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packet by  
NYU + JOHNS HOPKINS B

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## Tossups

1. One of this religion's places of worship contains a venerated wall where this faith's two youngest martyrs, a nine-year-old and six-year-old boy, were bricked up. The most sacred places of worship in this religion are known collectively as the "five thrones" or five "seats of temporal authority." This religion's places of worship, which often incorporate an outdoor element called a *sarovar*, traditionally offer all visitors to their main halls a type of sweets made from semolina, butter, and sugar. This religion's places of worship provide space for the group social practice known as *Pangat*, which is a subset of this religion's practice of fellowship called *Sangat*. Places of worship in this religion include a main hall called a *darbar* and a *langar*, which is a communal kitchen serving vegetarian food. For 10 points, name this Indian religion whose practitioners worship at *gurdwaras* such as Harmandir Sahib, also known as the Golden Temple.

ANSWER: **Sikhism** [or **Sikhi**; accept answers mentioning forms of the word **Sikh**]

2. The Flanders Quartet consists of players of this instrument, and it is the primary instrument Paul Leenhouts. Georg Philipp Telemann wrote a B-flat major double concerto for two of these instruments, strings, and continuo. Luciano Berio is credited with revolutionizing the 20th-century repertoire for this instrument with the piece *Gesti*, which was written for Frans Brüggen. Rampe and Zampf argued that an unusually named instrument in one of J. S. Bach's scores actually consists of two of these instruments joined together. The French flageolet (flah-zhoh-lay) differs from this instrument in its use of two thumbholes. The "fiauti d'echo" parts in the fourth Brandenburg Concerto were most likely intended to be played on this instrument. For 10 points, name this woodwind instrument ubiquitous in primary education, which, unlike the transverse flute, uses a whistle mouthpiece and is held straight in front of the player.

ANSWER: **recorder** [or **block flute(s)**; prompt on "**fipple flute(s)**" or "**duct flute(s)**" or "**pennywhistles**"; prompt on "**fiauti d'echo**" or "**echo flutes**" or "**flauti d'echo**" or "**tin whistles**" before "fiauti"; prompt on "**flute**" before "flute"; do not accept or prompt on "transverse flute(s)"]

3. A 1978 paper explained a sub-feature found in one of these by taking into account a type of wave theorized in another context that was damped by nonlinear and viscous effects. That Peter Goldreich and Scott Tremaine paper analyzed these objects, which are much smaller than galaxies, using the density wave theory of C. C. Lin and Frank Shu. A wavelike deformation within a structure of this type is informally named "Earhart" and is part of the larger class of disturbances in these structures called "propellers" after their shape. Regions of high density in these structures surrounded by regions of lower density comprise a type of microstructure known as a "self-gravity wake." Another of these structures is believed to draw its material from Metis, which lies within the Roche limit of its primary. Two of these structures designated 'A' and 'B' are separated by a gap that has been cleared of material by Mimas, called the Cassini division. For 10 points, name these regions of debris that orbit the gas giant planets.

ANSWER: planetary **rings** [accept more specific answers such as **rings of Saturn** or **rings of Jupiter**] [The Goldreich and Tremaine paper explains the Cassini division using density-wave theory.]

4. After assuming one office, this man gave his "Proclamation against Vice and Immorality," urging his state to replenish its militia reserves. He was the sole dissent in a vote electing himself governor, a position he retained until John Cook called for a reelection. This man used the anthem of the British Royal Navy, "Heart of Oak," as music for a song he composed with the line "by uniting we stand, by dividing we fall." As council president of his state, he refused to take military action against the Veterans Mutiny of 1783, leading Congress to relocate itself to Princeton. This composer of the "Liberty Song" had his home at Poplar Hall and wrote two series of letters under the name "Fabius" to defend the Constitutional Convention. This man wrote down objections to the Townshend Acts in his *Letters from a Pennsylvania Farmer*. For 10 points, name this Founding Father, known as the "Penman of the Revolution," who wrote the Olive Branch Petition.

ANSWER: John **Dickinson**

5. In Rabih Alameddine's *An Unnecessary Woman*, Fadia's yells of "take her back!" remind Aaliya of this poem as she refuses her half-brothers' requests to look after her mother. In *The Loved One*, Evelyn Waugh compares Dennis Barlow to a monk in prayer as he repeats a line from this poem set "here at the quiet limit of the world." This poem's speaker tells his lover that her "eyes brighten slowly close to mine, / ere yet they blind the stars," before noting that her horses "beat the twilight into flakes of fire." Its speaker says "and all I was, in ashes" and later laments that "the Gods themselves cannot recall their gifts." The first stanza of this poem says that "Man comes and tills the field and lies beneath. This poem, which begun as a pendant to "Ulysses," opens with the line "the woods decay, the woods decay and fall." The line "after many a summer dies the swan" appears in, for 10 points, what poem by Lord Tennyson about a lover of Eos who was given immortality but not eternal youth?

