**PRISON BOWL VIII**

Questions written and edited by Hunter College High School (Gilad Avrahami, Sam Brochin, Christopher Chilton, Prithi Chakrapani, Swathi Chakrapani, David Godovich, Lily Goldberg, Ada-Marie Gutierrez, Sarah Hamerling, Sophey Ho, Diane Huangpu, Joshua Kwan, Chloe Levine, Alice Lin, Helen Lu, Nancy Lu, Daniel Ma, Ria Modak, Brent Morden, Priya Srikumar, Brendan Sullivan, Albert Tai, Luke Tierney, Karina Xie, William Xie), Virginia Commonwealth University (Sarah Angelo, George Berry, Nathaniel Boughner, Akhil Garg, Cody Voight, Najwa Watson), Rohan Nag, and Zihan Zheng

**Extra Questions**

**Tossups**

1. One of these things made from the toenails and fingernails of the dead will arrive during Ragnarok. Freyr owned one of these things that was of such fine craftsmanship it could be folded up into a pocket when not in use called Skidbladnir. The supposed greatest of these things was Hringhorni, which was used as Baldr’s funeral pyre after his death. Ra traveled through the sky on a morning and an evening one of these things. Horus beat Set in a competition involving these things by constructing one from wood painted to look like stone. For 10 points, name this type of vessel on which Charon transports the dead across the River Styx.

ANSWER: **boat**s [or **ship**s; or **barge**s; or obvious equivalents indicating that a **vessel** transports things or people through water] <SEA/CV>

2. This man used a square box with reliefs on each of its four sides as the base for his depiction of Judith beheading Holofernes. He depicted a sick, ragged woman in his wooden sculpture *Penitent Magdalene,* and his statue of Habacuc was nicknamed *Zuccone* due to its bald head. One of this sculptor’s works is located outside the Basilica of St. Anthony, and features a spurred Erasmo da Narni. Another one of his works is considered the first freestanding male nude made since antiquity, and features an effeminate young man holding a sword while standing over the head of his enemy. For 10 points, name this Renaissance sculptor of the equestrian *Gattamelata* and a bronze statue of David.

ANSWER: **Donatello** di Niccolo di betto Bardi <AT>

3. The opening of this play sees one character remark that he gives “truth in the pleasant disguise of illusion.” That character later tells her sister to blow out her candles, claiming “nowadays the world is lit by lightning.” In this play, Amanda is unsuccessful in finding a “gentleman caller” for her daughter, who was given the nickname “Blue Roses” after a bout of pleurosis. That daughter, Laura, breaks the horn off of a unicorn while dancing with Jim O’Connor, exclaiming it looks “just like all the other horses” in the titular collection of animals. For 10 points, name this 1945 play about Tom and Laura Wingfield, written by Tennessee Williams.

ANSWER: *The* ***Glass Menagerie***<LG>

4. George Tenet testified that the bombing of the Chinese embassy in this country was accidental and intended for an arms depot. Children’s Day was once a major holiday in this country. The Dayton Accords established the constitution of a constituent of this country, where Muslims were massacred at Srebrenica. The ICTY was set up to adjudicate war crime prosecutions here, and the last leader of this country died in the Hague after being charged with genocide. For 10 points, name this former balkan nation led by Slobodan Milosevic that divided into six republics in the 1990s.

ANSWER: **Yugoslavia**

5. These structures have a gel-like coating that can identify transplanted and diseased cells, known as the glycocalyx. Proteins such as scramblases and flippases ensure that portions of these structures remain negatively charged, and areas where they are joined together are classified by the ability of molecules to pass through them. Those junctions are called either “tight” or “gap.” Water passes through these organelles via aquaporins, and they consist of molecules with polar heads and hydrophobic tails called phospholipids. For 10 points, name this organelle that separate the inside of the cell from the outside world.

ANSWER: **cell membrane** or **plasma membrane** [do not prompt or accept “cell wall”] <AT>

6. This composer withdrew his opera *The Maiden in the Tower* after only four performances. Though not Dvorak, he composed six Humoresques for violin and orchestra, and also wrote a violin concerto in D minor with a high number of double stops in its first movement. Another one of his works attempts to evoke locations such as the gates of Kakisalmi and Viipuri Castle. This composer of the *Karelia Suite* based a tone poem on a mythical bird of the dead, the Swan of Tuonela. His most famous work is a nationalistic hymn that protests against Russian occupation. For 10 points, name this composer of *Finlandia*.

ANSWER: Jean **Sibelius** <AT>

7. Competing views of this concept are the “union view” and “robust concern” view. The counterpart of the Greek formulation of this concept, according to Jung, is *logos*, a term for the principle of rationality. Empedocles wrote that this and Strife were responsible for attracting and separating the four elements. Harry Harlow set up an experiment in which he created inanimate surrogate mothers for monkeys, and he published his findings in a paper titled “The Nature of” this. In the *Symposium*, Plato argues the most correct use of this concept is directed toward the divine, and that type of this concept is now given the name *platonic*. For 10 points, name this concept characterized by strong affection and attachment.

