

Early Autumn Collegiate Novice 3 (Fall 2012), Packet #7

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Tossups

1. This particle can hypothetically decay to a positron and neutral pion with a mean lifetime of ten to the 33rd years. It is a hadron composed of two up quarks and one down quark and is often found in plasmas and cosmic rays. pH can be thought of as a measure of the concentration of this particle. The number of these particles in a nucleus is equal to the atomic number of an element. For 10 points, name this particle that has a charge of plus one and weighs approximately one atomic mass unit.

ANSWER: protons

2. One ruler with this name won the Battle of Barnet over Richard Neville. A king with this name expelled the Jews from England in 1290. The last English king of this name reigned for just under a year before abdicating to marry Wallis Simpson. A ruler of this name built the first Romanesque church in England, Westminster Abbey, and was canonized by the Catholic Church for his piety. For 10 points, give this shared name of several kings of England, one whom was a Plantagenet nicknamed "Longshanks" and another of whom was called "the Confessor."

ANSWER: Edward [accept Edward IV, I, VIII, Longshanks, or the Confessor; accept no other Edwards]

3. This philosopher wrote an introduction to Frantz Fanon's book *The Wretched of the Earth*. In one of his own works, he claimed that "if the Jew did not exist, the anti-Semite would have to invent him." He illustrated one of his ideas by using the example of a woman on a first date who puts off the decision of whether to accept or reject her date's advances, which he described as "bad faith." For 10 points, name this French existentialist and author of *Being and Nothingness* who illustrated some of his philosophy in the novel *Nausea* and the play *No Exit*.

ANSWER: Jean-Paul Sartre

4. The weakness of this city's educational system was the subject of the McCone Report. In this city, William Parker called the National Guard after Marquette Frye's arrest. One event in this city began after the Sleepy Lagoon case, and involved sailors beating Mexican Americans. This city, the location of unrest that popularized the phrase "Burn, baby, burn," was where Stacey Koon and three other police officers were videotaped beating an African-American man in 1992. For 10 points, name this city that faced the Zoot Suit Riots, Watts Riots, and Rodney King Riots.

ANSWER: Los Angeles [or LA]

5. The hand of the central figure of this painting casts a shadow upon the yellow jacket of the figure immediately to the right of the central figure. This painting includes a cut-off drum on the far right and a figure holding a yellow and blue flag. Light shines particularly strongly upon a little girl standing next to man in red holding a rifle on the left side of this work. The central figure of this painting, who wears a black hat and red sash, is Franz Banning Cocq. For 10 points, name this group portrait by Rembrandt whose name references the darkness of the canvas.

ANSWER: *The Night Watch* [or *De Nachtwacht*; or *The Shooting Company of Franz Banning Cocq* before "Franz"]

6. The sum of four of these numbers can represent any natural number according to a theorem of Lagrange. A formula that gives the sum of successive numbers of this type from zero to N is N times the quantity N plus one times the quantity two N plus 1, all divided by six. The product of two consecutive odd numbers is one less than one of these numbers. Two consecutive triangular numbers sum to one of these numbers. For 10 points, multiplying any integer with itself yields what type of non-prime number, such as four, nine, and sixteen?

ANSWER: **square** numbers [or perfect **squares**]

7. In one of this author's novels, Ronny Heslop breaks up Cyril Fielding's tea party. One of his title characters seeks the assistance of the hypnotist Lasker Jones to cure his homosexuality. In another novel by this author, Lucy meets George in Italy and exchanges accommodations with him, allowing her to look onto the river Arno. This author of *Maurice* created Dr. Aziz, who is accused of assaulting the British woman Adela Quested in the Marabar Caves, in another novel. For 10 points, name this British novelist who wrote *A Room with a View* and *A Passage to India*.

ANSWER: E.M. **Forster** [or Edward Morgan **Forster**]

8. One of these organizations was hurt when "El Chapo" was arrested in 2008. These organizations trace their modern history to a man nicknamed "The Godfather," Felix Gallardo. Two of these organizations are known as Sinaloa and Los Zetas. The Bureau of Alcohol, Tobacco, and Firearms faced controversy after the failure of Operation Fast and Furious, which was meant to catch these groups with illegal guns. For 10 points, name these criminal organizations which are involved in a violent war with the government of the U.S.'s southern neighbor.

