

1. Characters in this novel refer to sitting in lounge chairs on a terrace as "living horizontally". This novel's protagonist decides that "man is the master of contradictions" and dreams about witches slaughtering a child in the chapter "Snow". One character in this novel is completely unable to finish his sentences; that man, the suicidal malaria patient Mynheer Peeperkorn, is introduced as the new lover of Madame (*) Chauchat. An anticlimactic duel results in the death of neither Settembrini nor the Jesuit Leo Naphta in this novel, whose protagonist initially plans on a brief visit to his cousin Joachim. For 10 points, name this novel in which Hans Castorp spends seven years in the *Berghof* sanatorium, a work of Thomas Mann.

ANSWER: The <u>Magic Mountain</u> [or Der <u>Zauberberg</u>]

<Bailey>

2. These cells take on a tissue-paper appearance in patients who cannot break down glucocerebrosides in a condition named for Gaucher. Langhans giant cells are generated by fusing several of these cells together. These cells are responsible for storing iron in the form of hemosiderin. These cells express CD68 and MAC-1 on their surface. In atherosclerosis, these cells turn into foam cells, and those present in the liver are a key part of the reticulo-endothelial system and are named for (*) Kupffer. These cells originate from peripheral blood monocytes, and like dendritic cells they are responsible for using MHC class II to present antigens to helper T cells. For 10 points, name these immune cells whose name means "large eaters".

ANSWER: macrophages

<Mukherjee>

3. In a prose work, this author described how "the tom-tom cries and the tom-tom laughs" and noted "We build our temples for tomorrow". One of his poems describes a time when "the stars went out and so did the moon". His poem "Hard Luck" provided the title of his collection *Fine Clothes to the Jew*, which was published two years after his "discovery" by Vachel (*) Lindsay. He described a man who "slept like a rock or a man that's dead" after playing the piano in a club on Lenox Avenue in one poem, while in another, the speaker declares "I bathed in the Euphrates when dawns were young. I built my hut near the Congo and it lulled me to sleep". For 10 points, name this Harlem Renaissance poet who wrote "The Weary Blues" and "The Negro Speaks of Rivers".

ANSWER: Langston **Hughes** [or James Mercer Langston **Hughes**]

<Bentley>

4. This artist's first major work has a factory's smokestacks in the background to indicate that its subjects are lower-class, contrasting with two wealthy people participating in a boat race in the background. This artist painted a woman dressed in yellow balancing on a white horse in *The Circus* and depicted three naked women in a room in (*) *The Models*. This artist painted a boy in a swimsuit and red hat cupping his hands over his mouth in a painting of bathers; another painting by this artist shows several women holding umbrellas and a woman holding a monkey on a leash. For 10 points, name this pointillist painter of *Bathers at Asnieres* and *Sunday Afternoon on the Island of La Grande Jatte*.

ANSWER: Georges Seurat

<Berend>

5. Finding the time-derivative of the expectation value of this quantity gives Ehrenfest's theorem. In Lagrangian mechanics, cyclic coordinates can be used if the generalized form of this quantity is invariant. A relativistic form of this quantity has one component equal to E over c and the other three equal to the classical components. This quantity is conserved due to the Lagrangian's translational invariance according to (*) Noether's theorem. This quantity divides Planck's constant to find de Broglie wavelength. The change in this quantity is equal to the impulse. This quantity is conserved in both elastic and inelastic collision. For 10 points, name this quantity equal to mass times velocity. ANSWER: linear momentum [accept p]

<Mukherjee>

6. As a state legislator in 1784, this man introduced a bill for the immediate outlawing of slavery. In one of this man's efforts, he leased the Bastrop Tract on the Ouachita River and used an island owned by Harman Blennerhassett to train troops. He was imprisoned in Fort Soddet after the discovery of letters to Anthony Merry and the Marquis of Casa Yrujo. This man conspired with James (*) Wilkinson in an attempt to conquer Spanish territories and rule over a new empire, leading to a scandalous 1807 treason trial. The Twelfth Amendment was passed after this man nearly defeated Thomas Jefferson in an election that instead saw him become Vice-President. For 10 points, name this man who killed Alexander Hamilton in a duel.

ANSWER: Aaron Burr

<Weiner>

7. In one work by this composer, the chorus praises different forms of sherry while dancing a cachucha. In one work by this composer, the Duke of Plaza-Toro teaches a gavotte to Marco and Giuseppe Palmieri, who wish to transform Barataria into a republic. A trio by him celebrates the fact of one character being born on February 29th as "a most ingenious (*) paradox". In that work by him, Ruth mishears the word "pilot" and Mabel sings "Poor Wandering One". In one work by this composer of *The Gondoliers*, the singer struggles to find rhymes for "strategy" and "din afore" and declares himself the "very model of a modern Major-General". For 10 points, name this composer of *The Pirates of Penzance*, who collaborated with librettist W.S. Gilbert.

