**GSAC XXIII**Head Edited by Will Overman, written by members of Maggie Walker Quizbowl

**Packet 1**

1. **In one story by this author, a young boy predicts his own death before being pushed into a pool by his sister. In another of his stories, a man talks to a young girl on a beach before returning to his hotel room to shoot himself. This author of “Teddy” and “A (\*)** Perfect Day for Bananafish” also created a boy who accidentally leaves the fencing team’s gear on a train and goes to Central Park with his sister Phoebe after he is expelled from Pencey Prep. For 10 points, name this author who wrote about Holden Caulfield in *The Catcher in the Rye*.

ANSWER: Jerome David “J.D.” **Salinger**

2. **The artist of this work decided to scrap multiple sculpts of Adam and Eve from it because his reference model for Eve was pregnant. The Falling Man holds The Crouching Woman in order to create one section of this work titled *I am Beautiful*.  On the left side of this sculpture, (\*)** Paolo reaches for Francesca. The plaster version of this sculpture now resides in the Musee d’Orsay. *The Three Shades* sit directly above *The Thinker* in this work. For 10 points, name this sculpture by Auguste Rodin that depicts a scene from the Inferno.

ANSWER: *The* ***Gates of Hell***

3. **Tippu Tib transported many of these people to Zanzibar. Charles Deslondes led a group of these people along the German Coast of Orleans. In France, these people were allowed to marry by the passage of the Code Noir. Pedro II’s (\*)** Golden Law affected the status of these people. Sengbe Pieh and Cinque led a revolt of these people aboard the Spanish schooner *La Amistad*. These people founded the country of Liberia. For 10 points, name these human beings who were owned by other human beings.

ANSWER: **slaves** [prompt on “African Americans”]

4. **The differential of this quantity is equal to TdS plus Vdp and is also equal to heat capacity times the differential of temperature. This quantity is held constant in throttling processes and is equal to internal energy plus pressure times volume. (\*)** Gibbs free energy equals this quantity minus temperature times entropy. The change in this quantity is independent of reaction pathway and can be calculated using Hess’s law. For 10 points, name this thermodynamic quantity symbolized H.

ANSWER: **enthalpy**

5. **A character in this play resents her husband’s implication to his Aunt Juliana that she may be pregnant. Another character in this play wrote a popular book that he claims has very little in it, but writes a better work with a sheriff’s wife. That character is given a** (\*) pistol and told to end his life “beautifully.” The woman who gave that man the pistol burns the manuscript that he wrote with Mrs. Elvsted. At the end of this play, that woman shoots herself to avoid blackmail by Judge Brack. For 10 points, name this play by Henrik Ibsen about the title wife of George Tesman.

ANSWER: ***Hedda Gabler***

6. **Christoffel symbols are used to calculate the “covariant” form of this operation. This operation is well defined on a complex function if the Cauchy-Riemann equations are satisfied. The “directional” form of this operation can be found using the (\*)** gradient. Applying this operation to two functions multiplied together requires using the product rule. Applying this operation to a constant yields zero since it gives the instantaneous rate of change. For 10 points, name this operation that, according to the fundamental theorem of calculus, is the inverse of integration.

ANSWER: **derivative** [accept “**differentiation**”]

7. **The Hindu god of this object gave his son Karna impenetrable earrings and body armor, which were taken by Indra. During Ragnarok, the wolf Skoll will devour this object. The (\*)** Inca worshipped this object as Inti, and theJapanese kami of this celestial body once hid in a cave to escape her brother Susano’o. In Egyptian myth, a barge representing this object is guided by Ra. For 10 points, the Greek god Helios represented which star, around which Earth revolves?

ANSWER: **Sun** [accept **solar deity**]

8. **Haplowebs and barcode gap detection can be used to study whether or not this process has occurred. The time it takes for this process to begin must fall between the crown age and the stem age. This process is reinforced by the Wallace effect, and its occurrence in rapid bursts is fundamental to (\*)** Gould’s theory of punctuated equilibrium. Geographical changes can lead to the separation of an initial group in the allopatric form of this process. For 10 points, name this process in which reproductive isolation leads to the formation of a new member of the lowest taxonomic class.