ANSWER: **love** (accept **eros** or **agape**)

8. The Fokker-Planck equations for this phenomenon show probability density over time. Another model for this phenomenon is a stochastic differential equation which measures it at long timescales; this is known as the Langevin equation. Through the Stokes-Einstein law, calculations of this phenomenon were used by Jean Baptiste Perrin to determine Avogadro’s number. For 10 points, diffusion is a basic example of what random motion of particles in a fluid, first discovered in grains of pollen by its namesake botanist Robert Brown?

Answer: **Brownian motion** (accept **pedesis**)<JK>

9. Duke Caxias led one nation’s forces in this conflict, which began with an offensive through the Mato Grosso province. This conflict was largely decided following the battle of Riachuelo, and one side’s leader in this conflict was killed at Cerro Cora. That man had decided to intervene on behalf of the Blancos party in Uruguay; he was Francisco Solano Lopez. For 10 points, identify this conflict which pitted Paraguay and the namesake group of nations, leading to the deaths of over one third of the Paraguayan army.

ANSWER: War of the **Triple Alliance**

10. Frances Hodgson Burnett writes about two British girls who are this type of person in *The Secret Garden* and *A Little Princess*. In those novels Mary Lennox and Sara Crewe begins as this type of person, but become one by the end because of typhus and “jungle fever,” respectively. Philip Pirrip identifies himself as one of these people when looking at a pair of tombstones in the opening of *Great Expectations.* Heathcliff is one of these people, so he is taken into custody by the Earnshaws. Exemplified by Oliver Twist, for ten points, name this type of person whose parents have died.

ANSWER: **orphan**s [accept obvious equivalents] <AG>

11. The creation of this entity was stalled in 1767 when Iroquois guides refused to pass the border of Lenape territory, well short of their goal of the Ohio River. John F. Kennedy opened a newly connected section of I-95 where it intersects with this entity only weeks before he was assassinated. This entity was created to resolve a conflict known as Cresap’s War, and to remedy a mistake made by Charles II in the charter granted to Pennsylvania in 1681. The western border of Delaware was formed by, for 10 points, what line drawn by a pair of namesake surveyors to form the official border of Pennsylvania and Maryland?

ANSWER: **Mason-Dixon** Line <CC>

12. These people participated in the Battle of Clontarf against Brian Boru in 1014 as one of their last major actions in Ireland. This group took the monastery at Lindisfarne, and besieged Paris after the refusal of Louis the Fat to pay tribute. They defeated Ethelred the Unready at the Battle of Maldon in 991, and forced him to pay the Danegeld, but were defeated at the battle of Stamford Bridge by Harold Godwinson. This group included Ragnar Lodbrok, and settled Vinland beginning in the 11th century, reaching their peak of influence under Olaf II. For 10 points, name this group of North European raiders and explorers, known for their use of longships.

ANSWER: **Vikings**

**Bonuses**

1. One form of this technique involves using Fourier transforms to analyze graphs plotting frequency versus absorbance. For 10 points each:

[10] Name this laboratory technique used to identify functional groups and concentrations in a sl based on how well they absorb light.

ANSWER: absorption **spectroscopy** (accept **spectrophotometry**)

[10] Spectroscopy frequently uses this type of light, which has wavelengths from 700 nanometers to 1 millimeter. This type of light with relatively low frequency lies between red visible light and microwaves on the electromagnetic spectrum.

ANSWER: **infrared** (accept **IR**)

[10] Running spectroscopy on solutions of varying concentrations will show that absorbance and concentration are linearly proportional, therefore affirming this law. It is commonly written as A = e L c.

ANSWER: **Beer’s** Law (accept **Beer-Lambert** law, **Lambert-Beer** law, or **Beer-Lambert-Bouguer** law) <AT>

2. This novel features Joseph Faehmel’s girlfriend, Marianne, who tells of how her brother had been killed by her mother under the orders of her Nazi father. For 10 points each:

[10]Name this novel in which an architect adopts the bellhop Hugo and gives him the first slice of a cake shaped like the Westminster Abbey.

ANSWER: ***Billiards at Half-past Nine***

[10] This author of Billiards at Half-past nine also wrote *The Lost Honour of Katharina Blum*, *The Safety Net*, and *The Bread of Those Early Years*.

ANSWER: Heinrich **Böll**

[10]The publication of this book in which the protagonist can detect smells through the telephone resulted in negative remarks from the press for its negative views on the Catholic Church and the CDU Party.

ANSWER: ***The Clown*** <DH>

3. This ship never completed its planned breadfruit delivery. For 10 points each:

[10] Name this vessel whose crew carried out a 1789 mutiny led by Fletcher Christian. After trying to settle in Tahiti, the mutineers were arrested by the HMS *Pandora* and locked in “Pandora’s Box.”

ANSWER: HMS ***Bounty***

[10] The crew of the *Bounty* mutinied against this captain, who proved the issues on the *Bounty* were no fluke by being mutinied against at least two other times.

