

Penn Bowl 2018

Packet 8

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Tossups

1. **A catalyst system that acts on these compounds was first developed by Andre Mortreux and is composed of molybdenum hexacarbonyl and phenol additives. A widely used method for synthesis of these molecules involves a base-catalyzed reaction of DAMP at low temperature. These compounds can undergo a palladium-catalyzed cross-coupling reaction with aryl or vinyl halides in a method named for (*) Sonogashira.** These molecules can be formed from a reaction that involves lithium–halogen exchange of dibromoalkenes followed by alpha elimination. “Terminal” kinds of these molecules can isomerize into the “internal” kinds of these molecules through an allene intermediate in the presence of a strong base such as sodium amide. Lindlar’s catalyst can hydrogenate these compounds into cis-alkenes. For 10 points, name these compounds that contain a carbon–carbon triple bond.

ANSWER: alkynes [or terminal alkynes; or internal alkynes; do not accept or prompt on “alkanes” or “alkenes”]
<PL, Chemistry>

2. **One member of a branch of this church walked 2,000 miles on foot in a year to give sermons; that woman was Jarena Lee. Another member of this church wrote that all people believe that “the God who made them... was symbolized in themselves.” Daniel Coker and Daniel Payne, the founder of Wilberforce University, were among that denomination’s “Four Horsemen.” One branch of this church was founded in Philadelphia by (*) Richard Allen.** Scripture, tradition, reason, and experience are part of the namesake “quadrilateral” of this religion, which has an “African Episcopal” branch and a “Wesleyan” branch. During the Great Awakening, George Whitefield preached for this church. For 10 points, name this Christian denomination founded by John Wesley.

ANSWER: Methodism [or Methodist; or Methodist Episcopal; accept African Methodist Episcopal Church or AME until read; accept Wesleyan Methodism until read; prompt on Protestantism; prompt on Christianity; anti-prompt (ask “can you be less specific”) on incomplete answerlines like Episcopal Church or African Episcopal Church or Wesleyanism]
<JC, Religion>

3. **This man commanded a unit of *Hong Huzi* (“hung hoo-dzuh”) during the Russo-Japanese war and later served as a spy on an archaeological expedition to produce a report on a possible invasion of Xinjiang. After the Svinhufvud (“SVEEN-huh-vood”) Senate appointed this cavalryman as Commander-in-Chief, he won the Battle of Tampere and set up a concentration camp. While serving as regent for King Frederick Charles, he signed his name as *Kustaa* to allay suspicions of disloyalty. For his 75th birthday, this general received a surprise visit from (*) Adolf Hitler, from which a famous recording by Thor Daler survives. As commander of the Whites during his country’s civil war, this man commissioned a namesake fortification line across the Karelian Isthmus that slowed the Soviet advance during the Winter War. For 10 points, name this statesman, the “Father of Modern Finland.”**

ANSWER: Baron Carl Gustaf Emil Mannerheim
<NR, European History>

4. It's not the GI tract, but patients with Peutz–Jeghers (“puts YAY-gurs”) syndrome have a higher incidence of SCTAT (“S-C-T-A-T”) tumors in this organ. It's not the gut, but one condition named for this organ is diagnosed by observing a “whirlpool” sign or twisted vascular pedicle on ultrasound. The Canal of Nuck is formed after this organ descends through the gubernaculum. A biomarker for tumors of this organ is CA125. The Rotterdam criteria are used to diagnose a condition of this organ which results in insulin resistance and hirsutism from elevated (*) androgen levels; that condition is this non-kidney organ's polycystic syndrome. Granulosa cells in this organ can express LH receptors on their surfaces in response to elevated levels of FSH, which triggers the maturation of follicles and the release of ova into the fallopian tubes. For 10 points, name these female reproductive organs.

ANSWER: ovary [or ovaries]

<PL, Biology>

5. A dissent in this case referenced the then-recently decided *Jacobson v. Massachusetts* to argue for the state's right to make regulations regarding public health. This case spawned a derisive verb for legislating from the bench. John Harlan's dissent in this case asserted that the burden of proof rests with the party seeking to have a statute deemed unconstitutional. Although in *Holden v. Hardy* the Court found that it wasn't absolute, this case upheld the freedom to (*) contract established by Rufus Peckham in *Allgeyer v. Louisiana*. Concluding “the Fourteenth Amendment does not enact Mr. Herbert Spencer's *Social Statics*,” Oliver Wendell Holmes Jr. lambasted the outcome of this case in his famous dissent. For 10 points, name this 1905 case that overturned a New York law regulating bakeshop working hours and started a namesake era.