ANSWER: **speciation**

9. **This state contains the only kyanite mines in the entirety of North America, situated in its Willis Mountain. Its counties of Accomack and Northampton are noncontiguous with the rest of this state. Luray Caverns are located in this state’s (\*)** Shenandoah Valley. The Chickahominy and Appomattox Rivers are tributaries for the longest river entirely in this state, the James River, on which its capital is situated. For 10 points, name this state, nicknamed the “Old Dominion,” with its capital at Richmond.

ANSWER: Commonwealth of **Virginia**

10. **In this novel, the protagonist’s sister, Mrs. Joe, is killed by her husband’s assistant. During a fight in the water by an escape boat, a character in this novel kills his enemy Arthur Compeyson. At a “Finches of the Grove” meeting in this novel,**  (\*) Drummle makes a toast to Estella, who turns out to be the daughter of the convict Abel Magwitch. In this novel, stopped clocks and a moldy wedding cake can be found in the house of Miss Havisham. For 10 points, name this novel about Pip by Charles Dickens.

ANSWER: ***Great Expectations***

11. **British codebreakers in Malaya assisted one side during this conflict. During this conflict, General Kuropatkin organized a retreat after losing 90,000 men in the Battle of Mukden. Theodore Roosevelt mediated the signing of a peace treaty for this conflict at (\*)** Portsmouth. One side utilized a “crossing the T” strategy during this conflict to decisively defeat the other’s Second Pacific Squadron at the Battle of Tsushima Straits. For 10 points, name this 1904-1905 conflict, the first in modern history that saw an Asian country defeat a European power.

ANSWER: **Russo-Japanese** War

12. **In 1964, the Freedom Summer campaign was initiated in this state to register African-American voters. Two years later, thousands entered this state’s capital at the end of the “March Against Fear, ” which was initiated by James Meredith. Pictures of a teenager’s (\*)** drowned body inside an open casket made headlines after he was murdered in this state. Later, a member of the White Citizen’s Council, Byron de la Beckwith, killed an NAACP activist investigating Emmett Till’s murder in this state. For 10 points, name this state where Medgar Evers was murdered in its capital, Jackson.

ANSWER: **Mississippi**

13. **In *Fire Emblem: Awakening*, a sword named for this good has a durability of 35 and costs 840 gold. In *Pokémon*, attacks of this elemental type include Mirror Shot and King’s Shield; in that franchise, this type has the most resistances, 11, and** **an immunity to** (\*) Poison. This metal titled a 2011 Shawn Levy movie about robot boxing starring Hugh Jackman. In *Game of Thrones*, the Valyrian variety of this good has a distinctive ripple pattern when forged. According to a popular internet meme, jet fuel cannot melt, for 10 points, beams of what metal?

ANSWER: **steel**

14. **One character in this work claims that poets, like painters, are imitators who produce imitations without knowledge of the truth. A divided line in this book is used to describe the differences between the visible and the intelligible realms, within which the (\*)** Form of the Good exists. In another analogy in this work, men in chains facing a wall perceive flickering shadows to be the entirety of their reality. The Allegory of the Cave is discussed in, for 10 points, what Platonic dialogue in which Socrates and others discuss justice, the theory of forms, and the ideal state?

ANSWER: *The* ***Republic*** [accept ***Politeia***]

15. **This painter depicted a man wearing a large fur hat and holding a tiny flower. He also depicted baby Jesus holding a globe attached to a cross while sitting on Mary’s lap. Along with his *Portrait of a Man with a Carnation* and *Madonna of Chancellor Rolin*, this artist created a 12-panel painting with his brother. That work, the (\*)** *Ghent Altarpiece*, features a lamb in its center. His most famous painting shows a man in a dark cloak holding the hand of a seemingly pregnant woman wearing green. For ten points, name this Flemish painter of *The Arnolfini Wedding*.

ANSWER: Jan **van Eyck**

16. **Whoever solves a certain puzzle in this work is promised to be clothed in purple, given a gold chain around his neck, and made third in charge of the kingdom. For refusing to worship a sixty cubits golden statue in this work, Shadrach, Meshach, and Abednego are thrown into a furnace. The title figure of this work is called to King (\*)** Belshazzar’s palace to decipher the “writing on the wall.” In this book, King Darius signs a document forbidding anyone from worshipping any figure except him for thirty days. For 10 points, name this book of the Bible in which God saves the title figure by shutting the mouths of some lions in a den.

