dynasty was assassinated by Ignacy Hryniewicki. Sophia of Anhalt-Zerbst became a member of this dynasty when she married Peter of Holstein-Gottorp. Jose de Ribas may have been involved in a different assassination plot against a member of this dynasty, and one theory of Ribas' death is that Peter von der Pahlen poisoned him to prevent a delirious revelation of the plot, which was also led by the Count von (*)** Bennigsen. This dynasty came to influence through the marriage of Anastasia Zakharinya to Ivan IV; her nephew, the Patriarch Filaret, and his son, who was later advised by Alexei Lvov, formed the opposition to Boris Gudinov. That son was selected by a Zemsky Sobor in 1613. For 10 points, name this dynasty that ruled from Michael I's victory in the Time of Troubles until the Russian Revolution.
ANSWER: **Romanov**

17. **A bacterial transgene that biosynthesizes these molecules confers resistance to *Manduca sexta* in *Nicotiana*. The enzyme LONELY GUY is a key activator of these molecules in *Oryza sativa*. *Rhodococcus* pathogens produce non-degradable 2-methylthio derivatives of these molecules that constitutively activate hybrid histidine kinases to phosphorylate histidine phosphotransfer proteins. They're not steroids or other terpenoids, but these molecules are biosynthesized by the transfer of an isopentenyl group from DMAPP to adenine in a reaction catalyzed by IPTs. CKX degrades these molecules, whose effects are mimicked by phenylurea derivatives like (*)** TDZ. *Wooden leg* mutants are defective in the AHK4 receptor for these molecules, which have no effect on parenchyma alone but cause cell division when paired with indole derivatives. For 10 points, name these paracrine signaling molecules that include kinetin and zeatin, plant hormones discovered in coconut milk.
ANSWER: **cytokinin**s [accept **CK**s; prompt on "phytohormones" or "plant hormones" before mentioned; antiprompt on specific cytokinins; do not accept cytokines]

18. **One of these works by this composer is the title subject of the best-known book by James Webster. A three-movement one of these works by this composer quotes the Gregorian Alleluia chant in all three subjects of its first-movement exposition. A minuet in one of these pieces repeats each of its main themes in reverse. A six-movement one of these pieces reworks incidental music for a play by Karl Wahr, requires a sudden pause to re-tune the strings in the middle of its *prestissimo* finale, and is nicknamed (*)** "Il distratto". The second subject of the first movement of one in G minor features a dotted rhythm for oboe imitating a hen. Another ends with a slow coda in 3/8 time in the parallel key of F-sharp major, during which the players gradually exit the stage, granting it the nickname "Farewell". Ending with a collection of 12 named for London, for 10 points, name these 104 orchestral works by an Austrian Classical composer.
ANSWER: Franz Joseph **Haydn's symphonies**

19. **After this city's thatched buildings were destroyed by fire and flooding in 1881, its governor ordered the construction of its tiled Brickfields district, which became an Indian ethnic neighborhood after Sri Lankans were brought to this city to construct a railway. A system of "revenue farms" giving syndicates a monopoly over opium and gambling was established in this city by the Kapitan Cina Yap Ah Loy, who helped end its devastating gang wars by aiding the Hai San's victory over the Ghee Hin. Frank (*)** Swettenham governed from the Carcosa mansion in this city, which was founded in 1857 after malaria-ridden prospectors discovered tin deposits in the Klang Valley, and this city has been the site of recurrent violence between its dominant Chinese community and the majority indigenous ethnic group. For 10 points, name this capital city of the Federated Malay States.
ANSWER: **Kuala Lumpur** [Accept **KL** or **Garden City of Lights**]

20. **This poet praises a woman with eyes the color of the heavens, evoking "Mystic barcarolles", in "To Clymène". The speaker of one poem by him describes a "springtime in [his] soul" as "Like a flame around a flame"; that poem is titled "Winter has ended". One of his collections opens with a poem describing dreaming of "Persian and papal splendor / Heliogabalus and Sardanapalus!". This poet asked what "deaf child or foolish negro" invented rhyme, in a poem that commands: "Take Eloquence and wring his neck!"; that is his "The (*)** Art of Poetry". He described a soul that is like a landscape filled with "masques [and] bergmasques" in one poem. He wrote a poem whose speaker's heart is wounded by "The long sobs / Of the violins / Of Autumn" and coined the term "accursed poets". For 10 points, name this Symbolist poet who wrote "Clair de lune", *La bonne chanson*, and the *Saturnine Poems*, the lover of Arthur Rimbaud.
ANSWER: Paul(-Marie) **Verlaine**