ANSWER: Lochner v. New York [accept in either order]

<NR, American History>

6. A ruler of this nation was kidnapped by Geoffrey Sydenham, the leader of the organization ICON. The teachings of the pacifist Changamire inspired a violent anti-government movement in this nation called The People. A military unit from this nation has an elite subunit called the Midnight Angels. During an insurrection, the leader of this nation was recorded speaking to Jorick Kroawl, head of (*) Genoshan intelligence. This nation was first united by Bashenga, who also began the cult of Bast and was the first to be empowered by the Heart-Shaped Herb. The current ruler of this country was formerly married to Ororo Munroe and had previously reversed a coup by Erik Killmonger with the assistance of the Dora Milaje. For 10 points, name this vibranium-rich country ruled by the current Black Panther, T'Challa.

ANSWER: Kingdom of Wakanda

<EM, Trash (Film)>

7. This author wrote a dialogue in which the soul and body both complain about being stuck with each other. This poet wrote that a “forward youth” will “forsake his Muses” and “leave the books in dust” due to a man “like three-fork'd lightning.” In another work, this author of “The Coronet” remarks, “How vainly men themselves amaze / To win the palm, the oak, or bays.” He wrote about a man who “could not cease / In the inglorious arts of peace” in “An Horatian Ode Upon (*) Cromwell's Return from Ireland,” and he recommended rolling strength and sweetness into a ball and wrote “I always hear / Time's winged chariot hurrying near” in his most famous work. For 10 points, name this author of “The Garden” who lamented “Had we but world enough and time” in “To His Coy Mistress.”

ANSWER: Andrew Marvell

<JC, British Literature>

8. In spatial statistics, CAR models are designed to handle data exhibiting this phenomenon, which is quantified by Moran's *I*. If this phenomenon is strong for a set of data, then the OLS estimator may be numerically unstable because it is difficult to invert a matrix whose columns are nearly linearly dependent.

For time-dependent data, the Fourier transform of a function measuring this phenomenon is the spectral density function. The slope in simple (*) linear regression is a measure of this phenomenon times the ratio of standard deviations of the response and covariate. That measure of this phenomenon is the covariance divided by the product of the standard deviations, and is named for Pearson. For 10 points, name this phenomenon captured by a statistic denoted r , which measures the strength of linear association between random variables.

ANSWER: correlation [accept autocorrelation]

<AP, Other Science (Math)>

9. Fred Stevens and Luther Douglas helped develop a modern method for using this material in art. Because artwork made using this material is considered holy, pieces that are created for sale are often made with intentional errors to prevent authenticity. The Diné people use this material to create artwork called 'iikááh, meaning “a place where the gods come and go.” This material is used by the Navajo in “drypainting.” A particularly dense, (*) colorful type of this material is applied using *chak-pur* to create designs made of geometric concentric circles that are ritually destroyed to represent the ephemerality of the universe. This material is used by Tibetan monks to make mandalas, which are created using small funnels and tubes to pour this substance onto a flat surface. For 10 points, name this substance that can be melted to form glass.

ANSWER: sand [or gravel; prompt on dust; prompt on crushed rock; prompt on stone]

<JK, Painting>

10. One man in this play tells the story of his ancestor, a ship captain who unexpectedly threw passengers into the sea when the boat started to leak. In this play’s epilogue, that man periodically “turns off” the sound of his friends arguing about politics to appreciate a winter’s day in the park near a fountain. He is visited by his “thirty-second” great-grandfather, “not counting the bastards,” who sings “Prepare, prepare, the Infinite Descent.” After angrily wiping off makeup, one character is told “Look up” and sees a single gray (*) feather fall from this play’s title creatures, who bring the message “Stop moving!” The relationship of Louis Ironson and Prior Walter is broken off because of AIDS in this play in which Ethel Rosenberg haunts Roy Cohn. For 10 points, name this Tony Kushner play, subtitled “A Gay Fantasia on National Themes.”