ANSWER: Book of **Daniel**

17. **In one play from this country, four girls pretend to be a car after harassing a photographer. In another play from this country, Simon Pilkings steps in to stop the ritual suicide of Elesin. Jonathan buries a bicycle during this country’s civil war in the short story “Civil Peace.” One book from this nation tells the story of a man who defeats Amalinze the Cat of (\*)** Umuofia at wrestling; that man is Okonkwo, and he kills Ikemefuna. *The Lion and the Jewel* and *Things Fall Apart* were written in, for 10 points, what country, the homeland of authors Wole Soyinka and Chinua Achebe?

ANSWER: Federal Republic of **Nigeria**

18. **This composer’s most popular works for the piano include his F-minor Variations and his Sonata in E-flat Major. The first part of one of his works opens with the “Representation of Chaos.” This composer set lyrics by Leopold Haschka to music in his (\*)** “Emperor” quartet. An oratorio by this composer is based off descriptions from *Paradise Lost* and the Book of Genesis. In addition to *The Creation*, this composer wrote the London Symphonies, which includes his “Surprise” one. For 10 points, name this Austrian father of both the string quartet and the symphony.

ANSWER: Franz Joseph **Haydn**

19. **One side during this conflict restored its democracy after a narrow victory at the Battle of Cynossema. One side’s commander in this conflict gave his Funeral Oration speech after his successful invasion of Megara. A naval victory at the Battle of Aegospotami during this conflict convinced (\*)** Cyrus the Younger to aid the victors. One side during this conflict saw its entire fleet destroyed during the Sicilian Expedition. The Delian League was dissolved at the conclusion of this conflict. For 10 points, name this 27-year conflict fought between Athens and Sparta.

ANSWER: **Peloponnesian** War

20. **The Laplacian of the magnetic vector potential is equal to the negative product of the permeability of free space and this quantity. The magnetic dipole moment is equal to area times this quantity. This quantity is multiplied by the cross product of the length and displacement vectors in the numerator of the (\*)** Biot-Savart law. This quantity is equal to the time derivative of charge and is also equal to voltage over resistance. For 10 points, name this quantity that quantifies the amount of flowing charge, measured in amperes.

ANSWER: **current**

TB. **The fine-structure constant is equal to the square of a quantity associated with this particle divided by the product of h-bar and c. The magnetic moment of this particle is referred to as the Landé g factor. These particles are represented on Feynman diagrams by straight lines pointing forwards in time. Hertz discovered that sufficiently energetic (\*)** photons striking metal can cause the emission of these particles. Millikan attempted to measure their charge in his oil drop experiment. For 10 points, name these particles that travel in clouds around the nucleus, with the opposite charge of protons.

ANSWER: **electron**s

1. Curly admires the scenery in “Oh, What a Beautiful Mornin’” in this musical. For 10 points each:

[10] Name this musical where Jud Fry and Curly McLain square off to win Laurey’s hand in marriage.

ANSWER: ***Oklahoma!***

[10] *Oklahoma!* Was written by this two-person team who also wrote *The Sound of Music*.

ANSWER: Richard **Rodgers** and Oscar **Hammerstein** II

[10] In the first act of *Oklahoma!*, Ado Annie “cain’t” say this word to Will Parker or Ali Hakim.

ANSWER: “**No**”

2. Alternating 5/4 and 6/4 time meters are in the first movement of this work titled “Promenade”,whose G, F, B-flat, C, F, D motif reappears in five of its ten movements. For ten points each:

[10] Name this piece with movements such as “The Old Castle” and “The Great Gate of Kiev”. The works in the art gallery of Victor Hartmann inspired this piece.

ANSWER: ***Pictures at an Exhibition****: A Remembrance of Victor Hartmann*

[10] *Pictures at an Exhibition* was composed by this member of the Russian “Mighty Handful.” He depicted a witches’ sabbath in *Night on Bald Mountain*.

ANSWER: Modest **Mussorgsky**

[10] After hearing a story about a blind man regaining his sight, the title Russian Tsar of this Mussorgsky opera sings the aria “Farewell, my son, I am dying”.

ANSWER: ***Boris Godunov***

3. The zeta potential of these systems is defined as the electric potential at their double layer. For 10 points each:

[10] Name these systems in which one substance is dispersed in another. Specific types of these systems include aerosols, gels, and emulsions.