ANSWER: William **Bligh**

[10] After his tenure as captain of the *Bounty*, Bligh was rewarded by being made governor of New South Wales, where he was overthrown in this rebellion long incorrectly assumed to be result from his crackdown on illegal alcohol sales.

ANSWER: **Rum** Rebellion <GB>

4. This man instructs the performer to play a theme 840 times in his composition *Vexations*. For 10 points each:

[10] Name this French avant-garde composer of “furniture music” such as his *Gnossiennes* and *Gymnopédies*.

ANSWER: Erik **Satie**

[10] Satie’s *Gnossiennes* and *Gymnopédies* were written for this keyboard instrument, which also names a dynamic marking that Satie frequently used in his works for it.

ANSWER: **piano**

[10] Satie mentored this group of French composers whose members included Arthur Honegger, George Auric, and Darius Milhaud.

ANSWER: **Les Six** <BM>

5. The feast in this Christian holiday began as a celebration of the giving of the Law on Sinai, and is practiced in Judaism as Shavuot. For 10 points each:.

[10] Name this holiday that commemorates the original descent of the Holy Spirit upon Jesus’ disciples, who upon receiving it, began to speak in different languages. Priests wear red garments to symbolize joy.

ANSWER: **Pentecost**

[10] During Pentecost, this saint delivered an open-air sermon. The acts of this first Pope, who was originally a fisherman before becoming one of Jesus’ first apostles, are featured in the first half of the Acts of Apostles.

ANSWER: Saint **Peter** [or Simon **Peter**]

[10] Scholars believe that Peter gave his sermon in this room in Jerusalem, which was also the site of the Last Supper. A structure identified as this room on Mount Zion is a popular site for pilgrimage.

ANSWER: The **Cenacle** (or **Upper Room)** <WX>

6. Brekekekex koax koax! So speak the title creatures in this play’s chorus, where they argue with Dionysus. For 10 points each:

[10] Name this play where Dionysus and his slave Xanthias attempt to bring Euripides back from the underworld.

ANSWER: ***The Frogs***

[10] This ancient Greek comic playwright wrote *The Frogs*. In this author’s play *Lysistrata*, the wives of soldiers swear abstinence until the Peloponnesian War is over.

ANSWER: **Aristophanes**

[10] In this play, a court case involves a dog accusing another dog of stealing a Sicilian cheese. Philocleon is addicted to the court in this play, much to his son Bdelycleon’s (Beh-del-yee-clee-on’s) chagrin.

ANSWER: *The* ***Wasps*** <AT>

7. The Free Officers movement launched a 1952 revolution in this nation. For 10 points each:

[10] Name this African republic whose first president was Muhammad Naguib. Its current capital is Cairo.

ANSWER: Arab Republic of **Egypt**

[10] This politician's *Infitah* policy allowed increased foreign investment into Egypt. This leader was the third president of Egypt.

ANSWER: Muhammad Anwar El **Sadat**

[10] Because Sadat signed the Camp David accords with Israel, this organization suspended Egypt from its ranks. This multinational organization counts 22 members, including the independent state of Palestine.

ANSWER: **Arab League** [or **League of Arab States**] <AG>

8. This goddess who sent two serpents to kill the infant Heracles was frequently associated with peacocks, and was described by Homer as being “cow-eyed.” For 10 points:

[10] Name this queen of Mount Olympus, the wife of Zeus.

ANSWER: **Hera** [do not accept “Juno”]

[10] Hera is associated with peacocks because their eye-like designs commemorate the hundred-eyes of this man, her henchman. After Hermes put all of this watchman’s eyes to sleep, he slew him with a stone.

ANSWER: **Argus** Panoptes

[10] Hera once got in an argument with this priest about whether men or women enjoyed intercourse more, as he had previously transformed into a woman after hitting two mating snakes with a stick.

ANSWER: **Tiresias** <AT>

9. This painting was possibly inspired by the ground level of Lower Manhattan’s flatiron building. For 10 points each:

[10] Name this painting centering on a cafe and its lonely patrons. A sign for Phillies cigars can be seen overhead.

ANSWER: ***Nighthawks***

[10] *Nighthawks* ​was a work by this American painter. His other works centering on people in lonely urban settings include *The Automat* and *Chop Suey*.​

ANSWER: Edward **Hopper**

[10] The alley in the background of Nighthawks was incorporated into this other Hopper painting. Unlike Nighthawks, however, this painting is set during the day.

ANSWER: ***Early Sunday Morning***

10. The rising portion of this circulation creates the ring of clouds known as the ITCZ. For 10 points each:

[10] Name this global circulation that rises at the equator and falls at 30 degrees latitude.

ANSWER: **Hadley cell** circulation

[10] This secondary circulation appears between the polar cells and Hadley cells, those circulations causing the existence of it. It thus appears approximately between 30 and 60 degrees latitude.

ANSWER: **Ferrel cell**

[10] The lifting of air at the equator creates an area with a low value for this quantity. On weather maps, isobars connect areas with equal values of this pressure and the H and L on those maps indicate this quantity.

ANSWER: **pressure**