ANSWER: Sir Arthur (Seymour) Sullivan

<Lawrence>

8. This man's ideas influenced George Leonard's Human Potential Movement. This man included "justice", "aliveness", and "effortlessness" on his list of "B-values", which are achieved through "metamotivation". This man borrowed a term from Frank Manuel to describe fear of success, which he called the "Jonah complex." This author of *The Farther Reaches of Human Nature* claimed that certain "transient moments" constitute (*) "peak experiences" that hint at the highest possible level of fulfillment. He developed a scheme that starts with examples such as food and air in the "physiological" category and goes through five levels, the last being "self-actualization." For 10 points, name this psychologist who ranked human desires into a "hierarchy of needs."

ANSWER: Abraham Maslow

<Weiner>

9. These animals' blood was dumped on late Roman priests of Cybele or Magna Mater in a baptism-like ritual. One of these creatures with distinctive white spots on its forehead and foreleg was slain by Cambyses II when he invaded Egypt; that one, later syncretized with Osiris, was called Apis and was sacrosanct in Memphis. In the Roman Empire, statues of this creature with a knife held to its neck were made by the cult of (*) Mithras, a solar deity who slew this animal. A white one named Nandi is the mount of Shiva; in Greek myth, a Cretan and Marathonian one fought Theseus and Heracles. For 10 points, name these male animals whose head appeared on the Minotaur.

ANSWER: **bull**s [or **cattle**; do not accept "cows"]

<Jackson>

10. A speech proclaimed from one of these objects warned of those who would "bring eternal night" and was delivered in front of a parliamentary building called the White House. That speech given from one of these objects led to the Belavezha Accords, and was delivered in support of Gorbachev by Boris Yelstin to stop a 1991 coup. Roberto Souper's failed coup against Salvador (*) Allende in Chile is named for these objects, many of which faced off at Checkpoint Charlie in the Berlin Crisis of 1961. First appearing at Flers-Courcelette in the Somme offensive, 8000 of them took part in Operation Citadel at the Battle of Kursk. A lone man was photographed in front of four of these objects in Tiananmen Square in 1989. For 10 points, name these armored military vehicles.

ANSWER: Tanks

<Bentley>

11. In one novel by this author, Johannes and Matthew get off scot-free after a robbery gone wrong. The jealous Sergeant Steyn resents the protagonist of another of his novels. That novel is narrated by Sophie, who describes the affair between Esther's caretaker Stephanie and the policeman Pieter van Vlaanderen. Another of this author's characters searches for Gertrude after leaving a village where Napoleon (*) Letsitsi teaches agriculture. Theophilus Msimangu appears in that novel by this author, in which Mr. Carmichael works *pro Deo* to defend Arthur Jarvis's murderer, a boy named Absalom who is the son of Reverend Stephen Kumalo. For 10 points, name this South African author of *Too Late the Phalarope* and *Cry, the Beloved Country*.

ANSWER: Alan Stewart Paton

<Mehigan>

12. Chinese pirate Limahong made two attempts to conquer this city, but was shocked when its peasants under Galo reacted angrily to his murderous looting. Its modern incarnation was founded after negotiations with the "Three Rajahs" by Miguel Lopez de Legazpi. Andres de Urdaneta discovered winds allowing passage from this city to Acapulco by its namesake Galleons. Andres Bonifacio founded the (*) Katipunan in this city, which revolted in 1896 after the execution of José Rizal. A heart attack was the only casualty for a force that defeated Patricio Montojo off the coast of this city, whose occupation in 1898 enraged Emilio Aguinaldo. Commodore George Dewey won a Spanish-American War victory in the namesake Bay of, for 10 points, what capital of the Philippines? ANSWER: Manila

13. It's not Mithraism, but a treatise of this sect specifies seven levels of purification analogized to relay chariots. This tradition once consisted of eighteen schools of thought but now has only one. Ascetics of this religious group cannot eat solid food after midday or accept money gifts once their time as a samanera ends. This sect rejects the idea of bardo limbo, and specifies the "once-returner" and "stream-enterer" among four levels of attainment. Adherents of this tradition only use scriptures written in the (*) Pali language, and try on their own to become uncorrupted arhats by following the Tipitaka and meditating. For 10 points, name this "Way of the Elders" found in Burma and Thailand, a more traditional sect that reveres Siddartha Gautama.