ANSWER: **colloid**s

[10] Shining light on colloids often makes them appear blue due to this effect. Similar to Rayleigh scattering, this effect is due to the particles more strongly scattering short wavelengths.

ANSWER: **Tyndall** effect

[10] Colloids are stabilized in this process that uses a small amount of electrolyte. This process is the reverse of flocculation.
ANSWER: **peptization**

4. A character in one of this man’s works learns of his mother’s death via telegram; that work begins with the line “Mother died today.” For 10 points each:

[10] Name this French-Algerian author of *The Myth of Sisyphus* and *The Stranger*.

ANSWER: Albert **Camus**

[10] This man exhibits a lack of emotion and refuses to mourn after the death of his mother and the murder he commits in *The Stranger*.

ANSWER: **Meursault**

[10] In this other novel by Camus, Dr. Rieux joins forces with Jean Tarrou, Dr. Castel, and Raymond Raybert in combatting the title phenomenon that afflicts this work’s setting, Oran.

ANSWER: *The* ***Plague*** [accept “*La* ***Peste***”]

5. Considered one of the founders of American “infotainment,” Jon Stewart has been a major influence in modern mass media. For 10 points each:

[10] Name this former intern of *The Daily Show* who hosted his namesake Report on Comedy Central for 14 seasons, on which he adopted the role of a conservative pundit.

ANSWER: Stephen Tyrone **Colbert**

[10] This man hosted *The Daily Show* while Stewart directed his film *Rosewater*, and afterwards landed a position on HBO as the host of *Last Week Tonight*.

ANSWER: John William **Oliver**

[10] This Indian-American *Daily Show* intern became famous for his catchphrase, “Treat yo self,” on *Parks and Rec*. In 2015, he published the book *Modern Romance*.

ANSWER: Aziz Ishmael **Ansari**

6. This geographic feature is a result of the Petermann Orogeny, and, with Kata Tjuta, names the national park in which it is found, for 10 points each:

[10] Name this sandstone rock formation, a UNESCO World Heritage site sacred to the Anangu. It appears to change color throughout the day and year.

ANSWER: **Uluru** [or **Ayers Rock**]

[10] Uluru is located in this nation, whose largest city is Sydney.

ANSWER: Commonwealth of **Australia**

[10] The Anangu people fall under this wider category of native people inhabiting Australia. The Stolen Generations consisted of these native people.

ANSWER: **Aborigine**s [or **Aboriginal**s]

7. Islam has a variety of sects, for 10 points each:

[10] Name the largest sect of Islam, whose adherents believed that the *ummah* should be in charge of selecting each caliph. Historically, this group has stood at odds with the Shiites.

ANSWER: **Sunni** Islam

[10] This mystical sect’s dervishes are famous for their use of dance, song, and ecstasy in the practice of *Dhikr*,or remembrance of Allah.

ANSWER: **Sufism** [accept “**Sufi** Islam”]

[10] Members of this offshoot of Shi’a Islam celebrate Christian holidays such as Christmas and Easter in conjunction with Islamic holidays. The al-Assad family in Syria are members of this sect.

ANSWER: **Alawites** [accept “**Alawis**”]

8. This man stole the Mares of Diomedes and slew the Stymphalian Birds, for 10 points each:

[10] Name this son of Zeus who killed his wife and children while driven mad by Hera. This hero repented by completing Twelve Labors.

ANSWER: **Heracles** [accept **Hercules**, **Alcaeus**, or **Alcides**]

[10] This other son of Zeus took Hestia’s place among the Olympians. When this god was abducted by pirates, he transformed them into dolphins.

ANSWER: **Dionysus** [accept **Bacchus**]

[10] These *two* sons of Zeus, together called the Dioskouri, were born from an egg, along with their half-sisters Helen and Clytemnestra. Name both.

ANSWER: **Castor** and **Pollux**

9. Following the Jeffersonian Era, this era of American politics is the only time in US history where a second party did not compete for control of Congress. For 10 points each:

[10] The domination of a single party in both the White House and Congress characterized this era of American politics, which preceded the Jacksonian Era.

ANSWER: Era of **Good Feelings**

[10] In addition to overseeing the Era of Good Feelings, this president published his namesake doctrine prohibiting further European intervention in the Americas.