ANSWER: Angels in America

<JC, American Literature>

11. A man who played this instrument led a group that was once told to play more quietly because they were scaring the horses at a disastrous concert at a state fair, a fiasco recounted in “How Many of You Are There in the Quartet?” That musician wrote a cantata that combines the Torah with Martin Luther King, Jr. speeches called *The Gates of Justice*. A musician who played this instrument recorded a solo version of “Danny Boy” in his album *Time Remembered* and is best known for leading a trio with (*) Scott LaFaro and Paul Motian (“motion”). A musician who played this instrument played a Billy Strayhorn standard about going to “Sugar Hill, way up in Harlem.” The bandleader of “Take Five” on *Time Out*, as well as the bandleader of “Mood Indigo” and “Take the ‘A’ Train,” played this instrument. For 10 points, name this instrument played by Bill Evans, Dave Brubeck, and Duke Ellington.

ANSWER: piano

<JC, Other Arts (Jazz)>

12. A character by this author repeatedly sings the opera line “Tra la, tra la... I’ll thrash you with a steel mace.” This author described leaving a medical career due to his classmates’ callous reactions to slides of prisoners in one work. One of this author’s characters stepped on Mr. Ku’s account sheets and complains about the Chao’s dogs disliking him before remembering the death of his five-year-old sister and suspecting his (*) brother. A character by this author of “Call to Arms,” who mocks a nun and claims “spiritual victories” when he is defeated, tries to sign his name with a perfect circle before his execution for being a revolutionary. A character

created by this author ends a memoir with the phrase “Save the children...” and sees “Eat people” written in books. For 10 points, name this Chinese author of “The True Story of Ah Q” and “A Madman’s Diary.”

ANSWER: Lu Xun (“loo shwin”) [or Zhou Shuren]

<JC, World Literature>

13. According to Nonnus, Peitho predicted one of these events to a man whom she covered in clouds. At one of these events, armor is given which the recipient’s son “did not grow old in” - Apollo is notably absent from that event in a Catullus retelling. Iasion and Demeter have sex in a field at another of these events, which takes place after one man spends eight years serving Ares; at that event, Hephaestus (*) gives a robe and a misfortune-bringing necklace to Aphrodite’s daughter Harmonia, who held one of these events with Cadmus. At another of these events, the horses Xanthus and Balius were given to Achilles’ father; Eris was not invited to that event, causing her to throw an apple labeled “for the fairest,” setting off the Trojan War. For 10 points, name this type of event, which led to Peleus and Thetis being married.

ANSWER: wedding [or marriage; or nuptials]

<JC, Mythology>

14. W. V. O. Quine used the example of trenchcoat-wearing mayor Bernard J. Ortcutt to differentiate between *de re* and *de dicto* aspects of this concept. An essay on this concept describes two cases where a shipowner sends an unworthy ship on a voyage and it either sinks or arrives, arguing that the author is equally guilty in both situations; that essay by W. K. Clifford is titled for the (*) “Ethics of” this concept. An essay on this concept distinguishes between methods of tenacity, authority, and *a priori* reasoning before determining the scientific method is the best process for inquiry. In one lecture, a thinker identified “living,” “forced,” and “momentous” criteria for performing this action despite insufficient evidence. For 10 points, Charles Peirce (“purse”) and William James wrote about the “Fixation of” and “Will to” perform what concept?

ANSWER: belief [or “The Ethics of Belief”; or “The Will to Believe”; or “The Fixation of Belief”; accept word forms; accept ethics until “Ethics of” is read; prompt on attitude or propositional attitude]

<NR, Philosophy>

15. This thinker proposed the International Clearing Union, which would regulate international trade to eliminate trade imbalances. This thinker argued that when the marginal efficiency of capital was lower than the interest rate, it could be rational to pay people to dig holes in the ground. This economist credited *The Fable of the Bees*, by Bernard Mandeville, for the concept of the (*) paradox of thrift, in which an increase in savings results in a decrease in output and total saving in the economy. This man’s namesake “cross” diagram describes the relationship between aggregate expenditure and economic output. Milton Friedman’s permanent income hypothesis opposes his consumption theory. For 10 points, name this economist who wrote *The General Theory of Employment, Interest and Money*, the namesake of a school of economics that advocates deficit spending.

