



1. In one passage from this novel, a character imagines heaven as a dirty bathhouse full of spiders. This novel's ending was called "conventionally monologic," in contrast to its primarily polyphonic narrative, by Mikhail Bakhtin. That ending of this novel includes the protagonist weeping and embracing the knees of a girl whose father dies after being run over by a carriage. Earlier, the protagonist vacillates between that girl and the nihilist Svidrigailov. For 10 points, name this novel in which the pawnbroker Alyona Ivanovna is murdered by the student Raskolnikov, a work by Fyodor Dostoevsky.

ANSWER: **Crime and Punishment** [or **Prestupleniye i Nakazaniye**]

014-13-83-14101

2. A ruler with this title married Maria Cristina during the "Ominous Decade." It's not in England, but this royal title changed hands in an 1868 Glorious Revolution that resulted in the rule of Amadeus. A man abandoned this title after his forces lost the Battle of Vitoria. An unsuccessful holder of this title was known as "The Hexed" because of his very large tongue and inability to chew food. It's not in Naples, but Joseph Bonaparte held this title for five years before it returned to the House of Bourbon. Attempts to replace people with this title led to the Carlist Wars. For 10 points, name this royal title that went to Philip V after a 1700s succession war ended by the Treaty of Utrecht.

ANSWER: **king of Spain** [or **monarch of Spain**; or **queen of Spain**]

052-13-83-14102

3. One object named after this person controversially violated NASA's policy requiring the release of data within a year. Another object named after this person was the second of its kind to be fitted with a Reentry Breakup Recorder and was the second ATV sent to resupply the International Space Station. The former object named for this person was launched in 2009 and is surveying the Milky Way for habitable exoplanets. This person himself wrote *The Cosmographic Mystery*, in which he used spheres inscribing and circumscribing Platonic solids to build a model of the Solar System. This man was court mathematician to Rudolf II, was based in Linz, and got his start thanks to funding by Tycho Brahe. For 10 points, name this German astronomer who postulated three laws of planetary motion.

ANSWER: Johannes **Kepler**

020-13-83-14103

4. In one scene, this character tells his friend, "If love be rough with you, be rough with love; prick love for pricking, and you beat love down." In his final prose speech, this character states, "Ask for me tomorrow, and you shall find me a grave man." This character describes a figure with "collars of the moonshine's wat'ry beams" who is "drawn with a team of little atomi over men's noses as they lie asleep" in his speech about "the fairies' midwife" named Queen Mab. As he dies after being stabbed under his friend's arm, he repeatedly exclaims, "A plague o' both your houses!" For 10 points, name this Shakespearean noble killed by Tybalt and avenged by Romeo.

ANSWER: **Mercutio**

014-13-83-14104

5. One effect that affects these things can be investigated with a Lummer-Gehrcke plate. When these things are affected by impact pressure, quasistatic pressure, and the Doppler effect, they can be modeled by a Voigt profile. The distance between two of these things due to that effect is proportional to the magnetic quantum number multiplied by the Bohr magneton. Kirchhoff's laws govern the production of these things by hot and cold gases. The D1 and D2 examples of these things created the "sodium doublet" in a series named for Fraunhofer. During a solar eclipse, examination of these things led Jules Janssen to discover helium. For 10 points, identify these series of light and dark bands that appear in an element's spectrum.

ANSWER: **spectral lines** [or **absorption lines**; or **emission lines**; prompt on **energy levels**]

149-13-83-14105

6. One offshoot of this religion reveres a woman who wrote the book *Lightning from the Orient*. Disagreement with a decree banning the usage of the words "Tian" and "Shangdi" resulted in an eighteenth-century backlash against people of this religion. The early history of this religion is told in a stele that was lost from the ninth century until its rediscovery at the end of the Ming Dynasty; that history describes the arrival of Alopen. One convert styled himself the brother of one of this religion's leaders and established a "Heavenly Kingdom" while leading the Taiping Rebellion. For 10 points, name this religion that is still heavily persecuted in China, necessitating that many followers meet in house churches.

