CEESA Bowl Round 7

First Half

(Tossup 1) **This hero lived disguised as a girl on Skyros, the site of Theseus's death. This hero regrets killing Penthesilea after falling in love with her dead body. Ajax the Greater and Odysseus fought over this hero's armor. This hero gained his power when his mother Thetis dipped** (*) him in the River Styx. This hero was motivated by the death of Patroclus, which led him to drag Hector's dead body in a chariot for days. For ten points, name this hero who died from an arrow to the heel in the Trojan War.
ANSWER: **Achilles**

(Bonus 1) This god retrieves the Amrita from the Asuras while in the form of the woman Mohini. For ten points each,
[10] Name this "Preserver" of the Hindu Trimurti. Avatars of this god include Krisha and Rama.
ANSWER: **Vishnu**

[10] Vishnu's wife was this member of the Tridevi. This goddess associated with the lotus flower is honored on the third day of Diwali.
ANSWER: **Lakshmi**

[10] Vishnu's mount Shesha takes the form of one of these animals. One of these animals named Vasuki was used to churn the ocean of milk.
ANSWER: **naga** (accept **serpent**, accept **snake**)

(Tossup 2) **This country's city of Iquitos is one of the most isolated in the world, being most accessible by airplane. This country's Moche Valley is home to the ruins of the pre-Columbian city of Chan Chan. This country's ancient inhabitants built the still visible** (*) Nazca Lines. This country contains the ruins of Incan cities such as Machu Picchu. For ten points, name this Andean country in South America, whose capital is Lima.

ANSWER: **Peru**

(Bonus 2) This province is the site of Sable Island, a locale 180 miles off the coast of the mainland home to a sub-species of wild horses. For ten points each:

[10] Name this Canadian province, to which many Scottish immigrants moved, that is administered from the capital of Halifax.
ANSWER: **Nova Scotia**

[10] In the north of Nova Scotia is this large island with a name referencing Northwestern France. This island is the site of the wrongly named Bras d'Or (BRA-door) Lake which in actuality is an inland sea.
ANSWER: **Cape Breton** Island

[10] Nova Scotia is separated from this smallest Canadian province by the Northumberland Strait. It is the setting of *Anne of Green Gables*.
ANSWER: **Prince Edward Island** [Accept **PEI**]

(Tossup 3) **In this city, wool workers carried out the Ciompi (CHOM-pee) Revolt. A family in this city was targeted by the Pazzi conspiracy which was likely supported by Sixtus IV [the fourth]. Girolamo Savonarola ordered the burning of books in this** (*) city as part of the Bonfire of the Vanities. Lorenzo the Magnificent led, for ten points, what city in Italy that was ruled by the Medici family?

ANSWER: **Florence** (accept **Firenze**)

(Bonus 3) This ruler ordered the execution of his sons Bayezid and Mustafa, leading Selim II to succeed him after his 1566 death. For ten points each,

[10] What ruler defeated Louis II of Hungary at the Battle of Mohacs (MOE-hotch) and drove the Knights Hospitallers from Rhodes?
ANSWER: **Suleiman** the Magnificent (accept **Suleiman** I or **Suleiman** the Lawgiver or **Suleiman** Kanuni)

[10] Suleyman ruled this empire for over forty years. This empire based in Turkey lasted until its dissolution in the wake of World War One.
ANSWER: **Ottoman** Empire

[10] Suleyman held this title, which derives from an Arabic word meaning "strength" or "authority." Holders of this title did not claim the same religious mandate as the caliphs.
ANSWER: **sultan**

(Tossup 4) **This organ empties its contents into the small intestine when stimulated by cholecystokinin, while a disease affecting this organ causes its surface to look like a strawberry. This organ holds a substance that is produced in the** (*) liver and used to digest fats. Though it's not the kidneys, namesake stones composed of cholesterol can form in this organ. For ten points, name this organ in the digestive system which houses bile.