BONUSES

1. The Indianized Khmer civilization was primarily located along this river. For 10 points each:
[10] Name this river, along which the cities of Vientiane, Luang Prabang, and Phnom Penh lie. Excavations at Oc Eo, a site along this river, have yielded coins from the Roman Empire.
ANSWER: **Mekong** [or **Za Qu**; or r**Dza Chu**; or Tônlé **Thum**; or Tônlé **Mékôngk**; or Sông **Mê Kông**; or Sông **Lớn**; or Sông **Cửu Long**]
[10] Oc Eo is believed to have been part of this kingdom centered on the Mekong delta. This kingdom was legendarily founded by the Brahmin Kaundinya, and it declined in the late 6th century until it was absorbed by Chenla.
ANSWER: **Funan** [or **Phu Nam**; or **Nokor Phnom**]
[10] Funan conducted extensive trade with this Indian kingdom, which occupied the area today known as Orissa. The brutal violence during his conquest of this kingdom supposedly inspired Ashoka to convert to Buddhism.
ANSWER: **Kalinga**

2. Scherbaum et. al used this property to stabilize an incredible coordination complex containing a carbon atom with six bonds. For 10 points each:
[10] Name this interaction similar to hydrogen bonding, which causes complexes containing the element with atomic number 79 to aggregate at an equilibrium distance of about three angstroms.
ANSWER: **aurophilicity** [accept word forms; prompt on "metallophilicity" or word forms; do not accept Gold Bond, which is a foot powder]
[10] Aurophilicity can be explained by this theory, which also offers reasons for the inert pair effect and mercury being a liquid at STP. This theory uses changes in electron mass to explain the properties of heavy nuclei like gold.
ANSWER: theory of special **relativity** [or **relativistic** effects]
[10] By expanding f orbitals, relativistic effects may also augment the "contraction" named for these elements that along with scandium and yttrium make up the rare earths. They appear above the actinides in the periodic table.
ANSWER: **lanthanide**s

3. This paper uses the example of understanding Kurt when he says "Es regnet" and encourages the methodological stance of assuming what speakers say to be true. For 10 points each:
[10] Name this paper, which describes a methodology that finds the meaning of an utterance in extra-linguistic reasons, without reference to another language. It expands on a similar idea developed by W.V. Quine.
ANSWER: "**Radical Interpretation**"
[10] "Radical Interpretation" was written by this American philosopher. This man argued that though generalizations may exist linking the mental and physical, laws connecting the two were *a priori* impossible in "Mental Events."
ANSWER: Donald (Herbert) **Davidson**
[10] In his paper "Truth and Meaning," Davidson follows this man's reasoning on "the true" being the referent for all true statements. This author of *The Foundations of Arithmetic* invented modern logic.
ANSWER: (Friedrich Ludwig) Gottlob **Frege**

4. "Little" Charlie is carrying on an affair with a woman he believes to be his cousin in this play, which won the 2008 Pulitzer Prize for Drama. For 10 points each:
[10] Name this play by Tracy Letts in which a dysfunctional family gathers around the drug-addicted, sharp-tongued matriarch Violet Weston after her husband's disappearance.
ANSWER: *August: Osage County*
[10] A bell rings and resets the scene every time Bill fails at asking out Betty in *Sure Thing*, one of several short plays collected in *All in the Timing,* by this contemporary American playwright.
ANSWER: David **Ives**
[10] The 2011 Pulitzer Prize for Drama went to Bruce Norris for *Clybourne Park,* a response to this Lorraine Hansberry play about the Younger family.
ANSWER: A *Raisin in the Sun*

5. Answer some questions about music written in the 2000's, for 10 points each.
[10] In 2008, this Chinese composer wrote his *Internet Symphony No. 1 "Eroica"* for the YouTube Symphony Orchestra. He also wrote the opera *The First Emperor* and the score to the film *Crouching Tiger, Hidden Dragon*.
ANSWER: **Tan** Dun
[10] In 2003, this composer won the Pulitzer Prize for *On the Transmigration of Souls*, a piece commemorating the victims of the 9/11 attacks. He may be better known for the operas *Doctor Atomic* and *Nixon in China*.
ANSWER: John (Coolidge) **Adams**
[10] This English composer is sometimes called the "father" of the New Complexity movement. His opera *Shadowtime* is about Walter Benjamin, and his other works include the violin concerto *Terrain* and the sextet *Flurries*, which is inspired by the poetry of A.R. Ammons
ANSWER: Brian (John Peter) **Ferneyhough**