ANSWER: **Christianity** [or **Nestorianism**; or **Protestantism**; or **Catholicism**; or **Orthodox Christianity**]

020-13-83-14106

7. Edmund Blore's soft French stone facade for this building decayed due to pollution and was replaced in 1913 by Aston Webb's design, which called for its iconic white Portland stone. This building was built on the same spot as a failed mulberry garden. Visitors to this building often stay in its Belgian suite, so-named because it was first decorated for Leopold I. This building was converted from a townhouse with the same name, to which a stable known as the "Royal Mews" was added by chief architect John Nash. The massive Victoria Memorial statue lies outside the front gate of this structure, whose forecourt is the site of the Changing of the Guard. For 10 points, name this official London residence of the British monarchy.

ANSWER: **Buckingham Palace** [or **Buckingham House**]

020-13-83-14107

8. Antibodies produced against structures in neurons result in a disorder often mistaken for multiple sclerosis, neuromyelitis optica. Hereditary nephrogenic diabetes insipidus is caused by a mutation in a gene for another of these proteins. They usually form tetramers and are characterized by the NPA motif. In plants, the rate of symplastic movement increases due to these proteins. In the kidneys, they are transcribed in response to binding of antidiuretic hormone. These proteins are essential to maintaining turgor and for keeping cells isotonic. They may transport glycerol or other small polar solutes by facilitated diffusion. For 10 points, name these membrane proteins which transport water.

ANSWER: **aquaporins**

190-13-83-14108

9. This poem's speaker describes "the wolf, the snake, the hog, not wanting in me, the cheating look, the frivolous word, the adulterous wish, not wanting" after confessing, "I too knitted the old knot of contrariety." This poem's fifth section asks, "What is it then between us? What is the count of the scores or hundreds of years between us?" This poem concludes with the speaker addressing the "dumb, beautiful ministers," saying, "You furnish your parts toward eternity, great or small, you furnish your parts toward the soul." For 10 points, name this Walt Whitman poem beginning, "Flood-tide below me! I see you face to face!"

ANSWER: **"Crossing Brooklyn Ferry"**

014-13-83-14109

10. A precursor to this conflict was the Gal Oya Riots of 1956, which was a reaction to the Official Language Act No. 33. Early in this conflict, one side massacred over 60 settlers at the Kent and Dollar Farms. An ambush on a military patrol using the call sign Four Four Bravo set off a series of pogroms known as Black July at the outset of this conflict. In 1998, this conflict involved a bombing at a temple containing the Buddha's tooth. A suicide bomber from one side in this conflict assassinated Rajiv Gandhi because of India's involvement trying to end this conflict. For 10 points, name this 1983 to 2009 conflict between government forces and a group desiring the independent state of Eelam, the Tamil Tigers.

ANSWER: **Sri Lankan Civil War** [accept answers relating to **strife in Sri Lanka**; accept answers involving **Tamil** Tigers, **Tamil** independence, Liberation Tigers of **Tamil Eelam**, or **LTTE** before "Tamil Tigers"]

141-13-83-14110

11. In one story, the progenitor of these people was a nymph who boasted that she, rather than Athena, invented the plough. These characters decide to stone their leader in a lost play by Aeschylus, the first in a trilogy also including *Nereids* and *Phrygians*. Hermes took the guise of one of these people to guide Priam into the Greek tents. After a horrible plague, Aeacus begged Zeus for people to populate his kingdom of Aegina, so these people sprang from a number of ants on a sacred oak. Peleus ruled over these people, who were once led into battle by Patroclus in their leader's guise. For 10 points, name these soldiers commanded by Achilles in the *Iliad*.