Answer: **gallbladder** [accept strawberry **gallbladder** or **gallbladder** stones]

(Bonus 4) Rosemary and Peter Grant spend six months every year on the island Daphne Major to tag and study these animals, for ten points each:

[10] Name these specific animals native to a Pacific archipelago whose beak sizes and shapes were found to vary based on their habitat and diet.
ANSWER: **Darwin**'s **finch**es (accept |Galapagos finch|es; prompt on partial answers)

[10] Studies of finches in the Galapagos led Darwin to propose his theory of evolution based on this mechanism, which is often summarized as "survival of the fittest."
ANSWER: natural **selection**

[10] This form of natural selection occurs when animals are able to select mates, and there is competition between males for the chance to reproduce.
ANSWER: **sexual** selection

(Tossup 5) **In 1893, reporter Michael Ahern admitted that he had fabricated the origins of one of these events, which was spread due to anti-Irish Catholic sentiment. After one of these events, Robert Hooke designed a monument that blamed it on "a Popist faction." Following one of these events,** (*) Christopher Wren was tasked with rebuilding a European capital city. According to legend, one of these disasters was started by Mrs. O'Leary's cow. For ten points, name these disasters, one of which destroyed Chicago in 1871 and one of which destroyed London in 1666.

Answer: **fire** (accept equivalents like **blazes**, **conflagrations**, or **infernos**)

(Bonus 5) A group of Native Americans led by Richard Oakes occupied this location for 19 months starting in 1969. For ten points each,

[10]   Name this prison off the coast of San Francisco. Six prisoners attempted to escape from this prison in a namesake 1946 "battle".
ANSWER: **Alcatraz** Federal Penitentiary/Island

[10] This Chicago crime boss spent five years at Alcatraz after being convicted of tax evasion. This man, who was nicknamed "Scarface," gained notoriety for killing seven members of Bugs Moran's gang in the Saint Valentine's Day Massacre.
ANSWER: **Al Capone**

[10] Robert Stroud, another inhabitant of Alcatraz, was known for his work with this general group of animals. During his time at Leavenworth Penitentiary, Stroud wrote a book titled Diseases of Canaries.
ANSWER: **birds**

Category Rounds

The categories are...

1. A Weak Acid

2. The 9/11 Attacks

3. A Christmas Carol

A Weak Acid…

Part 1: typically has a value below 7 for what quantity which measures the acidity of a solution on a scale from 0 to 14?
ANSWER: **pH** [accept **power** of **hydrogen**; accept **potential** of **hydrogen**]

Part 2: can be neutralized by a base to form water and what type of ionic compound exemplified by sodium chloride?
ANSWER: **salt** [accept table **salt**]

Part 3: can have its concentration measured using a burette and a pH indicator in what common laboratory technique?
ANSWER: **titration** [accept acid-base **titration**]

Part 4: will disassociate less due to the common ion effect, an example of what principle describing stresses on equilibrium concentrations named after a French chemist?
ANSWER: **Le Chatelier**'s principle

Part 5: will form its conjugate base by donating what species to solution according to the Arrhenius and Bronsted-Lowry definitions of acids?
ANSWER: **proton**s [accept **hydrogen** cat**ion**; accept **H**$^+$; accept **hydronium** ion; do not accept or prompt on "hydride ion" or "hydrogen anion"]

Part 6: mixes with its conjugate base to form what kind of solution which resists changes in pH and is exemplified by the carbonic acid system in the blood?
ANSWER: **buffer** solutions

The 9/11 attacks

Name the...

Part 1: City where the World Trade Center towers were brought down by intentional plane crashes.
Answer: **New York** City (accept NYC)

Part 2: Surname of the president who was in power in 2001 at the time of the attacks.
Answer: **Bush** (accept George W. Bush)

Part 3: Headquarters of the Department of Defense that was targeted by one aircraft in the attacks.
Answer: The **Pentagon**

Part 4: Country where the mastermind of the attacks, Osama bin Laden, was killed by U.S. Navy SEALs in Abbottabad.
Answer: **Pakistan**

Part 5: Number of the United Airlines flight that crashed in Pennsylvania after passengers and crew tried to regain control of the aircraft.
Answer: **93**

Part 6: Person arrested in Minnesota who was given a life sentence for supposedly being a replacement for the "20th Hijacker" in the attacks.
Answer: Zacarias **Moussaoui**

A Christmas Carol

Name the following characters who appear in the Charles Dickens novella *A Christmas Carol*.