ANSWER: "**Tithonus**"

6. An essay by Maurice Bloch contrasts two types of this concept, a socially constructed type used for rituals and a universal type used for everyday life. A 1978 book argues that anthropological fieldwork has been plagued by the “schizogenic” use of this concept because of the “denial of coevalness,” which causes researchers to distinguish one type of this concept for themselves and another for the subjects they study. Clifford Geertz cited ceremonies with an “absence of climax” and a “depersonalizing” conception of personhood to argue that this concept is “immobilized” in Bali. Johannes Fabian described “how anthropology makes its object” in a book about this concept “and the other.” Benjamin Whorf argued that the Hopi language uses different grammar for this concept than European languages, causing the Hopi to perceive it differently. For 10 points, name this concept whose relation to linguistics, according to Saussure, can be considered from a “diachronous” or “synchronous” perspective.

ANSWER: time [accept equivalents such as temporality; accept Time and the Other]

7. Jorie Graham’s poem “Fission” juxtaposes news of the JFK assassination with a scene from one of this director’s films, noting that the way a character “lay down on that lawn” was “not at the speed of desire.” The title sequence of that film by this director is a close-up of a man’s hands polishing a girl’s toenails, and was shot by Gilbert Taylor after this man fell out with Oswald Morris. In another of his films, the camera shows people at tea in an 18th-century garden before tracking the protagonist’s gaze by zooming to a lady walking her wheelchair-bound husband in the far background. Inspired by Hogarth paintings, this man used super-fast Zeiss lenses to shoot a candlelit scene in which Redmond meets a countess at a card table. 14-year-old Sue Lyon posed in a bikini on the grass for one of his films, whose posters show Lyon with heart-shaped sunglasses and the question “how did they ever make a movie of” a Vladimir Nabokov novel it adapts. For 10 points, what director of *Lolita* and *Barry Lyndon* also made *The Shining*?

ANSWER: Stanley Kubrick

8. A documentary history of this group consists of two volumes entitled *Projectiles for the People* and *Dancing with Imperialism*, and includes a pamphlet released by this group called the “May Paper,” which puts forth their “front concept.” After a leader of this group broke out of prison by scheduling an interview for a fake book signing, a special courtroom was built inside the prison to put their members on trial. Operation Fire Magic successfully freed 86 hostages in Mogadishu that were used as bargaining chips in exchange for the release of members of this group. With the aid of the PFLP, this group hijacked Lufthansa flight 181, and after the failure of that operation, some of its members executed industrialist Hanns Martin Schleyer. This group’s members Gudrun Ensslin and Jan-Carl Raspe died under suspicious circumstances in Stammheim prison during the 1977 “German Autumn.” For 10 points, what German left-wing terrorist group is sometimes known as the “gang” of its two founders?

ANSWER: Red Army Faction [or RAF; or Rote Armee Fraktion; or Baader-Meinhof Gang or other answers mentioning the names Baader and Meinhof]

9. Due to their flexibility, these compounds can experience the “gate-opening effect” that is likened to breathing. Supercritical CO<sub>2</sub> is commonly used to activate these compounds, which can undergo a collapse upon removal of a solvent. HKUST-1 (“H-K-U-S-T-one”) is an example of one of these compounds formed from MBBs called “paddlewheels.” Omar Yaghi and Susumu Kitagawa are pioneers in the production of these compounds. Functionalization of these compounds is typically done through postsynthetic modifications. These compounds are the basis of reticular chemistry, and their names typically consist of an acronym referring to where they were synthesized followed by a number. ZIFs are a class of these molecules containing imidazolate linkers, while terephthalic (teh-ref-THAL-ik) acid and other bridging ligands are commonly used in their synthesis. These molecules are almost always produced using hydrothermal or solvothermal methods, and are designed to be similar to zeolites. For 10 points, name these porous coordination polymers.

ANSWER: metal-organic frameworks [accept MOFs; accept zeolitic imidazolate frameworks or ZIFs before “ZIFs”]

10. The protagonist of this novel repeatedly recalls the headline “Lost in the Fiery Hell of a Canyon a Woman Struggles Desperately for Life.” The last sentence of each chapter of this novel, such as “give me your hand” and “hell is my maximum” is repeated as the first sentence of the following chapter. While in a place she calls a “minaret,” the narrator of this novel realizes that she was hated by a woman who drew two mummy-like nudes and a dog in charcoal on the wall. In this novel, the main character vomits bread and milk that she’d consumed before forcing herself to eat an object that sporadically exudes white paste throughout the narrative. The protagonist of this novel, who is only identified by the tag on her luggage, enters the room of her penthouse where her recently departed maid had lived and undergoes a mystical experience after crushing a cockroach there. For 10 points, name this biblically titled novel by Clarice Lispector.