ANSWER: **Mexican** drug **cartels** [prompt on drug **cartels**; accept equivalents containing **Mexico and drugs**]

9. On one journey, this figure traveled with Silas after refusing to bring John Mark along. He cured Publius's father of dysentery after being shipwrecked on Malta, where he was bitten by a snake but remained unharmed, leading him to be confused for a god. He preached in both Antioch and Jerusalem with Barnabas. This man converted after his sight was restored by Ananias, which was necessary due to a vision he saw on the road to Damascus. For 10 points, name this Apostle, a native of Tarsus, who wrote one epistle to the Romans and two to the Corinthians.

ANSWER: St. **Paul** [or **Saul** of Tarsus]

10. This composer's second violin concerto is subtitled "The American Four Seasons" and was premiered in Toronto with Robert McDuffie as soloist. His sixth symphony is based on a poem by Allen Ginsberg, and is known as his *Plutonian Ode*. This man's *Low Symphony* and *Heroes Symphony* are based on David Bowie albums. He composed an opera based on the life of Gandhi and another that consists of "knee plays." For 10 points, name this American minimalist whose "Portrait Trilogy" of operas includes *Satyagraha* and *Einstein on the Beach*.

ANSWER: Philip **Glass**

11. During this war, the end of the House of Gonzaga resulted in the War of the Mantuan Succession. During this war, the Edict of Restitution was passed by a ruler who, along with Count Tilly, defeated the Bohemians at the Battle of White Mountain. The Second Defenestration of Prague precipitated this conflict, whose participants included Albrecht von Wallenstein and Gustavus Adolphus. For 10 points, name this conflict between Catholics and Protestants that ended with the signing of the Peace of Westphalia, a war lasting from 1618 to 1648.

ANSWER: **Thirty Years'** War

12. The interaction between two particles in one of these substances can be modeled as the sum of the repulsive double-layer electric force and the van der Waals force. They stabilize in a process called peptization and destabilize in a process called flocculation. Classifications of these substances include foams, aerosols, and gels, depending on the states of the continuous and dispersed phases. For 10 points, the Tyndall effect describes scattering off of the particles in what kind of mixtures, in which one substance is microscopically dispersed throughout another?

ANSWER: **colloids** [do not accept more specific answers]

13. This entity is proud that “under his wrist is the pulse / and under his ribs the heart of the people.” It flings “magnetic curses amid the toil of piling job on job.” It is “bareheaded, shoveling, wrecking, planning” while “under the smoke” and with “dust all over his mouth.” This entity is described as a stormy, husky, brawling “Player with Railroads, “Stacker of Wheat,” and “Hog Butcher for the World.” For 10 points, name this “City of the Big Shoulders” that titles a Carl Sandburg poem.

ANSWER: **Chicago**

14. In one work written in this language, the protagonist turns into a donkey and is cured when he eats a wreath after joining the cult of Isis. The narrator and his sixteen-year-old male lover Giton journey to Trimalchio’s feast in another novel written in this language. It was used to pen Apuleius’s *The Golden Ass* and to write a series of poems in which the people demand “bread and circuses” and the speaker wonders “who will watch the watchmen?” For 10 points, name this language used by Gaius Petronius Arbiter to write the *Satyricon* and by Juvenal to write the *Satires*.

ANSWER: **Latin**

15. One document in this type of law is the VCLT, which describes when derogation is permissible. The American Founders’ conception of this type of law was influenced by the treatise of Emerich de Vattel. This law is codified, standardized, or customary, in which case it must have *opinio juris*. The work of Hugo Grotius is foundational in the development of this type of law, which is highly codified in its application to the sea. For 10 points, the Geneva Conventions are a part of what type of law that governs the relations between different countries?

ANSWER: **international** law

16. Unspliced mRNA are permitted to leave this structure by the HIV-encoded protein Rev. In embryonic and tumor cells, this structure and a smaller subpart may contain coiled accessory bodies named for Cajal. Its surface contains pores into which larger molecules can enter or exit with the help of the transport factors importin and exportin. This organelle is surrounded by an envelope that is in contact with the rough endoplasmic reticulum. For 10 points, name this organelle that is only found in eukaryotes, the so-called “control center” of the cell.

