

NEW TRIER VARSITY 2009

ROUND 10



1. Name the following meso-American civilizations for 10 points each:

[10] During this civilization's Classic Period, such cities as Tikal and Palenque were built, though it is most famous for a city in the center of the Yucatan Peninsula, which it controlled for almost three thousand years.

ANSWER: Mayans

[10] This civilization lasted until about 400 CE in the modern Mexican state of Veracruz, creating many altars and colossal stone heads.

ANSWER: Olmec

[10] Centered at the Valley of Oaxaca, this civilization left behind the archeological site of Monte Alban.

ANSWER: Zapotec

2. This work is said to have revitalized interest in the Middle Ages during the 19th century. For 10 points each:

[10] Name this work by Sir Walter Scott that describes the last remaining Saxons in England during a time when nobility was increasingly Norman.

ANSWER: Ivanhoe

[10] Wilfred of Ivanhoe loses the favor of his father because of his support of the Norman King Richard I, on top of his courtship of this femme fatale.

ANSWER: Lady Rowena

[10] Scott also penned this work about Frank Osbaldistone, the son of a titular merchant who is owed a debt. Frank ventures to the Scottish Highlands to collect the debt.

ANSWER: Rob Roy

3. Identify the following about a Greek god:

[10] This father of the muses wields lightning bolts and is the chief god of the Greek pantheon.

ANSWER: Zeus

[10] This shield originally belonged to Zeus before Athena took possession of it. It is ringed with scales, and in the center is the head of Medusa.

ANSWER: Aegis

[10] Zeus made the aegis from the skin of amaltheia, this type of animal, as repayment for nursing him as a child, and also turned one of this animal's body parts into a cornucopia.

ANSWER: goat

4. Identify these symbiotic relationships in nature, for 10 points each:

[10] This mutualistic combination of green algae and fungi is often found growing on bark or stones, and a failure of these to thrive is sometimes used as a bioindicator of poor air quality.

ANSWER: lichen

[10] In this relationship, fungi grow on plant roots, improving the plant's ability to absorb minerals, while the fungi take carbohydrates from the plant.

ANSWER: mycorrhizae

[10] Sea anemones have a symbiotic relationship with this fish, which is immune to anemone poison and eats undigested matter off the anemone while providing it with nutrients.

ANSWER: clownfish [or amphiprioninae; or amphiprions]

5. This event occurs on the eighth to twelfth day of the twelfth month of the Islamic lunar calendar. For 10 points each:

[10] Name this fifth pillar of Islam, a pillar that all able-bodied Muslims must undertake at least once in their life, also known as the pilgrimage to Mecca.

ANSWER: **Hajj**

[10] As part of the Hajj, pilgrims complete various rituals, such as stoning the devil, drinking from Zamzam well, and walking seven times around this holy monument that was built by Ibrahim.

ANSWER: **Kaaba** [or **Ka'ba**]

[10] Muslims face the Kaaba when they engage in this pillar, the practice of praying five times every day.

ANSWER: **Salah** [or **Salat**]

6. For 10 points each, name the following logical fallacies:

[10] This type of argumentation consists of suggesting that one's opponent holds a different, easier to attack position than he does, then taking down that nonexistent opposition.

ANSWER: **straw man**

[10] This fallacy is the statement that someone's argument is invalid because he contradicts it with his own behavior or words.

ANSWER: ad hominem **tu quoque** [prompt on ad **hominem**]

[10] This fallacy consists of assuming that if a quality is true of a whole group, it is true of every member of the group; or that if a quality is true of one member of a group, then it is true of all members of the group.

ANSWER: fallacy of **distribution** [accept fallacy of **composition**; accept fallacy of **division**; accept hasty **generalization**]

7. Name these government agencies that work on financial analysis, for 10 points each. Abbreviations are acceptable:

[10] This agency, currently headed by Doug Elmendorf, provides economic data to the Legislature. Its cost estimates of various health care proposals were commonly used to adjust those proposals during the past year.

ANSWER: **Congressional Budget Office**

[10] This executive department is currently headed by Tim Geithner, who serves in Obama's Cabinet. In addition to overseeing the US Mint, it advises the President.

ANSWER: US Department of the **Treasury**

[10] This unit, which is within a different Cabinet Department, produces the Occupational Outlook Handbook and measures Productivity and the Consumer Price Index. It recently measured the unemployment rate at ten percent.