ANSWER: *The Passion According to G. H.* [or *A paixão segundo G. H.*]

11. Kjersti Aagaard's use of WGS and 16S rDNA studies found that the microbiome of this organ was most similar to that of the oral cavity. A protein involved in the formation of this structure is a membrane-fusion protein coded by an endogenous retroviral element based on env proteins. High expression of heme oxygenase-1 in this organ assists in the activation of Tregs (*tee-regs*) that assist in providing this structure immune privilege. EVT cells in this structure enter another organ and are assisted by dNK cells in remodelling that other organ's spiral arteries. Syncytin is required for the development of this structure that contains macrophages called Hofbauer cells. Immunoglobulin G can pass through this structure that develops from the trophoblast. In marsupials, a choriovitelline form of this organ forms, while the non-extinct members of *eutheria* are named for their use of this organ. For 10 points, name this organ that connects the umbilical cord to the uterus.

ANSWER: placenta [accept placental (mammals)]

12. The selection of a shade of this color was based on a 1935 "Report on Color and Lighting" that suggested emphasizing a structure "as an important feature of the landscape." That report was written by Irving Morrow, who settled on using an "unusual" shade of this color that was similar to the primer on metal shipped from Bethlehem Steel. A craft nicknamed the "Glamorous Glennis" was painted this color on a mission that involved being launched from the bomb bay of a B-29. Safety regulations require the use of white alternating with this color in certain tower structures, such as the Yerevan TV Tower and the Tokyo Tower. This is the color of the model of Chuck Yeager's supersonic Bell X-1 found at the Air and Space Museum. A more reddish shade of the "international" form of this color was used for the paint that links Route 101 to Marin County from San Francisco. For 10 points, name this "international" color of the paint of the Golden Gate Bridge and NASA's launch and entry space suits.

ANSWER: orange [accept international orange; do not accept or prompt on "red"]

13. A man with this name was called Labicus in Italy for introducing the military girdle there, and lost his powers of divination after spitting into his teacher's mouth. A son of Sisyphus with this name refused to let his mares breed, so Aphrodite drove them mad when they drank from her sacred well. Like Diomedes, that man of this name was eaten by his horses at the funeral games of Pelias and became Taraxippus, a ghost who haunted horses. After using a mulberry simile to describe a calf that changed from white to red to black, Polyidus found a boy with this name by tracking a mouse to a vat of honey in which that son of Minos had drowned. A grandson of Bellerophon with this name dueled Diomedes at Troy, but departed in peace because their grandfathers had been friends. A fisherman became a god of this name after eating a magical herb. Circe turned Scylla into a monster out of love for a sea-god of, for 10 points, what name, shared by a co-ruler with Sarpedon of Lycia during the Trojan War?

ANSWER: Glaucus [or Glaukos]

14. A king by this name came to power by publicly executing the previous ruler nicknamed "son of the water carrier," or Bacha-e Saqaw (*bah-chah-ee SAH-kow*), but after four years of rule he was shot and killed at a high school graduation ceremony by the rebel Abdul Khaliq in 1933. A much earlier ruler of this name required his subjects to wear a hat with four peaks named for him, and won an early victory as army chief at the Battle of Damghan, and then built a city named for himself after destroying the Hotaki Dynasty. That ruler of this name developed a Sunni school known as Ja'farism and fought a two-year war against the Lezgins in Dagestan after they killed and desecrated the corpse of his brother Ebrahim. That ruler of this name, who gouged out the eyes of his eldest son Reza Qoli Mirza, won the Battle of Karnal, after which he plundered the Red Fort. For 10 points, give the name of this Shah who ruled Iran after the Safavid Dynasty and captured the Mughal Dynasty's Peacock Throne.

ANSWER: Nadir [or Nader; accept Nadir Shah or Nader Shah or Nader Shah Afshar or Nader Qoli Beyg or Muhammad Nadir Shah or Muhammad Nadir Khan; prompt on "Muhammad" or "Khan" before "Damghan"]

15. An essay titled for this activity calls for a "Society for the Diffusion of Useful Ignorance" to spread "Beautiful Knowledge." In the last chapter of a book about this activity, the author looks back at a smog-shrouded Las Vegas from a campground in Red Rocks. Wordsworth's acquaintance John Stewart and the Peace Pilgrim are among the anecdotes about this activity discussed in a 2000 history of it. An essay about this activity proclaims "eastward I go only by force; but westward I go free" in a passage identifying the West with "the Wild"; *The Atlantic* published that popular essay titled for this activity shortly after the death of its author, Henry David Thoreau. The recovering alcoholic Stephen Katz appears a Bill Bryson book about engaging in this activity "in the woods," and women engaging in it in cities is the subject of Lauren Elkin's book *Flaneuse*. For 10 points, Rebecca Solnit's *Wanderlust* profiles what mode of travel described in many John Muir books?