ANSWER: James **Monroe**

[10] This party dominated the Era of Good Feelings and stood at odds with the Federalist Party years before. They were originally called the Anti-Federalist Party.

ANSWER: **Democratic-Republican** Party [do not accept or prompt on partial]

10. This poet wrote about his emigration from America to England in “Ash Wednesday.” For 10 points each:

[10] Name this poet who wrote “The Hollow Men” and “The Wasteland.”

ANSWER: T.S. **Eliot**

[10] In “The Hollow Men,” T.S. Eliot claims the world ends not with a bang, but in this way.

ANSWER: a **whimper**

[10] In the same poem, there are said to be no eyes in the valley of these things. Voices in the wind’s singing are said to be more distant and solemn than them.

ANSWER: fading **star**s

11. The protagonist of this work kisses a girl after she sings “I Have Nothing” while they sit on a deck watching a fire. For 10 points each:

[10] Name this novel in which Toru is torn between his love for Midori and Kizuki’s ex-girlfriend, Naoko.

ANSWER: ***Norwegian Wood***

[10] This Japanese author of *Norwegian Wood* has also written *Kafka on the Shore* and *The Wind-Up Bird Chronicle*.

ANSWER: Haruki **Murakami**

[10] Toru and Nagasawa become friends due to their mutual love of this Fitzgerald novel. Toru compares the light coming from Naoko’s room to the green light coming from Daisy’s dock in this novel.

ANSWER: *The* ***Great Gatsby***

12. For 10 points each, name some characteristics of a revolution led by angry farmers:

[10] This nation underwent a revolution from 1910 to 1920 that sought to end the hacienda system and overthrow the dictatorship of Porfirio Diaz. ANSWER: **Mexico** [accept “**United Mexican States**”] [10] The United States occupied this Mexican port in 1914 after several sailors on the USS Dolphin were accidentally jailed earlier that year. During the Mexican-American War, Winfield Scott also led an occupation of this port. ANSWER: **Veracruz**  [10] This US General led the American Expeditionary Force on a manhunt for Mexican Revolutionary hero Pancho Villa after the latter led a massacre of US settlers in New Mexico.

ANSWER: John Joseph **Pershing** [accept “Blackjack **Pershing**”]

13. The first discovered virus is named for its infection of this plant. For 10 points each:

[10] Name this plant in the *Nicotiana* genus, which can be infected by a namesake “mosaic virus.”

ANSWER: **tobacco**

[10] Tobacco contains a ton of carcinogens, which are chemicals that can cause this disease. Tobacco smoking is the main cause of the lung variety of this disease, which is due to uncontrolled cell growth forming malignant tumors.

ANSWER: **cancer**

[10] This biological assay was introduced by its namesake in the 1970s as a way to test whether a chemical is carcinogenic. This assay works by detecting mutations in the synthesis of histidine.

ANSWER: **Ames** test

14. This philosophy’s five key relationships include ruler-subject and older sibling-younger sibling. For ten points each:
[10] Name this Chinese philosophy that originated during the Warring States period, whose founder’s sayings are collected in the *Analects*.
ANSWER: **Confucianism** [accept **Ruism**]
[10] This other philosophy, propounded by Han Fei and Lord Shang, rejected the positive view of humans and favored harsh punishments on small crimes in order to institute social change.
ANSWER: **Legalism**
[10] This Confucian used the example of a child falling down a well to preach the innate goodness of human beings. He was also the architect of a major neo-Confucian revival.

ANSWER: **Mencius** [accept **Meng** Ke, **Meng**-tzu, and **Meng**zi]

15. According to a cobbler named Hans Heberle, this empire saw multiple incidences of cannibalism in Breisgau during one of its more devastating wars. For 10 points each:

[10] Name this empire, whose ruler Rudolf II, in the 1609 *Letter of Majesty*, allowed Bohemia greater religious freedom from the Catholic Church.

ANSWER: **Holy Roman** Empire [do not accept or prompt on “Roman Empire”]

[10] Ferdinand of Styria sought to remove the Bohemians’ religious freedoms, sparking this conflict. Beginning with a defenestration in Prague in 1618, this war ended in 1648.