ANSWER: cell **nucleus** [accept **nuclear membrane/envelope** before “organelle”; do not accept “nucleolus”]

17. One of this artist’s works includes 152 white marble cubes upon which the words “Made in France” appear. This artist of “Why not Sneeze?” used a snow shovel in his *In Advance of a Broken Arm*. A pair of glass panels sandwich various materials, including lead foil and wire, in his *The Bride Stripped Bare by her Bachelors, Even*. Man Ray photographed this man in drag as Rose Selavy. He used the name “R. Mutt” to sign a work that was simply a urinal. For 10 points, name this French Dada artist of the readymade *Fountain* and *Nude Descending a Staircase*.

ANSWER: Marcel **Duchamp**

18. In one campaign, also called the August Movement, this man called on leaders to “Quit” his home country. This man led a movement against the Rowlatt Act from 1920 to ‘22 called the Non-Cooperation Movement. He led a walk from Sabarmati to Dandhi as part of a campaign to protest a tax by Lord Irwin. Margaret Bourke-White showed this man sitting at his spinning wheel. This leader of the Salt March was assassinated by Nathuram Godse in 1948. For 10 points, name this practitioner of “satyagraha,” an Indian practitioner of nonviolent protest.

ANSWER: Mahatma **Gandhi** [or Mohandas Karamchand **Gandhi**]

19. This river was almost a thousand miles longer until the Miocene era expansion of the Virunga volcanoes blocked its extreme upper course. This river has an Albert branch and passes through the Sudd swamp. One of its sources contains Rusumo Falls, and another is at Lake Tana. A southward bend in this river includes the fourth of a series of six rapids, its “cataracts.” This river, whose Blue and White tributaries join at Khartoum, is overlooked by the city of Cairo along its banks. For 10 points, name this northeastern African river, the longest in the world.

ANSWER: **Nile** River

20. This author wrote a book in which Roberto della Griva lands on an island that is split by the International Date Line. This author of *The Mysterious Flame of Queen Loana* and *The Island of the Day Before* wrote about Diotavelli’s formulation of “The Plan,” which leads treasure hunters to hang Belbo. A book is poisoned in another of his novels that centers on William of Baskerville’s investigations at a monastery. For 10 points, name this Italian author of *Foucault’s Pendulum* and *The Name of the Rose*.

ANSWER: Umberto **Eco**

TB-21. This man had his hand in the fur trade as the head of the Company of One Hundred Associates. He allied his country with Sweden in the Treaty of Barwalde and refused to sign the Treaty of Regensburg. He was dismissed from a position due to Charles de Luynes, whose actions led to the killing of his patron, Concino Concini. This target of the Day of the Dupes was opposed by Gaston d’Orleans and Cinq-Mars. He encouraged France to enter the Thirty Years War and was succeeded by Mazarin. For 10 points, name this chief minister under Louis XIII.

ANSWER: Cardinal **Richelieu** [or Armand-Jean du **Plessis**]

TB-22. One character in this novel attempts to wash off a kiss in a brook. Governor Bellingham attempts to have the protagonist’s child taken away in this novel, in which three characters stand on a scaffold as a meteor passes. The daughter of the protagonist of this novel is referred to as a “demon offspring” and is named Pearl. In this novel, Roger Chillingworth is the disguised husband of the protagonist, who bore the illegitimate child of Arthur Dimmesdale. For 10 points, Hester Prynne wears the title object of what Nathaniel Hawthorne novel?

ANSWER: *The* **Scarlet Letter**

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Bonuses

1. Eteocles and Polynices perish in this playwright's *Seven Against Thebes*. For 10 points each:

[10] Name this playwright who wrote about a figure chained to a rock in *Prometheus Bound* in addition to *The Libation Bearers* and *The Persians*.

ANSWER: **Aeschylus** [or **Aiskhulos**]

[10] Aeschylus, like playwrights Sophocles and Euripides, worked in this dramatic form that accentuates suffering.

ANSWER: **tragedy** [or **tragoidia**]

[10] This character is the namesake of an Aeschylus trilogy that includes *Agamemnon*, *The Libation Bearers*, and *The Eumenides*. This brother of Electra kills Aegisthus and Clytemnestra.