ANSWER: **Myrmidons**

020-13-83-14111

12. Harry Bridges and his Albion Hall Group led a general strike in this city, and Bridges became the head of its longshoreman's union in 1935. The Supreme Court ruled a statute this city had passed regulating laundry buildings was discriminatory in practice in the case *Yick Wo v. Hopkins*. Its "Sandlot" was used to give speeches by Denis Kearney, who attacked one of its largest immigrant groups. A major immigration processing center was moved here after the facility on nearby Angel Island burned down. Mayor Eugene Schmitz requested aid from federal troops in the aftermath of a 1906 earthquake that hit this city. For 10 points, name this Californian city.

ANSWER: **San Francisco**

121-13-83-14112

13. In a play by this author, a monk disregards the advice of the former soldier Father Pimen and woos the Polish noble Maryna while leading a rebellion. He wrote a short novel in which a young officer quarrels with Shvabrin while stationed at Bailogorsk fortress. That officer, Peter Andreich Grinev, pursues Maria Ivanovna Mironova, the title character. In one of this author's stories, a German engineer goes mad when he loses a fortune to Chekalinsky due to the unexpected appearance of the title card. For 10 points, name this Russian poet known for such prose works as *The Captain's Daughter*, "The Queen of Spades," and *Boris Godunov*.

ANSWER: Alexander **Pushkin**

014-13-83-14113

14. A coefficient symbolized alpha and named for Bunsen measures this property for gases. The Hume-Rothery rules determine whether or not two solids mutually have this property. In order for a recrystallization to work, the product should have this property when hot, but not when cold. Liquid-liquid extractions take advantage of the difference in this property between three species. Addition of a common ion will reduce this quantity according to Le Chatelier's principle. On a chart with temperature on the x-axis and this property on the y-axis, solids have a positive slope and gases have a negative slope. Henry's Law gives this property for gases as a function of temperature. For 10 points, name this property measuring how much of a substance can dissolve in another.

ANSWER: **solubility** [accept word forms; or **dissolving**; prompt on "miscibility" or word forms]

190-13-83-14114

15. This company was sued in 1973 by Sid and Marty Kroft, who claimed it ripped off the children's show *H.R. Pufnstuf* to create its marketing characters. Jose Bove and his Confederation Paysanne supporters received a 44 day prison sentence for attacking one of this company's branches being built in France. Thomas Friedman erroneously theorized that no two countries with one of these businesses have ever fought a war against each other. Morgan Spurlock subsisted on its products for a month in the film *Super Size Me*. For 10 points, name this company managed for many years by Ray Kroc, the world's largest fast food chain.

ANSWER: **McDonald's** Corporation

052-13-83-14115

16. Adgandestrius offered to have this man poisoned, but was refused, since this man had to be defeated "openly and by arms." This man made an enemy of Segestes by going against his will and marrying Segestes' daughter. Maroboduus fought a brief war against this man, whose wife Thusnelda was captured by the nephew of Tiberius. This man lost the Battle of the Weser River to Germanicus, who recovered the aquilae lost to this man. After uniting the Marsi, Chatti, and other tribes with his own Cherusci, he won a crushing victory against Publius Quinctilius Varus. For 10 points, name this German chieftain who destroyed three Roman legions during the Battle of Teutoburg Forest.

ANSWER: **Arminius** [or **Hermann**]

080-13-83-14116

17. One director of this orchestra produced a saxophone concerto titled from a quote from Kafka's *The Trial*. In 1961, George Solti was succeeded as its music director by Zubin Mehta, who became renowned for being the youngest leader of an American orchestra. A more recent director of this orchestra championed the works of Igor Stravinsky, who spent thirty years in this orchestra's city. In 2009, this orchestra's leader Esa-Pekka Salonen passed the baton to the young Venezuelan-born violinist Gustavo Dudamel. This orchestra plays inside an intense glare-producing stainless steel-coated structure designed by Frank Gehry. For 10 points, name this orchestra which relocated to the Walt Disney Concert Hall from its former home, the Hollywood Bowl.