ANSWER: walking [or hiking; accept any synonyms of traveling on foot such as strolling or tramping; prompt on "traveling" or "wandering" or similar terms; accept more specific answers such as hiking the Appalachian trail]

16. This philosopher suggested that economic thought posits perfectly rational “cognitive angels” as an example of one of the “useful untruths,” or “idealizations” that he discusses in a book drawing on Frank Ramsey and Hans Vaihinger. This philosopher discussed how his father published an article asking whether his country was “worth dying for in an essay responding to Martha Nussbaum’s critical views on patriotism. This author of *As If* criticized W. E. B. Du Bois for merely rotating the axis of racial hierarchy in his essay on the “Uncompleted Argument.” This racial eliminativist discussed the “conceptual mistakes” of “creed, color, country, [and] culture” in his Reith lectures. This philosopher writes “The Ethicist” column for the *New York Times*, has written *In My Father’s House*, and has proposed an “Ethics in a World of Strangers” in another book. For 10 points, name this author of *Cosmopolitanism*, a British-born Ghanaian-American philosopher.

ANSWER: Kwame Anthony Appiah [or Kwame Akroma-Ampim Kusi Anthony Appiah]

17. Robert Baldwin argued that the nearest figure in a painting whose title mentions this person represented hope, citing First Corinthians 9-10. Hieronymus Bosch’s *The Hay Wain* inspired Frans Hogenbeck’s engraving *All Hay*, in which this person illustrates a maxim about someone who “shall deceive himself.” This person is shown upside-down near a corner of an engraving from the 1560s that depicts an “armed three-master” in the foreground. In making an artistic cropping of a painting showing this person in the bottom right, Andre Breton cited the bombing of Dusseldorf and cut away images such as a bag of seeds resting against a rock and a horse with a blinker over its left eye. Ovid’s *Metamorphoses* is the source of the images of a partridge, shepherd, and fisherman in a painting whose title mentions this person. Ships sail toward the setting sun as a plowman leads a horse in a painting titled after, for 10 points, what mythological figure’s “fall,” a work attributed to Pieter Bruegel the Elder?

ANSWER: Icarus [accept Landscape with the Fall of Icarus]

18. Zenithal bistable devices rely on patterning these materials. The free-energy density in these materials can be approximated by expanding to second order in the curvature strains and collecting the terms into “bend,” “splay,” and “twist” terms, which yields the Oseen-Frank expression for that free energy. A parameter that characterizes these materials is typically computed as the average of the second Legendre polynomial of cosine theta, where theta is the angle between the director and the molecular axis. The Landau-de Gennes approach describes these materials phenomenologically. Depending on whether their order varies with temperature alone or temperature and concentration, these materials can be classified as thermotropic or lyotropic. For 10 points, name these materials whose constituent molecules exhibit local alignment but lack the long-range three-dimensional order of a true solid.

ANSWER: liquid crystals [or LCs; accept nematic liquid crystals; prompt on “nematic” or “nematic phase”]

19. In this modern-day country, a group of poor farmers were murdered by the militia after they tried to board a train without tickets during the Kileler Uprising. A major fire in this country led the government to commission French archaeologist Ernest Hébrard to rebuild a city. During a famine in this country, food relief was provided by the SS *Kurtulus*, known as the “Steamship that Carried Peace,” which sunk on its fifth voyage. A soldier from this country reportedly chased his stray dog north across the border of another country, instigating the “Incident at Petrich” in 1925. This country, which was invaded during Operation Marita, was home to a daring style of dress popularized by its queen Amalia of Oldenburg after she married its first modern king Otto I. the Fourth of August Regime was declared by Ioannis Metaxas in, for 10 points, what country, where a 1917 “great fire” erupted in the city of Thessalonica?

ANSWER: Greece [or Hellenic Republic; or Hellas]

20. A critic claimed that this novel shocked its readers as Édouard Manet did “the bewhiskered philistines of his day” with its lengthy description of an overgrown garden shaded by aspen trees. A metaphor in this novel’s first chapter compares the tailcoats of men at a ball to flies fluttering around a block of sugar cut by an old housekeeper. During Dimitri’s trial in *The Brothers Karamazov*, the lawyer Kirillovich questions the optimism of a passage from this novel in which the narrator asks “who invented thee!” of a “bird-like” object. In a study of this novel’s author that examines those passages, Vladimir Nabokov argued that this novel’s characters exude a type of vulgarity called “poshlust.” In the last paragraph of this novel, the narrator imagines how “nations and states gaze askance as they step aside and give her the right away” in an extended metaphor comparing Russia to a three-horse sleigh, or *troika*. For 10 points, name this novel about the conman Chichikov by Nikolai Gogol.