ANSWER: **Orestes** [or **Oresteis**; accept the **Oresteia**]

2. This hero tried to ride to Mount Olympus, but he was foiled when the gods sent a gadfly. For 10 points each:

[10] Name this Greek hero who rode a flying horse to slay a monster that was a mixture of a lion, serpent, and goat.

ANSWER: **Bellerophon** [or **Bellerophontes**]

[10] This was the flying horse that Bellerophon rode.

ANSWER: **Pegasus**

[10] This monster was the fearsome mixture of lion-serpent-goat that Bellerophon slew.

ANSWER: the **Chimera** [or **Khimaros**]

3. Name these composers of masses, for 10 points each.

[10] This composer wrote fourteen masses, six of them for the Esterházy family. His *Mass in Troubled Times* came to be known as the *Lord Nelson Mass*.

ANSWER: Franz Joseph **Haydn**

[10] This prolific German composer wrote four *Missa brevis*, the enduring *Mass in B Minor*, and secular works like *The Well-Tempered Clavier* and the *Brandenburg Concertos*.

ANSWER: Johann Sebastian **Bach**

[10] This Renaissance composer allegedly saved polyphony at the Council of Trent with the *Pope Marcellus Mass*.

ANSWER: Giovanni Pierluigi da **Palestrina**

4. This body tissue contains the sarcoplasmic reticulum. For 10 points each:

[10] Name this tissue that comes in smooth and striated forms and generates force via the protein myosin.

ANSWER: **muscle** tissue

[10] The Krebs cycle takes place in this organelle, the "powerhouse of the cell." Slow-twitch or red muscle is rich in these organelles, which explains why it sustains aerobic activity.

ANSWER: **mitochondria** [or **mitochondrion**]

[10] Pyruvate, the product of glycolysis, enters the Krebs cycle through the pyruvate dehydrogenase complex, which forms coenzyme A bonded to this functional group.

ANSWER: **acetyl** group

5. Name these Texas university towns, for 10 points each.

[10] The University of Texas's flagship campus is located in this capital city.

ANSWER: **Austin**

[10] This city is named for Texas' first public university, now called Texas A&M University.

ANSWER: **College Station**

[10] University Park, a suburb of this city, is home to Southern Methodist University, whose football program received harsh sanctions from the NCAA for years of violations.

ANSWER: **Dallas**

6. Name the following aspects of a wave, for 10 points each.

[10] This value, the inverse of the wavelength, is often given in units of inverse-centimeters.

ANSWER: **wavenumber**

[10] This is the maximum absolute value of the variable that oscillates in a wave.

ANSWER: **amplitude**

[10] This is the name for the SI unit of frequency, the inverse-second.

ANSWER: **hertz**

7. Edgar Degas's *At the Races* depicts these animals. For 10 points each:

[10] Name this type of animal, four of which are commanded by apocalyptic riders in a German woodcut.

ANSWER: **horses** [or *The **Four Horsemen of the Apocalypse***]

[10] The *Four Horsemen of the Apocalypse* is an engraving by this German Renaissance engraver, whose other works include *Melancholia I*.

ANSWER: Albrecht **Dürer**

[10] Dürer made a copper engraving that depicts a knight, death, and this figure, who is often shown with goat horns presiding over witches' sabbaths in art.

ANSWER: the **Devil** [or **Satan**; or **Teufel**; accept equivalents; accept ***Knight, Death, and the Devil***]

8. A recent history of this philosophical movement was written by Louis Menand. For 10 points each:

[10] Name this American philosophical movement that concerned itself with the practical import of ideas.

ANSWER: **pragmatism** [accept word forms]

[10] This philosopher and psychologist expounded the pragmatic theory of truth in his series of lectures titled *Pragmatism*. He also wrote *Principles of Psychology* and *The Varieties of Religious Experience*.

ANSWER: William **James**

[10] This pragmatist philosopher extolled the scientific method in opposition to metaphysics and the method of tenacity in his essay "The Fixation of Belief." He also penned "How to Make Our Ideas Clear."

ANSWER: Charles Sanders **Peirce**

9. This battle took place at Senlac Hill. For 10 points each:

[10] Name this 1066 victory for William the Conqueror over Harold Godwinson, a critical battle in the Norman conquest of England.