ANSWER: Theravada Buddhism [prompt on Buddhism; prompt on Hinayana Buddhism]

<Jackson>

14. A definite matrix with this property has a unique Cholesky factorization and possesses eigenvalues which all have this property. These kinds of numbers in two's complement are expressed with a leading zero. The signum function returns a value of one for these types of numbers. With the exception of the discontinuity, the Heaviside function returns a value of 1 for these kinds of numbers, which is also the domain for the non-complex natural (*) logarithm function. For these kinds of numbers the floor function is merely the truncation function. A function that is concave upwards has a curvature that takes on these values. For 10 points, with the exception of zero, the output of the absolute value function are what numbers, the opposite of negative numbers?

ANSWER: positive [accept logical equivalents, such as being greater than zero]

<Jose>

15. These things appear internally to members of a "practice," according to a book which likens our era to a post-science dark age. Alasdair McIntyre's book, titled After [this quality], says the polis is the best community for pursuing it. Sophrosune is among these things, and another one, phronesis, is needed to define any others properly. One analogy compares them to a target which helps archers aim. Both deontology and consequentialism oppose a type of (*) "ethics" named for these things. They help people achieve a state of eudaimonia, emerge from habit, and lie between extremes at the "golden mean", according to Aristotle. For 10 points, name these character traits which make people good.

ANSWER: virtues [or excellences; or arete; prompt on characters or character traits; prompt on strength of character; prompt on goods]

<Jackson>

16. This composer wrote a piano suite beginning with the movements "The Oak" and "The Humoreske" based on music he wrote for a Shakespeare play. Donald Francis Tovey used the phrase "a polonaise for polar bears" to describe the finale of his *Violin Concerto in D minor*, which was premiered by Jascha Heifetz. Besides incidental music for *The Tempest*, other incidental music he wrote includes some for the play (*) *Kuolema*, which includes his *Valse Triste*. In one piece by him, strings depict shimmering water while an English horn soloist depicts the title bird swimming in the underworld. For 10 points, name this composer of the Kalevala-inspired *Lemminkainen Suite* and of *Finlandia*.

ANSWER: Jean Sibelius [or Johan Julius Christian Sibelius]

<Lawrence>

17. The Tanabe-Sugano diagram for this many d electrons is the first with a vertical line discontinuity. The "oxo wall" states this is the maximum number of valence d-electrons in oxo complexes. A linear triatomic molecule has this many vibrational degrees of freedom. The cycloalkane with this many carbon atoms has two butterfly conformers. Four of the five 3d orbitals, but not the 3d sub z-squared orbital, have this many (*) lobes. This is the lowest principal quantum number for f-orbitals. The first binary compound of a noble gas consists of xenon bonded to this many fluorine atoms. This is the number of ligands in molecules with the see-saw and square planar geometries. For 10 points, give this number, which also gives the atomic number of beryllium.

ANSWER: four

<Mukherjee>

18. In the book 1493, Charles C. Mann argues that the impact of this event was exacerbated by a move away from the use of lazy beds. The Battle of Ballingarry was fought during this event, which Cecil Woodham-Smith blamed on Charles Trevelyan. "Souperists" took advantage of this event in order to convert children to Protestantism. So-called "coffin ships" were used to (*) escape the country during this event. Absentee landlords and extreme subdivision of land contributed to this event, which prompted Robert Peel to rescind the Corn Laws. This event saw a certain variety of lumper devastated by *Phytophthora infestans*, a fungus-like organism. For 10 points, name this 1840s event in which as many as a million Irish peasants starved due to crop loss.

ANSWER: Irish **Potato Famine** [or **Great Famine** or **Great Hunger** of **Gorta Mor**]

<Bentley>

19. The "correction" of this river to make it straighter was achieved by an engineer named Tulla. Efforts to clean this river began in earnest after a chemical spill in 1986 caused by the Sandoz fire. The Stork Plan has focused on reforesting land around this river's main distributary, the Waal. The most polluted tributary of this river, the "biologically dead" Emscher River, flows through Dortmund. A 1976 convention to protect this river from pollution was signed in (*) Bonn, a city south of its confluence with the Ruhr. This river, which marks the eastern border of Alsace, meets the Main between Strasbourg and Cologne. For 10 points, name this river that rises in the Swiss Alps, flows through western Germany, and empties into the North Sea in the Netherlands.