ANSWER: John Maynard Keynes

<AJ, Social Science (Economics)>

16. Dimitri Gutas hypothesized that this place was fictional since its name was derived from a mistranslation of a word for “storage,” and most current scholarship about this place comes from the *fihrist*. A leader of this place wrote a treatise in praise of avarice and collected stories for evening entertainment; that director was Sahl. Tusi supposedly rescued 400,000 objects from this center of the Translation Movement. The creator of (*) algebra worked as an astronomer here, and it was founded as a private library by al-Mansur or Harun al-Rashid before being opened to the public. The Mongols’ destruction of this building in the “Round City” supposedly caused the Tigris River to run black with ink. For 10 points, name this Abbasid center of learning in Baghdad.

ANSWER: House of Wisdom [or Palace of Wisdom; or Treasury of Wisdom; or Bayt al Hikma; or Dar al Hikma; or Khizana al Hikma; prompt on Baghdad]

<JC, World History>

17. **An important toy solution to these equations is cylindrically symmetric and consists of particles rotating around an axis. Solutions to this equation with vanishing pressure are called dusts. Any spherically symmetric solution to these equations must be asymptotically flat and static. Assuming isotropy and homogeneity, the 00 (“zero-zero”) component of these equations gives the first (*) Friedmann equation.** The total set of these nonlinear, partial differential equations is often written with its namesake tensor notation. The namesake of these equations called one of its constants, the cosmological constant, the “biggest blunder [he] ever made.” For 10 points, name this set of 10 equations that describe gravity as a result of spacetime being curved.

ANSWER: **Einstein field** equations [accept **EFE**; prompt on partial answer]

<AP, Physics>

18. **One of these people captured a town by pretending to beat up his son, who gained the town’s sympathy and took over its military. One of these people was said to have been conceived by a disembodied phallus rising out of a hearth; that person introduced a census and founded a voting assembly with groups of 100 and was later run over by his daughter’s (*) chariot. One of these people tried to retake power at the Battle of Lake Regillus and was responsible for constructing the Cloaca Maxima, while another constructed a gate that was open during wartime and shut during peace. According to legend, the first person to take this title killed his twin brother after he jumped over the city walls.** For 10 points, name these seven non-emperor leaders of an Italian state, including Tarquinius Superbus, Numa Pompilius, and Romulus.

ANSWER: **kings of Rome** [prompt on **Roman monarchs**, **Roman rulers**, or less specific answers; do not accept “emperor,” “consul,” “princeps,” “senator,” or any other job that is not “king” and is distinctly from the Republic or Empire]

<JC, European History>

19. **This author, who wrote a controversial early novel that began with the line “I have been unfaithful to my husband,” created two characters who were betrothed as children, possibly as a joke, which they take seriously. This author of *Fru Marta Oulie* wrote about Olav, who cannot confess his guilt about killing his wife’s lover, as well as a protagonist who loses the farm Husaby because her husband plotted to overthrow the king. That sister of Ramborg dies of plague in a (*) convent after she is seduced by Erlend Nikulausson, but still wears the title golden object to her wedding.** This author of *The Master of Hestviken* wrote a trilogy consisting of *The Wreath*, *The Wife*, and *The Cross* about a 14th-century knight’s Catholic daughter. For 10 points, name this Norwegian Nobel-prize-winning author, the creator of Kristin Lavransdatter.

ANSWER: Sigrid **Undset**

<JC, European Literature>

20. **Sergei Lyapunov wrote his Opus 11 in order to “complete” these pieces, which originally did not include any pieces in sharp key signatures. The first editor of this collection referred to the ninth of these pieces as a “bundle of faded love letters.” Later nicknames given by Busoni (“boo-ZOH-nee”) to second and tenth of these pieces, such as “Fusées” and “Appassionata,” are not commonly used. The final version of these pieces removed all stretches larger than a tenth and was dedicated to the composer’s teacher, (*) Carl Czerny (“CHAIR-nee”).** The fourth of these pieces was inspired by a Victor Hugo poem about a Cossack. The eighth of these pieces in C minor is marked Presto furioso and is nicknamed the “Wild Hunt.” For 10 points, name these 12 highly-difficult études for solo piano by Franz Liszt.