ANSWER: Battle of **Hastings**

[10] This seventy-meter-long tapestry depicts the events of the Norman conquest of England, including Hastings.

ANSWER: **Bayeux** Tapestry

[10] Harold Godwinson was victorious over Tostig and Harald Hardrada at this battle, which preceded Hastings.

ANSWER: Battle of **Stamford Bridge**

10. This scientist came up with an erroneous triple-helical model for the structure of DNA. For 10 points each:

[10] Name this American chemist who invented the concept of hybrid orbitals.

ANSWER: Linus [Carl] **Pauling**

[10] Pauling's scale is commonly used to measure this property of atoms, which measures how much they attract electrons. Fluorine has the highest value in Pauling's scale for it.

ANSWER: **electronegativity** [accept word forms]

[10] Electronegativity and ionization energy both increase moving in these two directions on the periodic table.

ANSWER: **up** and to the **right** [need both; accept equivalents for either; accept in either order]

11. One of these documents mandates cutting off a son's hand for striking his father. For 10 points each:

[10] Name these documents, one of which was carved on a column in Susa. Another one, which was made by Napoleon, forbade privileges based on birth and allowed freedom of religion.

ANSWER: law **code** [prompt on **laws**; accept Napoleonic **Code**; or **Code** civil des francais]

[10] This Babylonian ruler's law code mandated the punishment of "an eye for an eye."

ANSWER: **Hammurabi** [or **Ammurapi**]

[10] Under this Byzantine Emperor, Tribonian wrote the *jus civile*, the law code of Ancient Rome. This husband of Theodora employed the generals Belisarius and Narses.

ANSWER: **Justinian** the Great [or **Justinian** I; or Flavius Petrus Sabbatius **Iustinianus** Augustus]

12. One member of this family has just returned from being treated for morphine addiction. For 10 points each:

[10] Name this family that consists of father James, mother Mary, and sons Jamie and Edmond, who are constantly fighting with one another in the family's living room.

ANSWER: **Tyrone** family [or the **Tyrones**]

[10] Members of the Tyrone family are the central players in this play that all takes place on one August 1912 day in the Connecticut summer home of the Tyrones.

ANSWER: **Long Day's Journey into Night**

[10] This American playwright, who wrote about the pipe dreams of the denizens of Harry Hope's bar in *The Iceman Cometh*, created the Tyrone family in *Long Day's Journey into Night*.

ANSWER: Eugene [Gladstone] **O'Neill**

13. Answer some questions about tectonic plate theory, for 10 points each.

[10] Tectonic plates are carried by subduction into what layer of the Earth, below the crust and above the core?

ANSWER: **mantle** [accept **upper mantle**; do not accept "lower mantle"]

[10] Tectonic plates compose what shell layer, which lies above the Earth's asthenosphere and below the atmosphere and is comprised of the crust and upper mantle?

ANSWER: **lithosphere**

[10] What discontinuity, lying between the crust and the mantle, marks the surface at which seismic waves change velocity as they move from a high- to low-density material or vice versa?

ANSWER: the **Moho** discontinuity [or **Mohorovicic** discontinuity]

14. The title character of this novel loves Cunegonde. For 10 points each:

[10] Name this French satirical novel about a character who is taught by Dr. Pangloss.

ANSWER: **Candide**

[10] In *Candide*, the optimistic Dr. Pangloss serves as a parody of this German philosopher, whose *Monadology* includes the statement, "Therefore this is the best of all possible worlds."

ANSWER: Gottfried Wilhelm **Leibniz**

[10] *Candide* was a work by this French Enlightenment writer who also wrote the play *Zadig*.

ANSWER: **Voltaire** [or Francois-Marie **Arouet**]

15. This present-day country is home to the legendary Bolshoi Theater, which houses famed ballet and opera troupes. For 10 points each:

[10] Name this country in which half-Georgian choreographer George Balanchine was born.

ANSWER: **Russia**

[10] This Russian-born founder of the Ballets Russes collaborated with choreographers Michel Fokine and Vaslav Nijinsky.