ANSWER: Dead Souls [or Mjortvyje dúshi]

**Bonuses**

1. Thomas Pynchon's "Entropy" and Woody Allen's "Retribution" were first published in a magazine operated by this institution that David Lynn has edited since replacing Marilyn Hacker in 1994. For 10 points each:

[10] Name this Ohio liberal arts college whose namesake review, founded in 1939 by John Crowe Ransom, is a prestigious literary outlet. David Foster Wallace gave his commencement speech "This Is Water" at this college.

ANSWER: **Kenyon** College [accept **Kenyon Review**]

[10] Ransom's formalism influenced this sonnet by his student at Kenyon, James Wright. Its speaker delays hanging himself to save a man from a "pack of hoodlums," but upon failing says, "I held the man for nothing in my arms."

ANSWER: "**Saint Judas**"

[10] In this poet's "Kenyon Review, After the Sandstorm," he noted the "brilliant way these / professors used the language to criticize each / other." This author of the novel *Ham on Rye* often wrote about alcohol and Los Angeles.

ANSWER: Charles **Bukowski** [or Heinrich Karl **Bukowski**]

2. In the presence of more than four conjugated double bonds, a set of rules named for Kuhn are used instead of these rules. For 10 points each:

[10] Name this empirically derived set of rules for predicting the wavelength absorbed by a conjugated compound.

ANSWER: **Woodward's** rules [accept **Woodward-Feiser** rules; do NOT accept **Woodward Hoffman** rules]

[10] The energy of pi orbitals in conjugated molecules may be estimating using this method that expresses energy levels in terms of parameters alpha and beta. This method is named for the namesake of the "4N + 2" rule.

ANSWER: **Hückel** method [accept **Hückel's** rule]

[10] When using the Hückel method, aromaticity may be determined by calculating this quantity that, when positive, indicates aromaticity and, when negative, indicates antiaromaticity. This quantity equals difference in energy between pi electrons in the cyclic molecule and its linear counterpart.

ANSWER: **Dewar resonance energy** [accept **DRE** or **Dewar energy**; prompt on "resonance energy"]

3. This military action is commemorated every September 11th during La Diada, or National Day, and soldiers killed during it were buried at the Grave of the Mulberries, or Fossar de les Moreres (fu-SAH de lez mo-RAY-res). For 10 points each:

[10] Name this 1713-1714 military action during which the Duke of Berwick defeated forces under Rafael Casanova and a regiment known as La Coronela.

ANSWER: 1714 **siege** of **Barcelona** [accept **fall of Barcelona** or **sack of Barcelona** or any answer indicating **capture of Barcelona** by the Spanish crown; prompt on "**Battle of Barcelona**" or "**Barcelona**"]

[10] The siege of Barcelona began after the signing of the Treaty of Utrecht in 1713, which had attempted to end this war, although Catalonia continued to support Archduke Charles of Austria against Philip V ("the fifth").

ANSWER: War of the **Spanish Succession**

[10] After the war, Philip V issued this set of laws that removed the autonomy of regions that were formerly part of the Aragonese crown, including abolishing the traditional charters of Valencia and Catalonia, in an attempt to create a centralized Spanish state.

ANSWER: **Nueva Planta** decrees [or decretos de **Nueva Planta**]

4. A major role of this god was to serve as the scribe for Ma'at, his consort, while she judged the dead in the Hall of Two Truths. For 10 points each:

[10] Name this ibis-headed Egyptian deity of wisdom, who was regarded as the messenger of the gods.

ANSWER: **Thoth** [or **Djehuty**]

[10] Because Hellenistic Greeks saw Thoth as an equivalent of Hermes, they syncretized the two into this distinct figure, whose name means "thrice-great." He is said to have written the sacred texts that are the basis of Hermeticism.

ANSWER: Hermes **Trismegistus**

[10] Ra commanded Thoth and Shu to retrieve this deity, who is not named in some sources, from the Nubian desert. To do so, the pair of gods disguised themselves as baboons and ask this deity to come home 1,077 times. A description or name is acceptable.

ANSWER: **Ra's daughter** [or **Re's daughter**; or **Eye of Ra**; or **Eye of Re**; or the **Distant Goddess**; accept **Tefnut**]

5. Answer the following about Felix Mendelssohn, for 10 points each.

[10] Mendelssohn's last large orchestral work was a concerto for this instrument, played by Jascha Heifetz, Sarah Chang, and Joshua Bell.

ANSWER: **violin** [accept **violin** concerto or Mendelssohn's *Violin Concerto in E minor*, Op. 64]

[10] Mendelssohn's violin concerto was described as the "heart's jewel" of German violin concertos by this Austro-Hungarian collaborator of Johannes Brahms. This namesake of Europe's finest 19th-century string quartet made a triumphant debut with the London Philharmonic at age 12 on Beethoven's own violin concerto.

ANSWER: Joseph **Joachim** [accept **Joachim** String Quartet]

[10] This Hungarian-born student of Joachim edited one version of the Mendelssohn concerto for violin and piano, but had a larger impact at the St. Petersburg conservatory, where he taught Heifetz and Nathan Milstein. He also spurned the dedication of Peter Tchaikovsky's violin concerto.