ANSWER: **Rhine** River [or Fluss **Rhein**; or Rivière le **Rhin**; or Fleuve **Rhin**; or Rivier **Rijn** ("RHAYN"); or Rivier de **Rijn** or Flum **Rain**]

<Wasserman>

20. A poet with this surname wrote of a "dead man" who "nobody heard" in her poem "Not Waving but Drowning". Another author with this surname wrote about "Dream City" and Barack Obama in the essay "Speaking in Tongues" and penned a novel about the friendship of Archie Jones and Samad Iqbal in which Marcus Chalfen studies the FutureMouse. The author of White Teeth shares this last name with Rezia, a character whose shell-shocked husband (*) Septimus commits suicide prior to Mrs. Dalloway's dinner party. Another character with this surname joins the Brotherhood alongside a member of the Junior Anti-Sex League and works for the Ministry of Truth before O'Brien betrays him to Big Brother. For 10 points, give this surname of Winston from Orwell's 1984.

ANSWER: <u>Smith</u> [accept Stevie <u>Smith</u>, Zadie <u>Smith</u>, Lucrezia "Rezia" <u>Smith</u>, Septimus Warren <u>Smith</u>, or Winston <u>Smith</u>]



21. Townspeople respond to this event by throwing the child of a prostitute into a well as a sacrifice to Hel in the novel *The Cross*, whose protagonist Kristin Lavransdatter joins an abbey during it. Such details as the placement of a severed head in a pot of basil suggest that the love between Lorenzo and Lisabetta is a metaphor for this event. One author claimed that many women became less chaste due to the necessity of using male servants during this event in the introduction to a collection about Dioneo, (*) Filostrato, and Fiammetta, who flee from Florence to escape it and spend two weeks telling stories. For 10 points, name this historical event that shaped the frame story of the *Decameron* and wiped out half the population of Medieval Europe.

ANSWER: the <u>Black Death</u> [or the <u>Black Plague</u>; prompt on "the <u>Plague</u>" or "the <u>Bubonic Plague</u>" or " <u>Yersinia</u> Pestis"]

<Gupta>

22. This is the order of phase transitions that are continuous and break no symmetries. The ionization energy can be derived from Rydberg's formula by setting the principal quantum number of the final state to this value. In quantum field theory, renormalization is used to remove points with this value. The Rayleigh-Jeans law predicts that the energy of a blackbody approaches this (*) value at low wavelengths. When considering the potential energy of a group of point charges, the energy at this point is set to zero. This is the density of the singularity at the center of a black hole, because it has a large mass and zero volume. For 10 points, name this value, which can be obtained by dividing by zero.

ANSWER: **infinite** [accept equivalents]

<Mukherjee>

23. This man's earthquake-resistant tomb sits atop a six-layered step pyramid and was restored by Aristobulus on orders from Alexander the Great. Much of this man's propaganda was aimed at casting himself as a better ruler than Nabonidus, whom he defeated at Opis. His daughter Atossa and the nobleman Otanes helped kill a Magi named Guatama who was masquerading as this man's son Bardiya. Xenophon wrote a (*) namesake biography of this man, who gained access to the Aegean by defeating Croesus of Lydia at Thymbra and established capitals at Ecbatana and Pasargadae. Harpagus's defection helped this man overthrow Astyages to supplant the Medes. Known for a namesake Cylinder, for 10 points, name this father of Cambyses II, an Achaemenid who founded the Persian Empire.

ANSWER: Cvrus the Great [or Cvrus II]

<Bentley>

24. This man's government was opposed by his one-time vice president and author of *The Unperfect Society*, Milovan Djilas. He was appointed head of the KPJ at the Fifth Land Conference in 1940, and Allied pressure forced the exiled King Peter II to recognize his government. The predecessor of his UDBA secret police arrested Draža Mihailovi?, a leader of the Chetniks, in 1946. Savka Dab?evi?-Ku?ar was a leader of a "spring" movement against this man in the (*) 1970s. His country was expelled from the Cominform in 1948, and he later became the First Secretary General of the Non-Aligned Movement. This man's federalized state of Slovenes, Croats and Serbs fell apart after the fall of Communism. For 10 points, name this longtime ruler of Yugoslavia.

ANSWER: Josip Broz <u>Tito</u> [or Josip <u>Broz</u>]



1. This law must hold for readings on thermometers to be valid. For 10 points each:

[10] Name this law, which states that if A and B and C are both in thermal equilibrium, A is in thermal equilibrium with C.

ANSWER: 0th law of thermodynamics

[10] Heat can be transferred in fluids through this process, which consists of bulk motion between areas of different temperatures.