ANSWER: **Los Angeles Philharmonic** [or **LA Philharmonic**]

020-13-83-14117

18. This city was where Nikolaus Skoufas and two other leaders founded the Filiki Eteria, a secret society promoting Greek independence. This city came to prominence under the governorship of a noble French refugee, the Duke of Richelieu. This city's Jewish community included the author of *Auto-Emancipation*, Leon Pinkser, and formed the "Jewish Militia for War against Pogroms" in response to its many pogroms. The sailor Valenchuk's corpse was brought into this city after mutinying sailors came to this port during the 1905 Revolution. For 10 points, name this city in Ukraine where *Battleship Potemkin* was filmed, and that contains a famous set of steps.

ANSWER: **Odessa**

080-13-83-14118

19. Trudy Guthrie's photograph of a sea monster in this body of water turned out to be a manatee. William Warner's book *Beautiful Swimmers* describes the life cycle of the blue crab here. This body of water contains an island whose residents are probably incorrectly thought to speak an Elizabethan dialect of English. In the same county as its Tangier Island, wild ponies are rounded up on Assateague Island and driven across water to Chincoteague, another island in this body of water. Accomack is on the Eastern Shore, a peninsula separate by this from the state mainland. A bridge-tunnel complex across this body connects Cape Charles on the Delmarva Peninsula to Virginia Beach. For 10 points, name this estuary that borders Virginia and Maryland.

ANSWER: Chesapeake Bay

121-13-83-14119

20. A Dutch-born member of this art movement painted a winged man wearing a suit dancing with a nude woman in *Archangel's Tango*. Kees van Dongen belonged to this movement, like a non-Monet artist who painted *The Houses of Parliament at Night* and often worked in the suburb of Chatou. Its most famous member gained international fame with his *Still Life with Geraniums* and painted a circle of people interlocking hands in the background of his *Joy of Life*. That member exhibited his *Woman With a Hat* at the 1905 Salon d'Automne, prompting a scathing comment by Louis Vauxcelles that gave this movement its name. For 10 points, Andre Derain and Henri Matisse co-founded what art movement whose name means "wild beasts"?

ANSWER: Fauvism [or Fauves]

020-13-83-14120

21. In this novel, a reformed thief jumps off the South Spit after buying a tin box and dog chains from Mrs. Yolland and using them to hide a paint-smeared nightgown in the Shivering Sand. The antagonist of this novel is trying to pay off his debts to the subtly-named Septimus Luker. In this novel, Ezra Jennings conducts an experiment by slipping an ex-smoker opium and seeing if it makes him sleepwalk. Near its end, a sailor with a fake beard and wig turns out to be Godfrey Ablewhite, who was murdered by three Brahmins after taking the title object from Rachel Verinder. For 10 points, name this Victorian detective novel about the theft of a diamond, written by Wilkie Collins.

ANSWER: *The* Moonstone

080-13-83-14121

22. This man developed a self-assessment test to measure internal consistency, or congruence, which is known as the Q-sort. He is shown leading an encounter group in the documentary *Journey Into Self*, and his work with abused and troubled youths prompted him to write *The Clinical Treatment of the Problem Child*. This man discouraged calling the people seen by psychologists as "patients," described a life force that he called the actualizing tendency, and encouraged psychologists to provide unconditional positive regard. For 10 points, name this author of *On Becoming a Person* and pioneer of client-centered therapy.

ANSWER: Carl Rogers

030-13-83-14122

23. The points named for half of this value on a transfer function plot are alternately called the 3 dB points. The cosine of the phase angle is equal to this value's namesake factor. A time-averaged form of this quantity's density divided by the speed of light gives the radiation pressure. This quantity is equal to the surface integral of the cross product of the electric and magnetic fields according to Poynting's theorem. The maximum amount of this quantity is transferred when the load resistance is the same as the Thevenin resistance. Using Ohm's law, it is found to be current squared times resistance for a resistor. For ohmic elements, it is often given off as heat. For 10 points, name this quantity that is the amount of energy a circuit transfers per unit time and is measured in watts.

ANSWER: electrical power

190-13-83-14123



1. In proline, this region is bound to more than one carbon atom. For 10 points each:

[10] Name this region that is different for each amino acid.