ANSWER: Leopold **Auer** [or Leopold von **Auer**; or **Auer** Lipót; or Lipót **Auer**]

6. This book was accompanied by 62 Ektachrome photographs that its authors claimed were the first ever made under the conditions that this book describes. For 10 points each:

[10] Name this 1953 book edited by James Dugan and co-written by Frédéric Dumas, which was made into the first documentary to win a Palme d'Or at Cannes.

ANSWER: *The **Silent World*** [or *The **Silent World: A Story of Undersea Discovery and Adventure***; or *Le **Monde du Silence***]

[10] *The Silent World* was co-written by this French marine researcher and captain of the *Calypso*.

ANSWER: Jacques **Cousteau** [or Jacques-Yves **Cousteau**]

[10] This author's *The Age of Missing Information* argues that Cousteau's popularizing of the world's oceans did not move anyone to take measures to save them. This Middlebury College professor wrote *The End of Nature*, a pioneering 1989 book about climate change.

ANSWER: Bill **McKibben** [or William Ernest **McKibben**]

7. Starting with St. Augustine, Christian writers often criticized the immorality of a scene by this author in which Chaerea describes his rape of Pamphilia. For 10 points each:

[10] Name this Roman playwright of Berber descent who wrote *The Eunuch* and *The Mother-in-Law*. Like his predecessor Plautus, he adapted many of his plots from Greek comedy.

ANSWER: **Terence** [or Publius **Terentius** Afer]

[10] This nun, the best-known writer of the 10th-century Ottonian Renaissance, christianized Terence's style in her six closet dramas based on his work, including *Dulcitius* and *Paphnutius*.

ANSWER: **Hrotsvitha** of Gandersheim [or **Hrosvite**; or **Hroswitha**; or **Roswit**; or **Roswitha**]

[10] A later German author, Christoph Wieland, called this Terence play's line "I am a man, I consider nothing that is human alien to me" to be "the best verse that humanity has ever inspired in a poet." This play opens with Menedemus punishing himself by digging in his fields.

ANSWER: *The **Self-Tormentor*** [or ***Heauton Timorumenos***]

8. For 10 points each, answer the following about Stephen Smale, the patron saint of bright students with poor GPAs.

[10] For resolving the generalized Poincaré conjecture in dimensions greater than 4, Smale won this medal for young mathematicians, considered along with the Abel Prize to be the highest award in mathematics.

ANSWER: **Fields** Medal

[10] The Poincaré conjecture asks whether manifolds that bear this relationship to 3-spheres are also homeomorphic to it. This relationship between spaces is analogous to a property often illustrated by a map from X cross [0,1] ("zero comma one") to Y.

ANSWER: **homotopy** equivalence [accept **homotopic** equivalence]

[10] Like Smale, who recently published in the *American Economics Review*, the mathematician John Nash also dabbled in economics. Nash's 1950 *PNAS* paper, "Equilibrium Points in N-Person Games," used this theorem, a generalization of the Brouwer fixed-point theorem, to show the existence of his namesake equilibrium.

ANSWER: **Kakutani fixed-point** theorem [prompt on "**Kakutani** theorem" or "**fixed-point** theorem"]

9. This dictator, who bathed in dolphin blood to stay young, betrayed his ancestry by persecuting ethnic Chinese with the Enterprise Nationalization Law of 1963. For 10 points each:

[10] Name this autocratic Prime Minister who ruled for 26 years after using the Union Revolutionary Council to seize power in 1962, after which he released an ideological tract titled as his country's "way to socialism."

ANSWER: **Ne Win** [or U **Ne Win**; accept Thakin **Shu Maung**; prompt on "Ne" or "Win" or "Shu" or "Maung"]

[10] Ne Win was prime minister of this country, which later witnessed the 8888 Uprising, and produced the politicians U Thant and Aung San Suu Kyi (owng san soo chee).

ANSWER: **Burma** [or **Myanmar**]

[10] During the 8888 Uprising, students marching on Prome Road were drowned in this artificial lake, on whose shores Aung San Suu Kyi was later confined to house arrest. This lake, formerly called Lake Victoria, was built by the British in 1882 as a reservoir to supply Yangon.

ANSWER: **Inya** Lake

10. Edwin G. Burroughs and Mike Wallace wrote that this document appealed to the "republic predilection for control and balance" and "distrust of sinuous nature" present in John McComb's neoclassical buildings. For 10 points each:

[10] Name this 1811 document that imposed a grid system above Houston ("HOW"-stun) street in Manhattan.

ANSWER: **Commissioner's Plan** of 1811 [do not accept or prompt on descriptive answers such as "New York City street plan"]

[10] The man credited with inventing street grids, Hippodamus of Miletus, was hired by Pericles to lay out a grid for the rebuilding of this city that continues to serve as the main port of Athens.