ANSWER: **Transcendental Études** [prompt on **études** by Liszt]

<LT, Music>

Bonuses

1. In a Douglas Adams novel adapted from a never-produced *Doctor Who* script, Dirk Gently goes back in time to become a “person from” this location. For 10 points each:

[10] That “person from” this place has become a byword for unwanted interruption during writing. That man from here allegedly interrupted the writing of “Kubla Khan,” leaving only “eight or ten scattered lines and images.”

ANSWER: **Porlock** [or “**person from Porlock**”]

[10] The person from Porlock interrupted this poet of “The Rime of the Ancient Mariner” from completing “Kubla Khan.” He coined the term “suspension of disbelief” in his *Biographia Literaria*.

ANSWER: Samuel Taylor **Coleridge**

[10] This poet of “Not Waving But Drowning” bewailed writer’s block, saying “O Person from Porlock come quickly / And bring my thoughts to an end” in “Thoughts about the Person from Porlock.”

ANSWER: Stevie **Smith**

<JC, British Literature>

2. In some myths, this deity is the mother of the Sirens, who were cursed for not preventing the kidnapping of Persephone. For 10 points each:

[10] Name this deity, who was originally responsible for the art of chorus, but is now more well known for tragedy.

ANSWER: **Melpomene**

[10] Melpomene was a member of this group of nine deities who inspired art, science, and literature. They were sometimes depicted as daughters of Zeus and Mnemosyne (“nuh-MOSS-ih-nee”).

ANSWER: the **Muses** [or **Mousai**; or **Musae**]

[10] The Muses judged a music contest between Apollo and this satyr; while the Muses initially ruled it a draw, Apollo edged this satyr out by singing or playing his lyre upside down and flayed him for his hubris.

ANSWER: **Marsyas**

<MT, Mythology>

3. A sonata by this composer was built around the rising phrase [read slowly] “G, B-flat, E-flat, F-sharp, B-flat, C-sharp” that was created by Pulcinella walking on a keyboard. For 10 points each:

[10] That *Cat Fugue* was composed by Domenico, a member of this family who wrote 555 keyboard sonatas. His father was an operatic composer who used the “Italian overture” and the *da capo* aria, Alessandro.

ANSWER: **Scarlatti** [accept Domenico **Scarlatti** or Alessandro **Scarlatti**]

[10] According to a legend, Scarlatti was eventually unable to perform this virtuosic technique frequently called for in his *essercizi* (“ess-air-CHEET-see”) due to his rotundness. Description acceptable.

ANSWER: **hand crossing** [accept **crossing** the left and right **hands** over each other; or equivalents]

[10] Ralph Kirkpatrick posited that Scarlatti’s sonatas contained this pivotal point, before which the sonata contains its main theme, and after which it modulates away from the home key, and then returns back to it.

ANSWER: **crux**

<JC, Music>

4. This term is often paired with “field” to remove the distinction between subjective and objective in sociology. For 10 points each:

[10] Name this sociological term for the system of dispositions an individual uses to interpret and react to the social world.

ANSWER: **habitus**

[10] The term *habitus* was developed by this sociologist in his book *Distinction: A Social Critique of the Judgement of Taste*. This Frenchman was influenced by Pascal to write his *Pascalian Meditations*.

ANSWER: Pierre **Bourdieu**

[10] In *Distinction*, Bourdieu discusses how having more of this concept allows an individual to have more influence on what constitutes taste in a society. The economic form of this concept titles a work by Karl Marx.

ANSWER: **capital** [or **kapital**; or social **capital**; or cultural **capital**; prompt on *k*]

<MT, Social Science (Sociology)>

5. Hermione Granger claimed that “A lot of the greatest wizards haven’t got an ounce of logic.” Let’s see if that’s true of quizbowlers! For 10 points each:

[10] This term refers to a conditional statement with a false antecedent. The conditional “if pink flamingos are green, then quizbowl is illegal” is true in this sort of way.

ANSWER: **vacuous** truths [or word forms like **vacuously** true]

[10] Answer the following logic puzzle: [read slowly] “If all cats are felines, then all dogs are small. Clifford is a big, red dog. Are all cats felines?” [Ask “do you need me to repeat the question?”]

ANSWER: **no** [accept anything that means “no” or “false” or “this is not true”]

[10] In the previous bonus part, “all” and “there is” are universal and existential types, respectively, of this type of logical expression. These things bind free variables.