6. Nusslein-Volhard and Wieschaus employed this technique in order to demonstrate that *bicoid* is expressed in the anterior portion of the *Drosophila* embryo. For 10 points each:
[10] Name this technique, whose chromogenic form was developed to study breast cancer oncogenes. This procedure uses oligonucleotide, DNA or cRNA probes to detect and localize sequences to tissue.
ANSWER: chromogenic *in situ* **hybridization** [or C**ISH**; prompt on partial answer; antiprompt on "FISH" or "fluorescence (or fluorescent) *in situ* hybridization"]
[10] A common *in situ* hybridization immunolabel is digoxigenin, a steroid hapten derived from this organism. Fab treats a toxin from this organism that inhibits Na+/K+ ATPase, increasing intracellular calcium.
ANSWER: *Digitalis* [or **foxglove**s; accept specific species such as *D. purpurea*]
[10] An alternative to digoxigenin is labeling with radioactive examples of these things. The Meselson-Stahl experiment employed two nitrogen ones, while the C3 and C4 pathways metabolize carbon ones in different ratios.
ANSWER: radioactive **isotope**s

7. At long last, a memoir by Bobby Baker, LBJ's Senate bagman, was finally published in 2013. For 10 points each:
[10] Baker's wife went to work as a secretary for this senator when he was first elected in 1950, having defeated Helen Gahagan Douglas, naturally by smearing her as a Communist.
ANSWER: Richard M(ilhous) **Nixon**
[10] Baker writes that this Senator's widow appealed to him for help laundering $2 million in unexplained cash he'd left her at his death. This New Hampshire Senator was a close ally of Joe McCarthy and, in order to vacate Senator Lester Hunt's Senate seat, this man bullied Hunt into committing suicide by using his son's arrest for homosexuality.
ANSWER: Styles **Bridges**
[10] Baker recounts this Senator looking in a mirror in the Senate cloakroom and exclaiming "God, why did you make me so beautiful?" This man first entered the Senate in 1952 and left in 1960, all under the loving, calculating eye of his father Joe.
ANSWER: John F(itzgerald) **Kennedy**

8. Shortly before singing a hymn to Venus, this character calls Vitelius a "keg of tallow" when he starts laughing uproariously at a feast entertained by the wrestler Croton. For 10 points each:
[10] Name this character who orders Narcissus to poison the title character after becoming consumed with desire for Junia in a Racine play. In a novel, this character gives the female protagonist to the freed slave Acte and is advised by Tigellinus.
ANSWER: **Nero** Claudius Caesar Augustus Germanicus [accept **Lucius** Domitius **Ahenobarbus** (either underlined portion); prompt on **Caesar**; prompt on the Roman **Emperor**]
[10] Nero's reign is the setting of *Quo Vadis*, a novel from this country. *Street of Crocodiles*, *The Outpost* and *The Captive Mind* were written by this country's authors Bruno Schultz, Bolesław Prus and Czesław Miłosz.
ANSWER: Republic of **Poland** [or **Rzeczpospolita Polska** (accept either underlined portion)]
[10] In this novel by the Polish author Witold Gombrowicz, Fryderyck attempts to manipulate the young farmhand Karol into having sex with Henia while he visits Hipolit's country estate with Witold.
ANSWER: ***Pornografia**

9. Identify some components of pujas, the Hindu celebrations honoring the gods. For 10 points each:
[10] Pujas often involve this ceremony in which devotees wave their hand over a lighted lamp or plate containing small lamps.
ANSWER: **aarti**
[10] Though Aarti lamps may burn camphor, they most often burn this substance, the Indian form of clarified butter.
ANSWER: **ghee**
[10] This is the Hindu term for a vision or manifestation of the divine. During a puja, a devotee might be expected to experience this after touching the feet of a murti or a guru.
ANSWER: **Darsan**a [or **Darshan**]