ANSWER: **side chain** [prompt on **R**]

[10] Amino acids are linked by peptide bonds to form these macromolecules, which fold into three-dimensional structures.

ANSWER: **proteins**

[10] Proteins in a gel may be separated based on their isoelectric point using this technique. This technique is often done as the second dimension of a two-dimensional gel.

ANSWER: isoelectric **focusing**

020-13-83-14201

2. This woman reportedly had an affair with Prime Minister Alec Douglas-Home's nephew, Robin. For 10 points each:

[10] Name this controversial princess, a daughter of George VI. She was prevented from marrying the divorced commoner, Peter Townsend, and had the title Countess of Snowdon.

ANSWER: **Margaret** Rose Windsor

[10] Margaret was the sister of this woman, the current queen of England.

ANSWER: **Elizabeth II** [or **Elizabeth Alexandra Mary**; prompt on **Elizabeth**]

[10] After the assassination of this man, a press report said Margaret referred to the Irish as "pigs." The last Viceroy of India, he was killed when his yacht was blown up by the Provisional IRA.

ANSWER: Louis Francis Albert Victor Nicholas **Mountbatten** [or Earl of **Mountbatten**; or Lord **Mountbatten**]

052-13-83-14202

3. Answer these questions about cows in Hinduism, for 10 points each.

[10] This avatar of Vishnu was a cowherd in his youth. He gives advice to Arjuna in the *Bhagavad Gita*.

ANSWER: **Krishna**

[10] The young Krishna also played around with these cow-herding girls. One of them, Radha, is Krishna's main lover.

ANSWER: **gopis**

[10] This divine wish-fulfilling cow is often depicted with the face and breasts of a woman. The worship of cows in Hinduism is also the worship of this goddess, since all cows are a manifestation of her.

ANSWER: **Surabhi** [or **Kamadhenu**]

080-13-83-14203

4. The modulation index is the ratio between the message and carrier types of this quantity. For 10 points each:

[10] Identify this quantity that names a type of analog modulation that is paired with phase modulation in QAM ("CAM").

ANSWER: **amplitude**

[10] This method assumes that the wavefunction solution to a certain equation is exponentials whose amplitude and phase vary slowly compared to the de Broglie wavelength.

ANSWER: **JWKB** approximation [or **JWKB** method; or Jeffreys-**Wentzel-Kramers-Brillouin** approximation; or **LG** approximation; or **Liouville-Green** method; accept all answers in any order]

[10] The WKB method is most often used with this equation, whose time-independent form states that \hbar times the time derivative of the wavefunction is equal to the Hamiltonian of the wavefunction.

ANSWER: **Schroedinger** equation

020-13-83-14204

5. This performer pioneered scat singing in a recording of Boyd Atkins' "Heebie Jeebies" and recorded his mentor King Oliver's "West End Blues" with his "Hot Five." For 10 points each:

[10] Name this jazz trumpeter from New Orleans, nicknamed "Satchmo."

ANSWER: Louis **Armstrong**

[10] Louis Armstrong recorded "Saint Louis Blues" with this female blues singer. Nicknamed the "Empress of the Blues," she saved Columbia Records with her recordings of "Gulf Coast Blues" and "Downhearted Blues."

ANSWER: Bessie **Smith**

[10] Louis Armstrong and Bobby Darin both popularized this song as a jazz standard. Marc Blitzstein's rendition of this moritat from *The Threepenny Opera* begins "Oh the shark has pretty teeth dear, and he shows them pearly white."

ANSWER: "The Ballad of **Mack the Knife**" [or "Die Moritat von **Mackie Messer**"]

080-13-83-14205

6. Harnosand and Sundsvall are cities on this body of water. For 10 points each:

[10] Name this northern branch of the Baltic Sea which is bounded on the south by the Archipelago Sea.

ANSWER: Gulf of **Bothnia**

[10] The Gulf of Bothnia lies between these two Nordic countries.