ANSWER: **Bureau of Labor Statistics**

8. Name the following Chinese dynasties for 10 points each:

[10] This longest-lasting Chinese dynasty began to lose power in the Spring and Autumn period, and eventually gave way to the Warring States Period.

ANSWER: **Zhou** dynasty

[10] This Chinese dynasty saw the opening of the Silk Road and the first Roman embassies to China. It ruled from roughly 200 BCE to 200 CE.

ANSWER: **Han** dynasty

[10] This Luoyang-based dynasty, founded by the Emperor Wen, preceded the Tang and unified China once again, but fell shortly thereafter, having lost several wars against Korea.

ANSWER: **Sui** dynasty

9. This quantity is formally defined as the integral of the probability distribution multiplied by the value. For 10 points each:

[10] Name this value, which for the binomial distribution is equal to n times p , and for a fair six-sided dice is equal to 3.5.

ANSWER: expected value [or expectation value; accept mean; prompt on average]

[10] This measure of spread in a distribution is equal to $n p$ times the quantity $1 - p$ for a binomial distribution, and for a general distribution is equal to the square of the standard deviation.

ANSWER: variance

[10] This value for a distribution measures the peakedness, where higher values of it indicate a distinct peak similar to the normal distribution, while lower values indicate a more uniform distribution.

ANSWER: kurtosis

10. This game features the first appearance of FLUDD, a pretty sweet hydro-powered jetpack/gun/rocket booster/flying machine. For 10 points each:

[10] Identify this game for the Nintendo Gamecube, which featured a famous mustachioed protagonist trying to return solar power back to Delfino Island.

ANSWER: *Super* Mario Sunshine

[10] Super Mario Sunshine saw the return of this colorful character to the series proper, giving him the new ability to shoot juice out of his mouth after eating a piece of fruit.

ANSWER: Yoshi

[10] Yoshi is seen eating these title objects in a puzzle game released for the NES, Game Boy and SNES. He also eats these objects as a power-up in the racing mini-game of Super Mario RPG.

ANSWER: cookies [accept Yoshi's Cookie]

11. This poem features "the roller of big cigars" being called in to "whip/In kitchen cups concupiscent curds." For 10 points each:

[10] Identify this poem about a dead prostitute which describes her "horny feet" and her "dresser of deal,/Lacking the three glass knobs".

ANSWER: "The Emperor of Ice-Cream"

[10] This poet behind "The Emperor of Ice-Cream" worked for an insurance company and kept a low profile as a poet, while penning the "Anecdote of the Jar", "Thirteen Ways of Looking at a Blackbird", and "Sunday Morning".

ANSWER: Wallace Stevens

[10] An avid fan of Stevens, this poet was responsible for a long poem about the Brooklyn Bridge simply titled *The Bridge*.

ANSWER: Hart Crane

12. This scientist's namesake supernova was the most recent supernova known to have taken place in the Milky Way. For 10 points each:

[10] Name this astronomer whose eponymous laws of planetary motion include that orbits take the shape of conic sections.

ANSWER: Johannes Kepler

[10] Kepler's second law states that a line between an orbiting body and its star sweeps out the same area in any given time interval, which is a consequence of the conservation of this quantity.

ANSWER: angular momentum [or L; do not accept or prompt on partial answer]

[10] Kepler published his first two laws in this 1609 treatise, which incorporated the data of Tycho Brahe.

ANSWER: Astronomia Nova *sev Physica Coelestis* [or New Astronomy, or *Celestial Physics*]

13. This group was opposed by the Locofocos. For 10 points each:

[10] Name this group that dedicated itself to helping Irish immigrants enter New York politics that was led at various times by William Mooney, John Kelly, Charles Francis Murphy, and William "Boss" Tweed.

ANSWER: Tammany Hall [or the Columbian Order; or the Society of St. Tammany; or the Sons of St. Tammany]

[10] "Boss" Tweed's corruption was revealed by this man who lost the 1876 Presidential Election to Rutherford B. Hayes after Hayes received the twenty disputed electoral votes as per the Compromise of 1877.

ANSWER: Samuel Jones Tilden

[10] The end of Tammany Hall's power is often dated to the 1934 mayoral election of this FDR ally who vowed to "clean house and clean it thoroughly."

ANSWER: Fiorello Henry LaGuardia

14. It includes tunes from numerous drinking songs, including the Gaudeamus Igitur. For 10 points each:

[10] Name this 1881 composition, premiered at the University of Breslau the year after it awarded its composer an honorary doctorate.