10. The title figure of this book calls a rose a "convoluted red form with a linear green attachment." For 10 points each:
[10] Name this collection of case studies of neurological malfunction. The title essay is about "Dr. P," a music teacher suffering from visual agnosia.
ANSWER: The ***Man Who Mistook His Wife for a Hat**
[10] *The Man Who Mistook His Wife for a Hat* was written by this neurologist. This herring enthusiast wrote about the effects of music on the brain in *Musicophilia* and most recently about his experience with mind-altering drugs in *Hallucinations*.
ANSWER: Oliver (Wolf) **Sacks**
[10] The title of Sacks' *An Anthropologist on Mars* comes from a phrase coined by this woman, an autistic animal science professor at Colorado State University whose work on livestock care is touchingly empathetic.
ANSWER: Temple **Grandin**

11. One of these facilities in Somerset is connected to the Grand Pump Room, and the largest public one of these in ancient times was named for Diocletian. For 10 points each:
[10] Name these facilities common in the Roman Empire, which typically included a frigidarium, a tepidarium, and a caldarium.
ANSWER: Roman **bath**s [or **bathhouse** or **thermae** or **balnea**]
[10] This statue by Glykon, a copy of an earlier work by Lysippos, was unearthed at the Baths of Caracalla. It depicts a certain Greek hero leaning on a club, with a lion skin draped over it.
ANSWER: **Farnese Hercules** [or **Hercules Farnese**; accept "Herakles" in place of "Hercules"]
[10] This sculpture fragment, attributed to Apollonios, was once thought to depict Hercules seated on a lion skin. Pope Julius II purportedly asked Michelangelo to complete this fragment, but Michelangelo declined.
ANSWER: **Belvedere Torso**

12. Over three thousand of these astronomical objects have been cataloged by the Kepler mission, which detects them by observing a reduction in luminosity during their transit. For 10 points each:
[10] Name these objects, which can also be detected by observing radial velocity variations as stars orbit their system's center of mass.
ANSWER: **exoplanet**s [accept descriptions like "**planets outside our solar system**"]
[10] One proposed criterion for habitable exoplanets is that they be comprised primarily of these two elements, the primary cations in the mineral components of the mantle and core of differentiated terrestrial planets in the solar system.
ANSWER: **silicon** [or **Si**] and **iron** [or **Fe**]
[10] A leading candidate for the energy source that melted terrestrial planetesimals and meteorites in the proto-planetary disk, giving rise to core/mantle differentiation, is the beta decay of this radioactive isotope present in the early solar system with a half-life of approximately 70,000 years.
ANSWER: **Aluminum-26** or **^{26}Al**

13. This speech recounted a constituent who claimed that "in 15 or 20 years' time the black man will have the whip hand over the white man." For 10 points each:
[10] Name this speech, which criticized the permitting of an "annual inflow of some 50,000 dependants" and states that "As I look ahead, I am filled with foreboding" before comparing the speaker to a Roman.
ANSWER: **Rivers of Blood** speech
[10] The Rivers of Blood speech prompted the dismissal of Enoch Powell from the Shadow Cabinet led by this party's leader, Edward Heath, though the speech may have contributed to this party's victory in the 1970 general election.
ANSWER: **Conservative** Party
[10] The Rivers of Blood speech was given while one of these bills was being considered by Parliament. That eventual 1968 Act was replaced by another of these Acts in 1976, which in turn was replaced by the Equality Act 2010.
ANSWER: **Race Relations Act**s

14. The "loony doctor" Sir Roderick Glossop is a nemesis of this character, who often helps his newt-obsessed friend Gussie Fink-Nottle with his romantic problems. For 10 points each:
[10] Name this character who is blackmailed by his Aunt Dahlia into trying to steal Sir Watkyn Bassett's silver cow-creamer in a novel named for his family's code of honor.
ANSWER: Bertram Wilberforce "**Bertie**" **Wooster** [accept either name]
[10] Bertie Wooster and his clever, problem-solving valet Jeeves are creations of this English comic novelist.
ANSWER: Sir P(elham) G(renville) **Wodehouse**
[10] Besides the Jeeves novels, Wodehouse's most popular books are his eleven novels about Lord Emsworth and his prize sow, the Empress, which are set in and named for this country estate.
ANSWER: **Blandings** Castle