ANSWER: convection

[10] A monatomic gas will have a heat capacity at constant volume equal to the number of moles of gas, times the ideal gas constant, times *this number*, which is related to the degrees of freedom experienced by the gas.

ANSWER: <u>3/2</u> [or <u>1.5</u>]

<Nutter>

- 2. The speaker of this poem "fell into the State" and "hunched in its belly" till his "wet fur froze". For 10 points each:
- [10] Name this Randall Jarrell poem whose narrator describes waking "to black flak and the nightmare fighters". and being washed "out of the turret with a hose" after the title event.

ANSWER: "The **Death of the Ball Turret Gunner**"

[10] One of Jarrell's critical essays is a line-by-line reading of this 1915 poem, which describes an argument between a husband and wife. Jarrell notes that it "starts on the stairs but continues in the doorway", and at its end, the husband vows to "follow and bring [the wife] back by force".

ANSWER: "Home Burial"

[10] "Home Burial" can be found in this poet's collection *North of Boston*, which also contains his "Death of the Hired Man" and "Mending Wall", but not "The Road Not Taken".

ANSWER: Robert Lee Frost

<Mehigan>

- 3. In myocytes, these are referred to as sarcolemma. For 10 points each:
- [10] Name this part of a cell, which is comprised largely of two leaflets phospholipids. It is described by the fluid mosaic model.

ANSWER: cell membrane

[10] These signalling molecules are made from cell membrane lipids. These eicosanoids are produced by cyclooxygenases, which in turn can be inhibited by NSAIDs.

ANSWER: **prostaglandin**s [prompt on **eicosanoids**]

[10] Prostaglandins can use this form of signaling, which can be described as a cell releasing a hormone to act on itself.

ANSWER: autocrine

<Morlan>

- 4. The boom in exporting this substance in the 19th century allowed Peru to repay its national debt under President Ramon Castilla. For 10 points each:
- [10] Identify this substance, whose abundance on the Chincha Islands sparked a war between Peru, Chile and Spain. It lost much of its value after the discovery of the Haber-Bosch process.

ANSWER: **Guano** [accept things like sea **bird dung**; prompt on "saltpeter"]

[10] Chile gained the upper hand in the guano export trade after winning this 1879-1883 conflict with Bolivia and Peru. Also called the Saltpeter or Guano War, it witnessed the naval battle of Iquique and was named for a large body of water.

ANSWER: War of the **Pacific** [or Guerra del **Pacifico**]

[10] Another disputed South American resource was the silver mine at this the high-elevation Bolivian city, home to a Spanish mint. Thousands of Indians were poisoned by mercury from the patio process at this site.

ANSWER: Potosi

<Bentley>

- 5. Psalm 23 begins by proclaiming that the Lord holds this role in relation to the psalmist, then says "I shall not want." For 10 points each:
- [10] Name this profession which David performed for his father. Moses used a staff for this job before he saw the burning bush, and the Latin word "pastor" literally refers to these people.

ANSWER: **shepherd**s [accept any answer indicating a **herd**er of **sheep**]

[10] David left his shepherd duties to play his harp for this tormented king of Israel. This man's son Jonathan became David's best friend.

ANSWER: Saul

[10] This Old Testament prophet from Tekoa was a shepherd and grower of figs. His namesake book followes Joel and addresses the rich people of Samaria for their indifference to the poor.

ANSWER: Amos

<Cheyne>

- 6. The female protagonist of this work tries to forget her love interest while showering in "I'm Gonna Wash That Man Right Out of My Hair". For 10 points each:
- [10] Name this 1949 musical in which Nellie and Emile sing "Some Enchanted Evening", and Lieutenant Cable explains the origins of prejudice in "You've Got To Be Carefully Taught".

ANSWER: South Pacific

[10] This American composer wrote *South Pacific* in collaboration with librettist Oscar Hammerstein II, with whom he also collaborated on *The Sound of Music* and *Oklahoma*

ANSWER: Richard (Charles) Rodgers

[10] Oklahoma unusually opens with this solo song for Curly McClain that describes corn "as high as an elephant's eye".

ANSWER: "Oh, What a Beautiful Mornin'"

<Lawrence>

- 7. It originally applied only to cases where a plurality of causes was posited without necessity for only one effect. For 10 points each:
- [10] Name this principle of hypothesis formation, sometimes called the principle of parsimony. It encourages the adoption of simpler theories over more complex ones.

ANSWER: Occam's razor

[10] William of Ockham was in this medieval intellectual movement. It included Aquinas and Duns Scotus, who ran disputations over theology at places such as Oxford.