ANSWER: **quantifiers** [or **quantification**]

<JK, Philosophy>

6. This diagram is a graphical tool used by astronomers to classify stars. For 10 points each:

[10] Name this diagram whose main sequence contains most stars, including the Sun, and whose y-axis usually plots either luminosity or absolute magnitude.

ANSWER: **Hertzsprung–Russell** diagram [or **HR** diagram]

[10] Variable stars, like cepheids, are found on this narrow, almost-vertical feature of the HR diagram.

ANSWER: **instability strip**

[10] Pulsations in variable stars is often caused by this mechanism, in which radiation is cyclically trapped in a compressed gas in the stellar atmosphere, driving pulsations.

ANSWER: **kappa** mechanism

<AP, Other Science (Astronomy)>

7. This organization was led by a guerilla nicknamed “Red Jesus.” For 10 points each:

[10] Name this former rebel group that fought ORDEN death squads during its country’s civil war. Since the Chapultepec Peace Accords, it has competed against the ARENA party for a majority in the legislature.

ANSWER: **FMLN** [or **Farabundo Martí National Liberation Front**]

[10] This proponent of liberation theology and recently canonized saint was murdered while officiating mass at a hospital chapel on the orders of ARENA leader Roberto d’Aubuisson (“DAHB-wee-sawn”) in 1980.

ANSWER: Óscar **Romero**

[10] Óscar Romero is from this country, where the FMLN currently holds the presidency. This Central American country fought the Soccer War with neighboring Honduras.

ANSWER: **El Salvador**

<AJ, World History>

8. The Ramis and Coata are two of the five major river systems that flow into this lake. For 10 points each:

[10] Name this lake shared by Peru and Bolivia that is considered to be the highest navigable lake in the world by altitude. It is the largest lake in South America by surface area and volume.

ANSWER: Lake **Titicaca**

[10] Along with the Quechua, this ethnic group can be largely found around the basin of Lake Titicaca. Its women are known for wearing bowler hats, and its seven-colored emblem is called the *wiphala* (“wee-PAH-lah”).

ANSWER: **Aymara**

[10] This island, one of the largest in Lake Titicaca, is located just north of the Yampupata Peninsula. The ruins of Pillkukayna are located at the southern end of this island.

ANSWER: Isla del **Sol** [or Island of the **Sun**]

<AJ, Geography>

9. One paper in this field of study attempts to define how long the coast of Britain is, since it gets longer and longer as you try and measure every crinkle in the coastline at smaller length scales. For 10 points each:

[10] Name this branch of mathematics, which focuses on the behavior of dynamic systems that are very sensitive to initial conditions. Mandelbrot wrote about fractals within this field, which discusses the “butterfly effect.”

ANSWER: **chaos** theory

[10] This model system is one of the simplest to exhibit chaotic motion. It lacks the energy to flip over in a region defined by the inequality “ $3 \cos \theta - 1 + \cos 2\theta < 2$,” but it may chaotically do so outside that range.

ANSWER: **double pendulum** [or **Acrobot**; prompt on **pendulum**]

[10] This model system is defined by the differential equation “the second derivative of x , minus μ times the quantity $1 - x^2$ times dx/dt , plus x , equals 0.” It is a simple harmonic oscillator when μ equals zero, but it enters a limit cycle when μ is greater than 0, and it can be formed with an electrical circuit that includes a triode.

ANSWER: **van der Pol** oscillator

<JC, Physics>

10. In this place, the soul confronts its *daena*, which can take the form of a beautiful maiden or a terrifying witch, according to its actions during life. For 10 points each:

[10] Name this place that includes Mount Hara and passes through the halls of Good Thought, Good Word, and Good Deed. It is guarded by two four-eyed dogs.

ANSWER: **Chinvat** Bridge [or **Cinvatô Peretûm**]

[10] In this religion, those souls that successfully cross the Chinvat Bridge are united with Ahura Mazda, the adversary of Angra Mainyu in this religion.

ANSWER: **Zoroastrianism**

[10] Zoroaster himself is said to have composed these 17 hymns contained in the *Yasna*. They are divided into five sections with names like “Bounteous Spirit,” “Best Beloved,” and “Having Happiness.”