ANSWER: Academic Festival Overture, Opus 80 [accept either underlined part]

[10] This composer wrote the *Academic Festival Overture*, which is often paired with his *Tragic Overture*, and also composed a famous lullaby.

ANSWER: Johannes Brahms

[10] This longest Brahms work used the Luther Bible as its text, and the first of its seven movements is titled "Blessed are they that mourn".

ANSWER: A German Requiem, to Words of the Holy Scriptures, Opus 45 [accept either underlined part; accept *Ein Deutsches Requiem, nach Worten der heiligen Schrift*]

15. Answer these questions about France in the 1870s.

[10] France experienced a humiliating defeat in this war, culminating in Kaiser Wilhelm's coronation in Versailles.

ANSWER: Franco-Prussian War

[10] This is the name given to the period of French government beginning with the fall of the Second Empire after the Franco-Prussian War.

ANSWER: Third Republic

[10] This was a short-lived attempt at establishing a socialist government in France in 1871, the result of the uprising in reaction to France's defeat in the war.

ANSWER: Paris Commune

16. Ammonia's N-H bonds have a difference of 0.84 Pauling units, meaning they have a polar type of this. For 10 points each:

[10] Name this type of bond found in carbon tetrachloride, ozone, and carbon dioxide, formed when two atoms share electrons.

ANSWER: covalent bond

[10] A central metallic atom can be bonded to polar molecules, such as water and ammonia, by a lone pair donation to form a quasi-covalent bond, forming this stable class of molecule. Examples are $\text{Al}(\text{OH})_4^-$, minus; and $\text{Cu}(\text{NH}_3)_4^{2+}$, two plus.

ANSWER: coordination complex [accept metal complex]

[10] This is the name for molecules, such as water, ammonia, hydroxide, and nitrate that have the capability to form coordinate covalent bonds with central metals in complexes.

ANSWER: ligands

17. He earned his nickname by showing his teeth while playing high school basketball. For 10 points each:
[10] Give the nickname of this Magi-Peel salesman married to Janice whose real name is Harold Angstrom.

ANSWER: **Rabbit**

[10] "Rabbit" Angstrom was created by this American author who penned *Rabbit, Run* and wrote about Alexandra, Jane, and Sukie in *The Witches of Eastwick*.

ANSWER: John **Updike**

[10] John Updike also wrote this short story in which Lengel gets mad at three bikini-clad girls, prompting Sammy to quit his job at the title grocery store.

ANSWER: **"A&P"**

18. Identify these things related to the electron transport chain, for 10 points each:

[10] The enzymes responsible for the electron transport chain are located in the cristae of this organelle, and create a proton gradient between its matrix and intermembrane space.

ANSWER: **mitochondrion/a**

[10] Complex I is responsible for dehydrogenating this electron donor derived from vitamin B3, which transfers two electrons to coenzyme Q.

ANSWER: **NADH** [prompt on **NAD+** or **nicotinamide adenine dinucleotide**]

[10] This insecticide and poison found in jícama seeds disrupts complex I, preventing electron transfer. Studies have found it induces Parkinson's-like symptoms in rats.

ANSWER: **rotenone**

19. This guy died on stage during a production of his *The Imaginary Invalid*. For 10 points each:

[10] Identify this French playwright responsible for *The Miser*, *The Misanthrope*, and a play about a religious hypocrite, *Tartuffe*.

ANSWER: **Molière** [accept Jean-Baptiste **Poquelin**]

[10] Molière was betrayed by this playwright of *Andromaque* and *Phèdre* who had a rival theatre company produce his *Alexandre Le Grand* after Molière's company had already debuted it.

ANSWER: Jean **Racine**

[10] This contemporary of Racine was often compared to him, and in fact wrote a play titled *Tite et Bérénice*, much like Racine's famous *Bérénice*.

ANSWER: Pierre **Corneille**

20. This man's early works include giant heads of Abraham Lincoln and Robert E. Lee. For 10 points each:

[10] Name this sculptor best known for Mount Rushmore.

ANSWER: John Gutzon de la Mothe **Borglum**

[10] Another American sculptor, Frederic Remington, produced this bronze status of a cowboy on a reared-back horse.

ANSWER: *The* **Broncho Buster**

[10] This American sculptor is known for *Fountain of Time*, at the west end of the Midway on the University of Chicago campus, as well as the *Alma Mater* at the University of Illinois at Urbana-Champaign.

ANSWER: Lorado Zadoc **Taft**