ANSWER: **Scholastic**ism [or **Scholastic** philosophy; or "**Schoolmen**"]

[10] Occam is often attributed this stance, the belief that universals don't exist and commonalities are drawn between individual objects by using the same word to describe them.

ANSWER: **nominalism** [or **nominalist** school]

<Jackson>

- 8. Voting on whether to enforce this practice involved writing a name on a piece of broken pottery. For 10 points each:
- [10] Identify this Athenian practice of exiling an individual for 10 years.

ANSWER: Ostracism

[10] Some accounts state that this man introduced an alternative method for ostracism, only to have it used against him. This son of Megacles was a rival of Isagoras and transferred power in Athens from a clan-based system to one based on citizenship.

ANSWER: <u>Cleisthenes</u> of Athens [or <u>Clisthenes</u>]

[10] Some 190 *ostraka* bearing the name of this man - apparently written by a single person - have been found in the Agora of Cerameicus. This general and statesman is best known for winning the Battle of Salamis.

ANSWER: Themistocles

<Bentley>

- 9. *The Slave Bangle* and *The Perfume of the Lady in Black* are among this author's many works starring the detective Joseph Rouletabille. For 10 points each:
- [10] Identify this French author of the *Cheri Bibi* series. In a climactic scene from his most famous novel, the title character kidnaps The Persian and Raoul, the Viscount of Chagny.

ANSWER: Gaston Louis Alfred Leroux

[10] In this novel, Leroux's most famous, the masked Ghost demands that Box Five continually be reserved for him and that Christine Daaé receive prominent parts, and later drops a chandelier on the audience at the Palais Garnier. It was made into a popular Andrew Lloyd Webber musical.

ANSWER: The **Phantom of the Opera** [or Le **Fantome de l'Opera**]

[10] Joseph Rouletabille also appears in a novel titled for the mystery of a room of this color. This color also appears in the title of a short story in which the narrator's husband John makes her undergo the Weir Mitchell's "rest cure".

ANSWER: <u>vellow</u> [accept "The <u>Mystery of the Yellow Room"</u> or "The <u>Yellow Wallpaper"</u>]

- 10. This painting is located in California's Huntington Gallery, where it hangs opposite a painting by Thomas Lawrence called *Pinkie*. For 10 points each:
- [10] Identify this 18th century portrait of a youth, believed to be Jonathan Buttall, who holds a black feathered hat at his side.

ANSWER: The Blue Boy

[10] The Blue Boy was painted by this English artist, the longtime rival of Joshua Reynolds.

ANSWER: Thomas **Gainsborough**

[10] This painting by Gainsborough depicts a married couple and their dog beside a tree on the left side of the painting, while a grassy meadow stretches into the distance on the right.

ANSWER: Mr. and Mrs. [Robert] Andrews

<Rosenberg>

- 11. Identify the following about revenge plays, for 10 points each.
- [10] The title character of this Shakespeare play gets his revenge on King Claudius, but dies for his trouble. So do Ophelia, Gertrude, Laertes, Polonius, and others--it gets messy.

ANSWER: **Hamlet**, Prince of Denmark

[10] In this Thomas Kyd drama, the ghost of Don Andrea and the personification of Revenge form the chorus and watch Hieronimo and Bel-Imperia engineer the murder of Balthazar.

ANSWER: The **Spanish Tragedy**; or Hieronimo is Mad Againe

[10] Spain was also the setting for *The Spanish Gipsy*, written by Thomas Middleton, William Rowley, and possibly this other author. He definitely wrote a play about Giovanni and Annabella's incestuous relationship titled *'Tis Pity She's a Whore*.

ANSWER: John Ford

<Bentley>

- 12. This man fell in love with Scylla, but when he went to Circe to ask for help, the witch fell in love with him. For 10 points each:
- [10] Name this man who was transformed into a sea god when he consumed a magical plant growing in the water.

ANSWER: Glaucus

[10] This mortal sister of Androgeus also had a brother named Glaucus. This princess of Crete stayed on the isle of Naxos, where she eventually became Dionysus' wife.

ANSWER: Ariadne

[10] Ariadne had been left on Naxos by this Athenian hero, who used her golden thread to trace his way back out of the Labyrinth.

ANSWER: Theseus

<Silverman>

- 13. As Commander-in-Chief, this man played a major role in putting down the 1917 Army mutinies. For 10 points each:
- [10] Name this French general who commanded the defense at the Battle of Verdun and led the collaborationist Vichy regime during World War II.