Part 1: The book's grumpy protagonist, who learns to care about the people around him at Christmastime.
Answer: <u>**Ebenezer**</u> <u>**Scrooge**</u> (accept either underlined name)

Part 2: The protagonist's dead business partner, who appears to him as a chained-up ghost.
Answer: <u>**Jacob**</u> <u>**Marley**</u> (accept either underlined name)

Part 3: Bob Cratchit's young, sick son, whose death is predicted by the Ghost of Christmas Yet to Come.
Answer: Tiny <u>**Tim**</u> Cratchit (prompt on "Cratchit")

Part 4: The ghost that appears to the protagonist as a strange, shifting shape wearing a candle snuffer as a hat.
Answer: Ghost of <u>**Christmas Past**</u>

Part 5: The protagonist's former boss, whose party he sees with the help of a ghost.
Answer: Mr. <u>**Fezziwig**</u>

Part 6: The protagonist's former fiancée, who the protagonist abandons to become a lonely businessman.
Answer: <u>**Belle**</u>

Second Half

(Tossup 6) **A subspecies of this animal found in the Bili Forest uncharacteristically build ground nests for their young. This species, scientifically known as *Pan troglodytes*, has a relative named the bonobo, which likely speciated due to populations being separated by the Congo River. The first reported use of** (*) tools by this species was using a twig to attract termites for consumption, later being observed using stones to crack open nuts. For ten points, name this ape that, with the extinction of the Neanderthals, is the closest related species to Humans.

Answer: <u>Chimp</u>anzee [Accept <u>P</u>an <u>troglodyte</u>s]

(Bonus 6) This behavior is described by the Ising model, for ten points each:
Part 1: Name this permanent form of magnetism exhibited by elements like cobalt, nickel, and iron.
ANSWER: **<u>ferromagnet</u>**ism

Part 2: Ferromagnetism disappears above a temperature named for a scientist with this last name. Radium and polonium were discovered by the first ever female Nobel laureate, who also had this last name.
ANSWER: **<u>Curie</u>** (accept Marie <u>Curie</u>; accept Pierre <u>Curie</u>)

Part 3: The Ising model describes ferromagnetism with a lattice of values for this quantity, which can be either +1 or -1. Bosons have integer values for this quantity.
ANSWER: **<u>spin</u>** (prompt on "angular momentum"; do not accept or prompt on momentum)

(Tossup 7) **The books *The Fire Within* and *Icefire* are the first two in a series of novels written by Chris D'Lacey titled for the "last" one of these creatures. *The Inheritance Cycle* focuses on a boy named Eragon who befriends these creatures. In** (*) *The Hobbit*, one of these creatures is named Smaug. For ten points, name these mythical creatures, a magical one of which named Puff lives by the sea.

Answer: <u>dragon</u>

(Bonus 7) Three characters in this play predict that the title character will not be defeated until Birnam Wood comes to Dunsinane Castle. For ten points each,

Part 1: Name this Shakespeare play, in which the Weird Sisters predict that the title Thane of Cawdor will become king.
Answer: **<u>Macbeth</u>** (accept The Tragedy of <u>Macbeth</u>)

Part 2: Macbeth becomes king by murdering this man, his predecessor.
Answer: King **<u>Duncan</u>**

Part 3: Macbeth and Duncan rule this European country. According to theater tradition, it is unlucky to use the title *Macbeth*; instead, it is commonly referred to as a play from this country.
Answer: **<u>Scotland</u>** (accept the <u>Scottish</u> play, do not accept Britain, UK, etc.)

(Tossup 8) **Stirling's formula can be used to approximate this operation. Wilson's theorem states that this function of n minus one is congruent to negative one mod n if and only if n is a prime number. The gamma function extends this function. This function of n is the number of** (*) permutations when all entities are distinct. For ten points, name this function that multiplies integers less than or equal to the input together, symbolized with an exclamation mark.