ANSWER: Sergei [Pavlovich] **Diaghilev** [or Serge **Diaghilev**]

[10] Diaghilev commissioned this Russian composer to write his ballets *The Firebird* and *The Rite of Spring*.

ANSWER: Igor [Fyodorovich] **Stravinsky**

16. Every section but one in this book begins with the *Bismillah*. For 10 points each:

[10] Name this religious text of Islam, which was revealed to Muhammad by the angel Gabriel.

ANSWER: *al-Qur'an* [or the **Koran**]

[10] These passages are generally considered the chapters of the Qur'an and are further divided into various *ayat*. The second one is the longest and refers to the sacrifice of a cow.

ANSWER: **Sura** [or **Surat**; or **Suwar**]

[10] This is the name given to the collections of sayings of the Prophet Muhammad. One group of them, the *qudsi*, contains words that came originally from God.

ANSWER: **Hadith** [or **Hadiths**; or **ahadith**]

17. This event occurred in part because the deaf Black Coyote didn't understand an order. For 10 points each:

[10] Name this 1890 event in which the U.S. army killed a large group of Lakota Sioux in South Dakota.

ANSWER: **Wounded Knee** massacre [or Battle of **Wounded Knee**]

[10] This Native American spiritual movement largely ended after the Wounded Knee massacre. Adherents of this movement, which was founded by Wovoka, believed that spiritually powerful shirts could repel bullets.

ANSWER: **Ghost Dance** of 1890 [or **Nanissáanah**]

[10] This massacre in Colorado occurred when soldiers under John M. Chivington killed peaceful Cheyenne and Arapaho Indians, including Chief Black Kettle, at Fort Lyon.

ANSWER: **Sand Creek** massacre [or Battle of **Sand Creek**]

18. A study of this phenomenon investigated why it happened more frequently among Protestants than among Catholics. For 10 points each:

[10] Name this behavior, which the aforementioned study claimed can be egoistic, anomistic, or fatalistic.

ANSWER: **suicide** [accept equivalents]

[10] The study *Suicide* was conducted by this foundational French sociologist who authored *The Elementary Forms of Religious Life* and *The Rules of Sociological Method*.

ANSWER: [David] Émile **Durkheim**

[10] This type of suicide is committed for the benefit of others. Auguste Comte coined this word.

ANSWER: **altruistic** [accept word forms]

19. This son of Joao I sponsored Gil Eanes and Tristao Teixeira. For 10 points each:

[10] Name this “Navigator” prince who sponsored the discovery of the Azores.

ANSWER: Prince **Henry** the Navigator [or **Henry** the Seafarer]

[10] Henry the Navigator was a prince of this country, the home of explorers Bartolomeo Dias and Vasco da Gama.

ANSWER: Kingdom of **Portugal**

[10] Vasco da Gama laid claim to this small Indian state, where he still names a city. It was owned by Portugal until India annexed it in Operation Vijay in 1961.

ANSWER: **Goa**

20. This author used the stream of consciousness style in her long essay *A Room of One's Own*. For 10 points each:

[10] Name this author of *The Waves* and *To the Lighthouse* who created Clarissa, a title character who debates whether she made the right choice in marrying Richard, in her novel *Mrs. Dalloway*.

ANSWER: [Adeline] Virginia **Woolf**

[10] In *A Room of One's Own*, Virginia Woolf invented Judith, who cannot become a professional writer despite being as talented as her brother, this English playwright of *Titus Andronicus* and *All's Well that Ends Well*.

ANSWER: William **Shakespeare**

[10] This Woolf novel tells the story the title boy who turns into a girl and ages only 36 years over the span of three centuries, during which he/she is the lover of Queen Elizabeth, Sasha, and Marmaduke Bonthrop Shelmerdine.

ANSWER: **Orlando: A Biography**

Extra. Name the following about Helmholtz free energy, for 10 points each.

[10] In order to find the Helmholtz free energy, these two variables of state must be held constant.

ANSWER: **temperature** and **volume** [accept in either order]

[10] Helmholtz free energy can only be calculated for this kind of system, which can exchange energy, but not matter, with its surroundings.

ANSWER: **closed**

[10] Helmholtz free energy measures the reversible amount of this quantity that can be obtained from a closed system under constant temperature and volume. It can be calculated as force times distance.

ANSWER: **work**