ANSWER: Philippe Petain [or Marshal Henri Philippe Benoni Omer Joseph Petain]

[10] In 1918, Allied forces were reorganized such that this man became overall commander of the nations' forces, eventually accepting the Germans' surrender.

ANSWER: Ferdinand Foch

[10] Foch famously counterattacked at this 1914 battle outside of Paris. French victory during it stopped the German's Schlieffen Plan offensive and set the stage for prolonged trench warfare.

ANSWER: **First** Battle of the **Marne** [or **Premiere** Bataille de la **Marne**, prompt on partial answer]

<Nutter>

- 14. This man's students included Alban Berg and Anton Webern. For 10 points each:
- [10] Identify this Austrian composer who pioneered atonal music through the method of twelve-tone composition.

ANSWER: Arnold Schoenberg

[10] One atonal piece by Schoenberg is this setting of poems about a character from the *commedia dell'arte*. The vocalist is accompanied by a quintet and uses a technique halfway between speaking and singing called "*Sprechstimme*."

ANSWER: Dreimal sieben Gedichte aus Albert Girauds <u>Pierrot Lunaire</u>, Op. 21 [or <u>Moon-drunk Pierrot</u>; or <u>Pierrot in the Moonlight</u>]

[10] After Schoenberg's passing, this French composer wrote the essay "Schoenberg is Dead" and urged avant-garde composers to use Webern as their model rather than Schoenberg. He composed *The Hammer without a Master* and succeeded Leonard Bernstein as music director of the New York Philharmonic.

ANSWER: Pierre Boulez

<Rosenberg>

- 15. Based on the standard deviation of these phenomena, Robert Lucas estimated their welfare cost to be less than one tenth of one percent of annual consumption. For 10 points each:
- [10] Name these fluctuations of production and consumption over a period of time.

ANSWER: business cycles

[10] This theory views business cycles as caused by productivity shocks rather than inefficient markets failing to clear. Relatively small shocks can have larger effects, depending on how people value their leisure.

ANSWER: **real business cycle** theory [or **RBC** theory]

[10] Real business cycle theory was partly in response to empirical evidence suggesting shocks to this value weren't very important. This value is the sum of investment, consumption, government spending and net exports and determines output in the short run.

ANSWER: <u>aggregate demand</u> [prompt on <u>demand</u>]

<Bailey>

- 16. This poem's speaker tells of coming "through many nations and over many seas" to perform "these wretched rites of death". For 10 points each:
- [10] Identify this poem whose speaker offers "sad gifts covered in tears" to his deceased brother's "mute ashes". It ends with the line "Now and forever, brother, hail and farewell!"

ANSWER: "Ave Atque Vale" [accept Carmen 101; accept but DO NOT OTHERWISE REVEAL "Catullus 101"; accept "Multas per gentes et multa per aequora vectus"]

[10] "Ave Atque Vale" was written by this sparrow-eulogizing Roman poet, who was also capable of some amazing vulgarity. Many of his poems, including one that pleads "let us live and love", were addressed to Lesbia.

ANSWER: Gaius Valerius Catullus

[10] Catullus also wrote a memorable elegiac couplet that opens with a declaration that he does these two things. Catullus then notes that he doesn't know why he does them, but he feels it, and it crucifies him.

ANSWER: <u>hate</u> and <u>love</u> [accept "I <u>hate</u> and I <u>love</u>" or "<u>Odi</u> et <u>amo</u>"; accept word forms of each word; both answers are required]

<Mehigan>

- 17. Name these African countries where coups recently took place, for 10 points each.
- [10] Amadou Toumani Touré was overthrown in March 2012 in this country after he failed to control the Tuareg rebels who sought to establish an Islamic state in Azawad, which would have included Timbuktu.

ANSWER: Republic of Mali

[10] Michel Djotodia deposed François Bozizé in April 2013 in this country, where the Seleka coalition of rebels was accused of widespread looting.

ANSWER: Central African Republic [accept CAR]

[10] Manuel Serifo Nhamadjo, who was polling third, was elevated to the presidency of this former Portuguese colony in April 2012 in a coup against leading candidates Carlos Gomes Junior and Kumba Iala.

ANSWER: Republic of **Guinea-Bissau** [do not accept or prompt on "Guinea"]

<Weiner>

- 18. Name these politicians of the Confederate States of America, for 10 points each:
- [10] After serving as Secretary of War under Pierce, this former Mississippi senator was elected president of the Confederacy.