15. This nymph's spring was sacred to Artemis. For 10 points each:
[10] Name this nymph, who was turned into a spring after being chased by Alpheus.
ANSWER: **Arethusa**
[10] Arethusa's spring was located on Ortygia, sometimes said to be the site where this goddess gave birth to her first child while being chased by Python.
ANSWER: **Leto**
[10] In Ovid's *Metamorphoses*, Arethusa briefly interrupts this Roman god's kidnapping of Proserpine.
ANSWER: **Pluto**

16. Answer some questions about Surrealist painting, for 10 points each.
[10] This Salvador Dali painting shows a figure gazing into a pool, next to a similar-shaped stone figure of a hand clutching an egg with a flower growing out of it.
ANSWER: *__Metamorphosis of Narcissus__*
[10] This Belgian Surrealist painted a street-lamp in a darkened lane in *The Empire of Light*. A green apple obscures the face of a figure in a bowler hat in his *The Son of Man*.
ANSWER: René (François Ghislain) __Magritte__
[10] This French Surrealist and buddy of Jacques Prévert depicted misshapen decorations in a bleak gray landscape in *The Furniture of Time*. His *The Rapidity of Sleep* depicts assorted red and white objects in a similar landscape.
ANSWER: (Raymond Georges) Yves __Tanguy__

17. This result occurs in telescopes mostly because it is far easier and cheaper to make objects that experience it. For 10 points each:
[10] Identify this phenomenon, the positive type of which occurs when light striking near the edge of the lens is bent too much, intersecting the optical axis before reaching the focal length.
ANSWER: __spherical aberration__ [prompt on "aberration"]
[10] Telescopes with parabolic mirrors tend to suffer from this aberration, in which viewed objects not located on the optical axis often appear to have a tail.
ANSWER: __coma__tic aberration
[10] This effect occurs because lenses are dispersive, causing different frequencies of light to be focused at slightly different lengths.
ANSWER: __chromatic__ aberration

18. Along with Wilhelm Liebknecht, this man founded the Saxon People's Party, and he wrote *Women and Socialism*, an argument against marriage. For 10 points each:
[10] Name this leading light of the German Social Democrats, who was accused of treason for opposing the Franco-Prussian War.
ANSWER: (Ferdinand) August __Bebel__
[10] Bebel was a proponent of this initial platform for the SPD, which called for the abolition of exploitative capitalism and wage labor through the universal franchise and democratization. It notably did not mention a Proletarian revolution.
ANSWER: __Gotha__ Program
[10] Between 1878 and 1890, the SPD's activities were restricted by Anti-Socialist Laws, proposed by this man after he took advantage of two assassination attempts against the Kaiser to silence his political enemies. Those laws lapsed immediately after this man was forced from office.
ANSWER: Otto von __Bismarck__

19. The formal definition of this concept in frequentist statistics is that the expectation of an estimator is not equal to the population moment. For 10 points each:
[10] What is this statistical concept, which may arise when a sample is not drawn randomly from the population?
ANSWER: __bias__ [accept word forms and more specific answers: "sampling __bias__," for example]
[10] This type of bias arises because the data are generated by agents who make decisions. For instance, the observed wage distribution does not include the "latent" wages of those outside the labor force, so the data is not a random sample.
ANSWER: __selection__ bias
[10] Selection bias is a major issue in estimates of this data object, the parameter of interest in most applications of the "Mincer equation." This data object can potentially be compared to the market interest rate to test for over- or- under-investment in human capital.
ANSWER: "rate of __return__ to __school__ing" or "rate of __return__ to __education__"

20. Name some novels about characters who cope with terminal illness, for 10 points each.

[10] 'Half-Lung Club' member Hermine Kleefeld can whistle with her pneumothorax in this Thomas Mann novel, which describes Hans Castorp's seven-year stay at a Swiss sanatorium after being diagnosed with tuberculosis.

ANSWER: The ***Magic Mountain*** [or *Der **Zauberberg***]

[10] This Coetzee novel consists of letters sent by the cancer-stricken Mrs. Curren to her daughter during apartheid. In this novel, Mrs. Curren befriends the homeless alcoholic Vercueil and sees the corpse of her servant's son Bheki.

ANSWER: ***Age of Iron***

[10] The Feuerbach-quoting Reverend John Ames shares memories of his pacifist father and abolitionist grandfather in letters to his son as he dies of angina pectoris in this novel by Marilynne Robinson.

ANSWER: ***Gilead***