ANSWER: **Sweden** and **Finland** [accept in either order]

[10] This archipelago lies in the southern Gulf of Bothnia and has its capital at Marihamn. It is west of the Abolan archipelago and contains nearly 6,000 skerries.

ANSWER: **Aland** Islands [or **Alands**]

192-13-83-14206

7. One member of this family was left permanently incapacitated after undergoing a prefrontal lobotomy at her father's request. For 10 points each:

[10] Name this prominent family. Another member of it founded the event that evolved into the Special Olympics and was married to former Ambassador Sargent Shriver.

ANSWER: **Kennedys**

[10] The aforementioned Rosemary and Eunice Kennedy were the children of Joseph Kennedy, whose youngest son was this longtime Massachusetts Senator who died in 2009 of brain cancer.

ANSWER: **Edward Moore Kennedy, Sr.** [or **Ted**; or **Teddy**; "Kennedy" is not needed]

[10] Shriver later replaced Thomas Eagleton as George McGovern's running mate in 1972 after Eagleton was mocked by the press for once undergoing this type of procedure to help his mental exhaustion.

ANSWER: **shock therapy** [or **electroconvulsive therapy**; or **ECT**]

052-13-83-14207

8. Richard Babcock's wife Gioia Diliberto wrote a historical novel telling the story of this painting's model. For 10 points each:

[10] Name this painting of Virginie Gautreau leaning on a table that aroused scandal at the 1886 Salon because her right shoulder strap was about to fall off.

ANSWER: *Portrait of **Madame X***

[10] This American artist painted the *Portrait of Madame X* and showed a line of blinded soldiers walking towards a dressing station in his 1919 work *Gassed*.

ANSWER: John Singer **Sargent**

[10] Sargent's 1885 painting, in which this author walks by an open door and looks at the viewer while putting his finger up to his mustache and his wife sits to the right, sold for \$8.8 million in 2004.

ANSWER: Robert Louis **Stevenson**

052-13-83-14208

9. The Phillips Curve relates this quantity to unemployment. For 10 points each:

[10] Name this economic term that describes the collective increase in prices over time.

ANSWER: **inflation**

[10] One theory on the cause of inflation is this idea that the price-wage spiral causes inflation due to the increase in the price of wages and raw materials.

ANSWER: **cost-push** inflation

[10] This American economist questioned the assumptions behind the Phillips Curve, claiming that workers can't be frequently fooled by changes in government policies with his "policy ineffectiveness proposition." He developed the theory of rational expectations.

ANSWER: Robert **Lucas**

030-13-83-14209

10. Characters in this play constantly quote from *Love's Whirlwind*, and it ends with a spirited argument about whether the Rue Saint-Honore connects to the Place de la Concorde. For 10 points each:

[10] Name this play in which the Bliss family has four houseguests.

ANSWER: **Hay Fever**

[10] Noel Coward, the author of *Hay Fever*, also wrote this play in which Madame Arcati summons the spirit of Charles's deceased wife Elvira.

ANSWER: **Blithe Spirit**

[10] *Blithe Spirit* takes its title from this Romantic poet's "To a Skylark."

ANSWER: Percy Bysshe **Shelley**

190-13-83-14210

11. This treaty revised an earlier papal bull called *Inter caetera* by moving a demarcation line west of the Cape Verde islands. For 10 points each:

[10] Name this treaty signed by Spain and Portugal that divided control of the prospective New World in 1494.

ANSWER: Treaty of **Tordesillas**

[10] This Spanish Borgia pope wrote *Inter caetera* and drafted the Treaty of Tordesillas. His son Cesare was made a cardinal under him for five years..

ANSWER: **Alexander VI** [or **Rodrigo Borgia**; or **Rodrigo de Borja** y Doms; prompt on partial answers]

[10] Three decades later, the town of Tordesillas sided with this rebellion against Charles I of Spain before its defeat at Villalar.