ANSWER: **Piraeus** [or **Piraeus**; or **Peiraieus**]

[10] Baron Haussmann used an unconventional street layout of wide boulevards emanating like spokes from various plazas in his redesign of this European capital.

ANSWER: **Paris**

11. This character proclaims "I'm happy, you're happy, we're all happy, even the meanest Irishman that walks along Broadway" in a drunken speech. For 10 points each:

[10] Name this character, a newt-collecting member of the Drones Club. In one novel, this character drunkenly presents prizes at the Market Snodsbury Grammar School after the main characters gives him gin-laced orange juice to help him propose to Madeline Bassett.

ANSWER: **Gussie Fink-Nottle** [or **Augustus** Fink-Nottle; accept any underlined portion]

[10] Gussie appears in novels such as *Right Ho, Jeeves!* and the *Code of the Woosters* by this comic British author.

ANSWER: P. G. **Wodehouse** [or Pelham Grenville **Wodehouse**]

[10] Among depictions of drunken public speaking in comic British literature, Gussie's speech is only rivaled in fame by the scene from Kingsley Amis's *Lucky Jim* in which Jim mocks Mr. Dixon while delivering a lecture on this nostalgic subject. An exact two-word phrase is required.

ANSWER: "**Merrie England**"

12. In "Ten Theses on Politics," Jacques Rancière championed "dissensus" over consensus because the latter reduces politics to this institution. For 10 points each:

[10] Name this institution. A 1970 essay subtitled "Notes towards an Investigation" gives the example of a member of this institution "hailing" someone to illustrate how "interpellation" turns an individual into a subject.

ANSWER: the **police** [or **law enforcement**; accept answers mentioning the idea of a **police** force or **law enforcement** institution; prompt on "state" or "ideological state apparatus"]

[10] The example of the police officer appears in the essay "Ideology and Ideological State Apparatuses" by this French Marxist, who broke with his student Rancière over the 1968 student uprisings.

ANSWER: Louis **Althusser** [or Louis Pierre **Althusser**]

[10] Rancière contributed to Althusser's book on "reading" this unfinished Karl Marx book that presents a "critique of political economy."

ANSWER: **Capital: Critique of Political Economy** [or *Das **Kapital: Kritik der politischen Ökonomie***]



13. The time component of this quantity is given by the Lorentz factor times the speed of light. For 10 points each:

[10] Name this vector quantity from special relativity that equals the “tangent vector to a worldline” for massive particles.

ANSWER: **four-velocity** [prompt on “velocity”]

[10] In special relativity, the velocity is equal to the speed of light times this function of the rapidity.

ANSWER: **tanh** (“tanch”) [or **hyperbolic tangent**; do not prompt on “tan” or “tangent”]

[10] Special relativity grew out of the Michelson-Morley experiment, which obtained a null result for deflection of light by this medium through which light supposedly propagated.

ANSWER: luminiferous **aether** [or luminiferous **ether**]

14. In 1637, this man was arrested for circulating books not licensed by the Stationers Company, including William Prynne’s *News from Ipswich*, but he refused to answer the questions of the Star Chamber. For 10 points each:

[10] Name this man who coined the term “freedom rights” in his pamphlet *The Free Man’s Freedom Vindicated*. The campaign to free him from the Tower of London is cited as the founding moment of the Levellers.

ANSWER: John **Lilburne**

[10] Lilburne left the military in 1645 after being told that he had to take the Solemn League and Covenant to fight for this Parliamentary force commanded by Oliver Cromwell at battles such as Naseby.

ANSWER: **New Model Army** [prompt on “New Model”]

[10] John Lilburne was greatly influenced by this historian, whose 1563 work *Actes and Monuments* became known as his namesake “book of martyrs,” and detailed sufferings of Protestants through the time of Queen Mary.

ANSWER: John **Foxe** [accept **Foxe’s Book of Martyrs**]

15. Answer the following about the use of rock, soul, and funk instrumentation in jazz, which led to the creation of jazz fusion, for 10 points each.

[10] This keyboardist helped pioneer jazz fusion as a member of Miles Davis’s second quintet. As a bandleader, he released the seminal jazz-funk album *Head Hunters*.

ANSWER: Herbie **Hancock** [or Herbert Jeffrey **Hancock**]

[10] Hancock started using this company’s iconic Rhodes electric piano while playing in Davis’s quartet. This company’s electric guitars include the Jazz Bass and the Stratocaster.

ANSWER: **Fender** [or **Fender** (Electric) Musical Instruments Corporation]

[10] Hancock made heavy use of the Rhodes and other new electronic instruments while recording a trio of experimental albums, including *Crossings* and *Sextant*, under this Swahili pseudonym.