ANSWER: **Thirty Years’** War

[10] Following a string of imperial victories in 1629, Emperor Ferdinand approved this document, which attempted to restore territorial changes back to the 1555 Augsburg settlement.

ANSWER: **Edict of Restitution**

16. These particles all have integer spin and obey statistics named for their Indian namesake. For 10 points each:

[10] Name these particles whose gauge varieties serve as the carriers of fundamental forces.

ANSWER: **boson**s

[10] This boson’s existence was confirmed by CERN in 2012. It’s the only scalar boson and its field is responsible for imparting mass to particles.

ANSWER: **Higgs** boson

[10] When a boson has a spin equal to 1, it is referred to as this type of boson.

ANSWER: **vector** boson

17. John collects a bunch of info about this this fictional creator of the atomic bomb and father of Newt, Angela, and Frank for his book *The Day the World Ended*. For 10 points each:

[10] Name this scientist who invented ice-nine.

ANSWER: Dr. **F**elix **Hoenikker** [prompt on “Hoenikker,” accept “**Felix**”]

[10] Felix Hoenikker plays the title game with his son in this novel. Ice-nine destroys the world in this novel that includes the fictional religion of Bokononism.

ANSWER: ***Cat’s Cradle***

[10] *Cat’s Cradle* was written by this American author of *Breakfast of Champions* and *Slaughterhouse-Five*.

ANSWER: Kurt **Vonnegut**

18. Much like bees, these animals form colonies headed by a queen, and they are indigenous to every continent except Antarctica. For 10 points each:

[10] Name these animals whose worker varieties often build namesake “hills” out of sand, and who are often kept in namesake “farms” by children.

ANSWER: **ant**s

[10] Ant colony optimization was originally applied to this problem. The simulated ants’ likelihood of choosing an edge between two cities is proportional to its level of pheromones.

ANSWER: **travelling salesman** problem [accept **TSP**]

[10] This Harvard professor is considered the world’s leading expert on ants. This “father of sociobiology” also wrote *The Social Conquest of Earth* and *Letters to a Young Scientist*.

ANSWER: Edward Osborne **Wilson**

19. Rather than titling some of his paintings, this man notably numbered them so that they would be open to interpretation. For 10 points each:

[10] Name this American artist of *Lavender Mist* and *Autumn Rhythm* who often employed a drip method for painting, earning him the nickname “Jack the Dripper”.

ANSWER: Paul Jackson **Pollock**

[10] Along with John Chamberlain, Barnett Newman, and Lee Krasner, Jackson Pollock was a major figure in this 20th century art movement.

ANSWER: **abstract expressionism**

[10] This Pollock painting also known as *No. 11, 1952* caused controversy when it was acquired by the National Gallery of Australia. Its name is based on the title colored, vertical objects.

ANSWER: ***Blue Poles***

20. During the Long March, he was the only prisoner permitted to ride on horseback. For 10 points each:

[10] Name this Chinese revolutionary who was betrayed by Chiang Kai-Shek after the Northern Expedition. His forces defeated the KMT and expelled them to Taiwan in 1949.

ANSWER: **Mao** Zedong [accept **Mao** Tse-tung]

[10] This program of Mao’s was started in order to cleanse China of supposed bourgeois threats. Students formed the Red Guard during this event, and Deng Xiaoping was imprisoned for its duration.

ANSWER: Great Proletarian **Cultural Revolution**

[10] Mao also initiated this program in which the government encouraged citizens to voice their opinions of the government. It was shut down after less than a year in 1957, and Mao ordered a purge of all critics of his regime.

ANSWER: **Hundred Flowers** campaign

Extra. He sent Colonel Pride to oust members of Parliament who refused to vote on executing the King, creating the Rump Parliament. For 10 points each:

[10] Name this Puritan commander of Parliamentary Roundhead forces during the English Civil War. He led the New Model Army over the loyalist Cavalier forces.

ANSWER: Oliver **Cromwell**

[10] Cromwell’s period of rule was given this name, as it interrupted the period of the ruling Stuart Dynasty. During this period, Cromwell held the title, “Lord Protectorate”.

ANSWER: **Interregnum**

[10] This member of the House of Stuart was called back to England to become King after Richard Cromwell stepped down as Lord Protectorate in 1659. He was known as the “Merry Monarch”.

ANSWER: **Charles II**