ANSWER: Revolt of the **Comuneros** [or **Comunero** uprising]

104-13-83-14211

12. This theory was proposed by Alan Guth in 1980. For 10 points each:

[10] Name this modification of the Big Bang model that states that the universe exponentially expanded for a short period of time during this theory's namesake epoch. This process is thought to be driven by the inflaton scalar field.

ANSWER: cosmological **inflation**

[10] This problem, along with the flatness problem, was a primary motive behind developing inflationary theory. This problem occurs because two distant parts of the universe could not interact with each other in the old Big Bang model.

ANSWER: **horizon** problem

[10] According to Andrei Linde, inflation theory may allow for our universe to exist inside of one of these particles that are predicted by Grand Unified Theories. Their existence is traditionally disallowed by one of Gauss's law for magnetism.

ANSWER: **magnetic monopole**

149-13-83-14212

13. Answer the following about feudalism, for 10 points each.

[10] Feudalism involved a system of obligations between lords and these people, who swore loyalty and support in exchange for grants of land called fiefdoms.

ANSWER: **vassals** [or **feudatory**; or **feudatories**]

[10] This ruler is depicted becoming a vassal on the Bayeux Tapestry. Another section of the Tapestry may show him getting an arrow in his eye.

ANSWER: **Harold Godwinson** [or **Harold II**; prompt on **Harold**]

[10] Early vassalage ceremonies involved Christian relics, including those of this saint, the first bishop of Paris who was martyred around 250 CE. After getting beheaded, he picked it up and kept walking for miles, preaching all the way.

ANSWER: Saint **Denis** [or **Dionysius**; do not accept "Dionysus the Areopagite"]

052-13-83-14213

14. Name these techniques used to study cells, for 10 points each.

[10] A "scanning" or "transmission" device may be used to magnify images up 10 million times in this form of microscopy.

ANSWER: **electron** microscopy

[10] DAPI is used to label DNA in a form of microscopy that takes advantage of this phenomenon, in which a substance absorbs light of a certain wavelength and emits light of a longer wavelength.

ANSWER: **fluorescence** microscopy

[10] Speaking of fluorescence, this technique attaches a donor and acceptor chromophore to a pair of molecules and sees whether they interact. This assay is commonly used in protein-protein binding studies.

ANSWER: **FRET** [or **fluorescence resonance energy transfer** or **Forster resonance energy transfer**]

020-13-83-14214

15. This author adapted Anton Chekhov's *The Seagull* into his play *The Notebook of Trigorin*. For 10 points each:

[10] Name this playwright who wrote the essay "The Catastrophe of Success" after the popularity of his play *The Glass Menagerie*.

ANSWER: Tennessee **Williams**

[10] Reverend Shannon travels with an entourage of women to a hotel managed by Maxine Faulk in this Williams play.

ANSWER: *The **Night of the Iguana***

[10] Williams retold a Greek legend in this "apprentice play," reworked from his *Battle of Angels*, which focuses on the relationship between the mysterious stranger Val and the middle-aged Lady.

ANSWER: ***Orpheus Descending***

020-13-83-14215

16. One baffling part of this scandal, involving a shirtless picture of an FBI agent, was later revealed to have just been a joke. For 10 points each:

[10] Name this scandal, in which a retired four star general resigned as CIA director after he was found having an extramarital affair with his biographer.

ANSWER: **Petraeus** scandal [or **Petraeusgate**; accept any number of humorous answers that include the name of **Petraeus**, but not **Betray Us** since that's a different thing]

[10] Much amusement has been had by retrospectively considering the name of this book, the biography of Petraeus that his lover Paula Broadwell authored.

ANSWER: ***All In: The Education of General David Petraeus***

[10] Natalie Khawam, the twin sister of threatening email recipient Jill Kelly, is being represented by this celebrity attorney, who also represents Amber Frey and two of Tiger Woods's mistresses.

ANSWER: Gloria **Allred**

020-13-83-14216

17. In this novel, Himiko is part white because her grandfather married a Russian from Vladivostok. For 10 points each:

[10] Name this novel in which Bird comes to terms with his son's brain hernia.