ANSWER: **Gathas**

<AP, Religion>

11. Elmer Cowley repeats the phrases “I’ll be washed and ironed” and “I ain’t so queer” after punching a man whom he thinks keeps looking at him. For 10 points each:

[10] Name this collection of short stories loosely structured around characters like the schoolteachers Wing Biddlebaum and Kate Swift and the protagonist George Willard.

ANSWER: **Winesburg, Ohio**

[10] *Winesburg, Ohio* was written by this author of *Windy McPherson’s Son* and *Dark Laughter*.

ANSWER: Sherwood **Anderson**

[10] This first story in *Winesburg, Ohio* begins with a white-mustached writer trying to get a carpenter to make his bed level with his window, then having a dream that inspires him to write the title work about “truths.”

ANSWER: “**The Book of the Grotesque**”

<JC, American Literature>

12. A chemist from this company described placing sebacoyl chloride in an aqueous solution of hexamethylene diamine to seemingly produce the title object from water in her paper “The Nylon Rope Trick.” For 10 points each:

[10] Name this ubiquitous Delaware chemical engineering company that developed many polymers, such as neoprene and Teflon.

ANSWER: **DuPont**

[10] The aforementioned chemist, Stephanie Kwolek, developed Kevlar. Kevlar is a fiber made from a derivative of this compound which can be synthesized by reducing nitrobenzene.

ANSWER: **aniline** [or **phenylamine**; or **aminobenzene**]

[10] Kevlar is an example of this type of polymer, which consist of aromatic polyamides. Twaron is another example.

ANSWER: para-**aramid** [or meta-**aramid**]

<JC, Chemistry>

13. Due to his attempt to record everything that was known, this person became the patron saint of computers and the Internet. For 10 points each:

[10] Name this man who was described by Charles Montalembert as “the last scholar of the ancient world.” His most famous work was a twenty-volume encyclopedia called *Etymologiae*.

ANSWER: **Isidore** of Seville

[10] Isidore’s brother Leander of Seville influenced this group’s King Reccared to convert from Arianism to Catholicism. This group held a total of 30 church councils in their capital at Toledo.

ANSWER: **Visigoths** [prompt on **Goths**]

[10] The Visigothic Kingdom was overthrown by this dynasty’s general Tariq ibn Ziyad. This was the second caliphate formed after the death of Muhammad, and it was eventually overthrown by the Abbasids.

ANSWER: **Umayyad** Caliphate

<AJ, European History>

14. In one work, this man described being drunk as if “my own ghost [was] trying to take its first solo walk outside the body.” For 10 points each:

[10] Name this Turkish author of *My Name is Red* who described Ka investigating a suicide epidemic after a ban on headscarves in *Snow*.

ANSWER: Orhan **Pamuk**

[10] Pamuk wrote this novel about Kemal’s love for his cousin Fusun which claims that “A woman who doesn’t love cats is never going to make a man happy.” Pamuk created a real-life version of this novel’s title place.

ANSWER: *The **Museum of Innocence***

[10] Kemal describes this object falling onto blue sheets as the happiest moment of his life. This perpetually-lost item becomes the first object in the “Museum of Innocence” after Fusun dies in a car crash.

ANSWER: Fusun’s **earring**

<LC, World Literature>

15. At MIT, Linda Griffith connected 10 of these systems together to simulate drug delivery’s stress on the liver. For 10 points each:

[10] Name these microfluidic systems consisting of channels seeded with cells. They are used to mimic namesake units of the body to increase personalized medicine and reduce the need for animal testing.

ANSWER: **organs** on a **chip** [accept, but DO NOT REVEAL, more specific answers like **lung on a chip**, **heart on a chip**]; prompt on more vague answers like **lab on a chip** or **artificial organ** or **bio-MEMS**]

[10] This was the first organ simulated on a chip. That Wyss (“veese”) Institute chip featured a layer of epithelial cells between air and blood to mimic this organ’s alveoli, and vacuum chambers to simulate the diaphragm.

ANSWER: **lung**

[10] To simulate the pulmonary form of this disease, interleukin-2 was added to that first lung-on-a-chip. This condition generically is the buildup of fluid in tissue, and in the lungs it can occur in a “flash” form.