ANSWER: **Mwandishi**

16. These interactions hold together the hairpin of a PPRH and allow the formation of triple and quadruple helices. For 10 points each:

[10] Name this alternative to Watson-Crick pairing, in which one of the AT or GC pair is rotating 180 degrees.

ANSWER: **Hoogsteen** base pairing [accept reversed **Hoogsteen** base pairing]

[10] This quadruplex structure forms as an intermediate in genetic recombination and double-strand break repair. Symmetric sequences in these “junctions” allow individual arms to slide along the sequences.

ANSWER: **Holliday** junctions

[10] The hydrogen bonding in Hoogsteen pairing occurs along this feature of the DNA helix, which, in B-DNA, has a width of 22 angstroms. Both DAPI and Hoechst stains bind to the smaller counterpart of this feature.

ANSWER: **major groove(s)** [prompt on “groove(s)”]

17. Two researchers at this university conducted the *Nationwide* project, which interviewed representatives of different social groups to see if they produced “dominant,” “negotiated,” or “oppositional” readings of the news. For 10 points each:

[10] Name this English university whose Centre for Contemporary Cultural Studies was founded by Richard Hoggart and later directed by Stuart Hall.

ANSWER: University of **Birmingham** [or the **Birmingham** School]

[10] In an essay on “New Labour’s Double-Shuffle,” Hall criticized the “third way” neoliberal ideology of this Labour Party prime minister and his successor, Gordon Brown.

ANSWER: Tony **Blair** [or Anthony Charles Lynton **Blair**]

[10] After graduating from Birmingham’s Centre for Contemporary Cultural Studies, this theorist analyzed the forms of resistance enacted by teddy boys, punks, and reggae fans in his book *Subculture: The Meaning of Style*.

ANSWER: Dick **Hebdige** [or Richard **Hebdige**]

18. An alexandrine sonnet titled for “the nocturne of” this person is a double acrostic spelling the phrase “the maiden in her dark, pale meadow,” as well as a perfect anagram of a sonnet by John Keats. For 10 points each:

[10] Name this title figure of a poem that begins “any style of life / is prim.” *The Xenotext* was written to accompany that poem titled for this person, which Christian Bök encoded into bacterial DNA to generate a response poem in the resulting poem.

ANSWER: **Orpheus** [accept “The **Nocturne of Orpheus**” or “**Orpheus**”]

[10] Just like the *E. coli* in the Xenotext project, this Imagist wrote a poem called “Eurydice” which states that “hell must open like a red rose / for the dead to pass.” This woman wrote the collections *Sea Garden* and *Helen in Egypt*.

ANSWER: **H. D.** [or Hilda **Doolittle**]

[10] This Austrian author wrote the poem “Orpheus. Eurydice. Hermes” and a 55-cycle of poems called *Sonnets to Orpheus*. He also wrote the *Duino Elegies*.

ANSWER: Rainer Maria **Rilke** [or René Karl Wilhelm Johann Josef Maria **Rilke**]

19. This art form was utilized in the construction of the set for the Igor Stravinsky ballet *The Song of the Nightingale*. For 10 points each:

[10] Name this art form collected into the book *Jazz*. The same artist used this medium to create the *Blue Nudes* series and an eye-level band around his dining room that he titled *The Swimming Pool*.

ANSWER: paper **cut-outs** [or **paper collage**; or **decoupage**; accept answers mentioning **cut paper** or equivalents; prompt on “**paper**”]

[10] This artist turned to making cut-outs late in his life after being diagnosed with abdominal cancer. Earlier works by this Fauvist include *Green Stripe*.

ANSWER: Henri **Matisse** [or Henri Émile Benoît **Matisse**]

[10] One of Matisse’s final cut-outs, *Le Bateau*, or *The Boat*, was the subject of a 1961 controversy when the Museum of Modern Art displayed it in this fashion.

ANSWER: (accidentally) **upside-down** [accept any answer indicating that it was hung **wrong way up**; prompt on less-specific answers mentioning “**hung incorrectly**” or similar]

20. This Chief Engineer of the U.S. Army from 1838 to 1864 developed namesake “shutters” that would protect men operating cannons inside coastal forts by closing immediately after fire. For 10 points each:

[10] Name this American pioneer of the Third System of Fortifications, who designed the Minot’s Ledge lighthouse in Massachusetts to employ massive iron pins that secured its weight.

ANSWER: Joseph Gilbert **Totten**

[10] Winfield Scott entrusted Totten to direct the siege of this seaport during the Mexican-American War, after which Scott blew through Santa Anna at Cerro Gordo.

ANSWER: **Veracruz** [or Heroica **Veracruz**; accept Siege of **Veracruz**]

[10] Much earlier, Totten designed fortifications at this town on Lake Champlain. Ships under Thomas Macdonough and the militia of Alexander Macomb defended this city from a British invasion in the War of 1812.

ANSWER: **Plattsburgh**, New York [accept Battle of **Plattsburgh**]