ANSWER: *A **Personal Matter*** [or ***Kojinteki na Taiken***]

[10] This Japanese author of *Nip the Buds, Shoot the Kids* and *The Silent Cry* sublimated his experiences with his son Hikari to write *A Personal Matter*.

ANSWER: Kenzaburo **Oe**

[10] Oe's *The Silent Cry* is narrated by this one-eyed English professor married to Natsumi.

ANSWER: **Mitsusaburo**

186-13-83-14217

18. This person's suicide note read "Today the revolution has been stolen by the revisionist clique." For 10 points each:

[10] Name this person who was sentenced to life imprisonment in 1983. She was the only female member of the Gang of Four and was arrested in 1976 after her husband's death.

ANSWER: **Jiang Qing** [or **Lan Ping**; or **Madame Mao**; or **Li Jinhai**; or **Li Yunhe**]

[10] With her husband, Mao, Jiang Qing supported what movement that began in 1966? Its goal was to violently purge bourgeois elements of Chinese society.

ANSWER: Great Proletarian **Cultural Revolution** [or Wuchanjieji **Wenhua Dageming**]

[10] Jiang Qing commissioned *Taking Tiger Mountain by Strategy* and *The Legend of the Red Lantern*, types of this art form, to promote revolutionary ideas. Both works, along with six other notable ones, originated in this artistic genre before they were adapted for other media.

ANSWER: model **operas** [prompt on **plays**]

052-13-83-14218

19. MODERATOR NOTE: DO NOT REVEAL THE ALTERNATE ANSWER TO PART ONE

The score of this symphony calls for a five-minute break before the second movement. For 10 points each:

[10] Name this symphony, based on a Friedrich Klopstock poem, whose extremely long fifth movement finale is partly choral and calls for the use of church bells.

ANSWER: **Resurrection** *Symphony* [or Gustav **Mahler**'s *Symphony No. 2*; prompt on **Second Symphony** or the like without the mention of **Mahler**]

[10] The *Resurrection Symphony* was composed by this Romantic Austrian composer of the *Symphony of a Thousand* and the *Titan* symphony.

ANSWER: Gustav **Mahler**

[10] A trumpet solo opens the C-sharp minor funeral march, or "Trauermarsch", at the beginning of this Mahler symphony, whose fourth movement contains a famous adagietto.

ANSWER: *Symphony No. 5*

190-13-83-14219

20. This author wrote about Holocaust survivor Hermann Broder and his Polish servant in his novel *Enemies, A Love Story*. For 10 points each:

[10] Name this Jewish-American author of such novels as *The Magician of Lublin* and *Satan in Goray*.

ANSWER: Isaac Bashevis **Singer**

[10] Much of Singer's "Gimpel the Fool" focuses on Gimpel's dysfunctional relationship with his wife, who calls him to her deathbed to tell him this secret.

ANSWER: their **children are not his** [or their **children are illegitimate**; or obvious equivalents; prompt on **she has been sleeping with other men**]

[10] Singer was one of the foremost authors to write in this language, which uses the Hebrew script and was developed by Ashkenazi Jews in Central Europe.

ANSWER: **Yiddish**

020-13-83-14220

21. An appendix detailing the sex life of these creatures was written in a manner that mocked the academic writing of the author's time. For 10 points each:

[10] Name these creatures that destroy large chunks of the world's continents as revenge for being exploited by the pearl farming industry.

ANSWER: newts [or salamanders; or mloky]

[10] This Czech writer wrote *War with the Newts* and coined the term "robot" in his play *R.U.R.*

ANSWER: Karel Capek

[10] Bernard Williams wrote an article about the "tedium of immortality" as it related to this Capek play, in which the arrival of opera singer Emilia Marty complicates the lawsuit between Jaroslav Prus and Albert Gregor.

ANSWER: *The* Makropulos Affair [or *The* Makropulos Case; or Vec Makropulos]

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