ANSWER: pulmonary **edema**

<JC, Biology>

16. Bandits of this ethnicity known as klephts carried out pro-independence insurgencies from the mountains. For 10 points each:

[10] Name this Mediterranean ethnicity whose members like Alexander Ypsilantis sparked a revolution against the Ottoman Empire in the Peloponnese.

ANSWER: **Greeks**

[10] Ypsilantis belong to this influential class of Istanbul Greeks that took its name from the neighborhood where the Ecumenical Patriarch resided. An era named for these people marks their rule of the Danubian Principalities.

ANSWER: **Phanariots**

[10] The large Greek population still living in Anatolia after World War I was forcibly exchanged with Turks in Greece by the terms of a convention signed in this city during negotiations to replace the Treaty of Sèvres (“SEV”).

ANSWER: **Lausanne**

<NR, European History>

17. Every paragraph in the first chapter of a novel by this author begins with “For thirty-five years now,” and that phrase is repeated throughout that novel. For 10 points each:

[10] Name this Czech author of *Too Loud a Solitude*, a novel about a man named Hanta who obsessively saves books from being compacted. He wrote about the tribulations of a hotelier in *I Served the King of England*.

ANSWER: Bohumil **Hrabal**

[10] This Czech author wrote the novel *The Unbearable Lightness of Being*.

ANSWER: Milan **Kundera**

[10] A postcard that says “Optimism is the opium of mankind! A healthy spirit stinks of stupidity! Long live Trotsky!” is one of the titular things that ruins Ludvík’s life in this Kundera novel, his first.

ANSWER: *The **Joke*** [or **Žert**]

<MT, European Literature>

18. Name some artists inspired by Shakespeare, for 10 points each.

[10] This artist created an extremely creepy fairy retinue for *A Midsummer Night’s Dream* in his painting *Titania and Bottom* and a terrifying-looking *Lady Macbeth Seizing the Daggers*, but is better known for *The Nightmare*.

ANSWER: Henry **Fuseli**

[10] This non-Millais Pre-Raphaelite artist did many studies of Ophelia rather ominously sitting on a tree branch over a lily pad-covered river. He also branched out into Tennyson fan art with *The Lady of Shalott*.

ANSWER: John William **Waterhouse**

[10] This Swiss Neoclassical artist of *Cornelia Pointing to Her Children as Her Treasures* depicted Shakespearean actor David Garrick grasping a chair and also showed Miranda and Ferdinand in the woods in *The Tempest*.

ANSWER: Angelica **Kauffman**

<JC, Painting>

19. This enterprise’s original financier, Sir Humphrey Gilbert, drowned near the Azores returning from Newfoundland. For 10 points each:

[10] Name this “Lost Colony” founded by Walter Raleigh whose colonists disappeared without a trace during the first Anglo-Spanish War.

ANSWER: **Roanoke** Colony

[10] This artist and Governor of Roanoke made watercolor sketches of the island and its native Algonquians. On his return from England, this man learned his granddaughter Virginia Dare had disappeared like the rest of the settlers.

ANSWER: John **White**

[10] One Virginia senator with this surname nicknamed “of Roanoke” led the Tertium Quids and dueled Henry Clay. Another Virginia politician with this surname served as the first Attorney General.

ANSWER: **Randolph** [accept John **Randolph** or Edmund **Randolph**]

<NR, American History>

20. Part of a sculpture by this artist was eaten by members of Penn Quizbowl. For 10 points each:

[10] Name this Cuban-American artist who represented the death of his partner Ross from AIDS via billboards showing only an empty bed, as well as a dwindling pile of hard candies which visitors can consume over time.

ANSWER: Felix **Gonzalez-Torres**

[10] *Food Burger*, an enormous sculpture by this artist, is less edible since it is made of rubber and canvas. This artist of an upside-down ice cream *Dropped Cone* created many idiosyncratic sculptures such as *Lipstick Ascending on Caterpillar Tracks* and Penn’s giant “button.”

ANSWER: Claes **Oldenburg**

[10] “The Bean” is the nickname of the extremely inedible, shiny, legume-shaped *Cloud Gate*, an Anish Kapoor work in this city’s Millenium Park. This city contains Alexander Calder’s *Flamingo* and the Sears Tower.

ANSWER: **Chicago**

<JC, Other Arts (Sculpture)>