ANSWER: Jefferson Finis **Davis**

[10] This Jewish lawyer and senator from Louisiana served as Attorney General, Secretary of War, and Secretary of State of the C.S.A. He repeatedly sought recognition from Britain and France.

ANSWER: Judah Philip **Benjamin**

[10] This senator from Florida went on to serve as the Confederate Secretary of the Navy, where he oversaw the construction of ironclads like the *Merrimack*, commerce raiders like the *Alabama*, and the submarine *Hunley*.

ANSWER: Stephen Russell Mallory

<Wasserman>

- 19. The order of the terms in one of these constructs is given by the Aufbau principle for lighter elements. For 10 points each:
- [10] Name these constructs which describe how the electrons arrange themselves in the orbitals of atoms. For oxygen, this construct is "1s2 2s2 2p4"

ANSWER: electron configuration

[10] Electron configurations for large atoms can be abbreviated by putting the symbol for one of these elements in square brackets, then proceeding with the electron configuration for the remaining electrons.

ANSWER: **noble gas**ses [or group **18**, or group **8A**, prompt on group **8** but DO NOT prompt or accept group "8B"]

[10] If copper followed the Aufbau principle, its electron configuration would end in 4s2 3d9. Name the real last two terms of copper's electron configuration.

ANSWER: 4s1 3d10

<Busse>

- 20. Answer some questions about object-oriented programming, for 10 points each.
- [10] These functions are used to instantiate an object. In Java, they share their name with the class, and they're the opposite of destructors.

ANSWER: constructors

[10] When performing this operation on an object, it is important to know if the used method is deep or shallow. In C++, a special type of constructor and overloaded assignment operators can be used to do a form of this.

ANSWER: **copy** [or **clone**; or **dup**licate]

[10] Also known as ad-hoc polymorphism, this feature of object-oriented languages allows multiple functions to share the same name but have different parameters.

ANSWER: operation <u>overloading</u> [or function <u>overloading</u> or method <u>overloading</u>]



- 21. Detroit mayor John W. Smith and sheriff Edward Stein were once arrested in one of these locations. For 10 points each:
- [10] Identify these institutions, also called Blind Pigs, which were supplied by men like George Remus.

ANSWER: **Speakeasies** [or **Speakeasy** or **Blind Tiger**; prompt on "bar" or "illegal bar" or "places that sell alcohol"]

[10] Speakeasies were a fixture of this period of American history, when alcohol was banned by the Volstead Act passed after the ratification of the 18th Amendment.

ANSWER: **Prohibition** of Alcohol_Era

[10] This man headed the Department of Justice's Prohibition Bureau in Chicago during the tail-end of Prohibition. He formed the Untouchables to go after gangsters like Al Capone.

ANSWER: Eliot Ness

<Bentley>

- 22. One of this author's short stories depicts several episodes in the life of Dexter Green, who has an on-again/off-again relationship with the beautiful Judy Jones. For 10 points each:
- [10] Identify this Minnesota-born author of "Bernice Bobs Her Hair", who later returned to many of the themes of the aforementioned story, "Winter Dreams", in his novel *The Great Gatsby*.

ANSWER: F. Scott **Fitzgerald** [or Francis Scott Key **Fitzgerald**]

[10] In this story from Fitzgerald's *Tales of the Jazz Age*, John T. Unger travels to Percy Washington's secluded compound in Montana, where Washington's family zealously guards the titular gigantic gemstone.

ANSWER: "The **Diamond as Big as the Ritz**"

[10] In Fitzgerald's story "Babylon Revisited", Marion reveals that her antipathy towards Charlie stems in part from an incident in which, during a quarrel, Charlie did *this* to his wife Helen, Marion's sister, causing her death.

ANSWER: he <u>lock</u>ed her <u>out</u> of the house during a snowstorm [accept logical equivalents; also accept equivalents of "causing her to <u>freeze</u> to death"]

<Carson>

- 23. This bacterial genus can be classified by their Lancefield antigens, and they are typically spherical and grow in chains rather than clusters. For 10 points each:
- [10] Name this genus of Gram-positive, aerobic bacteria. Important pathogenic species of this bacteria include *pyogenes* and *pneumoniae*.

ANSWER: Streptococcus

[10] Streptococcus can be identified by testing negative for this enzyme. This very fast enzyme can be found in peroxisomes, where it breaks down hydrogen peroxide.

ANSWER: catalase

[10] The first generation of this family of beta-lactam antibiotics can be used to treat Strep infections. Those drugs include cefazolin and ceftriaxone, and they are sometimes used with patients who are allergic to penicillin.

ANSWER: cephalosporins

<Morlan>