Answer: **factorial**

(Bonus 8) Pell numbers approximate this value. For ten points each:
Part 1: Name this value, approximately 1.414, which can be proved to be irrational by infinite descent.
ANSWER: the **square root of two** [or **root two**]
Part 2: Followers of this man discovered that the square root of two is irrational, which was legendarily kept a secret. This man names the formula that for right triangles, a squared plus b squared equals c squared.
ANSWER: **Pythagoras** of Samos
Part 3: Notably, there are many of these statements regarding the Pythagorean theorem, including an algebraic one put forth by President James Garfield and one "by dissection" by Albert Einstein.
ANSWER: **proof**s

(Tossup 9) **The Mogi model predicts deformation due to pressure changes in certain areas that store this substance, though it's also stored in mush zones where it contains a significant amount of crystals. Plutons form from the cooling of this substance, and depending on the concentration of its silica content, it can be classified** (*) as felsic or mafic. For ten points, name this substance stored underground until it erupts from volcanoes as lava.

Answer: **magma** [do not accept "lava"]

(Bonus 9) A growler is a small one of these features. For 10 points each:
Part 1: Name these features that are only about 10% above the sea surface. These objects are formed from glaciers and one is suspected to have sunk the *Titanic*.
Answer: **iceberg**s

Part 2: This is the process by which icebergs are formed from glaciers. This process is a form of ablation.
Answer: ice/glacier **calving**

Part 3 Glaciers may also form these depositional features, which form from debris carried by a glacier. These features can be classified as lateral, medial, and terminal.
Answer: **moraine**s

(Tossup 10) **Emperor Yu the Great became Xia Emperor after successfully managing one of these events. A pair of humans who threw stones over their backs were notable for surviving one of these events and were named Pyrrha** (*) and Deucalion. A Biblical character waits on the mountains of Ararat for one of these events to end with his son Japheth. Ftp, name this event that Noah survived by building an ark.
ANSWER: |**flood**|

(Bonus 10)This man fails to stay awake long enough to pass Utnapishtim's trial. For ten points each,
[10] Name this Sumerian king who seeks immortality in an ancient "Epic". This king befriends Enkidu, a wild man who is punished by the gods for slaying the Bull of Heaven.
ANSWER: |**Gilgamesh**|
[10] The Epic of Gilgamesh is from this Middle-Eastern region located in between the Tigris and Euphrates Rivers. This region flourished under the reign of rulers like Sargon and Hammurabi.
ANSWER: |**Mesopotamia**|
[10] One of Gilgamesh's foes was this terrible guardian of the Cedar Forest. A sun god named Shamash binds this beast with his winds, allowing Gilgamesh and Enkidu slay it.
ANSWER: |**Humbaba**|

Tiebreaker

(Tossup 11) **A poem written and set during this war describes an "ecstasy of fumbling" during an aerial attack in this conflict. In the *Sun Also Rises*, Lady Brett Ashley and Jake Barnes have a complex romantic entanglement due to Jake's injury during this war. Siegfried Sassoon, a writer and soldier during this period, described it in the poem** (*) "Suicide in the Trenches." Wilfred Owen wrote "Dulce Decorum Est" during, for ten points, what deadly European war of the 1910s?

Answer: <u>W</u>orld <u>W</u>ar <u>I</u> [Accept The <u>Great War</u>]

(Bonus 17) Two cities of the Greek world fought a decades-long war in the fifth century BCE. For ten points each:
Part 1: What war pitted city states allied with Athens against city states allied with Sparta?
Answer: <u>**Peloponnesian**</u> War

Part 2: The war pitted the Sparta-led Peloponnesian League combat this league, led by Athens, named for the island on which it originally housed its treasury.
Answer: <u>**Delian**</u> League

Part 3: Pericles, leader of Athens, gave a famous address at one of these public events after the first year of the war.
Answer: <u>**funeral**</u>