

NEW TRIER SCOBOL SOLO 2012

ROUND 4

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1. A book with this title ends with a section titled “Of the Power of the Intellect, or of Human Freedom” and argues that God is the substance of the universe. More recently, J. L. Mackie has written that the most basic notions of this branch of philosophy have to be invented. This field contrasts deontology with consequentialism, with the former exemplified in Immanuel Kant’s categorical imperative and the latter exemplified by utilitarianism. Aristotle wrote two works on this topic, the Eudemian [yoo-DEH-mee-un] and Nicomachean [nih-koh-MAH-kee-un]. Name this branch of philosophy concerned with behavioral norms, also known as moral philosophy.

ANSWER: ethics [accept Ethics *Demonstrated in the Geometric Manner* or Ethica, *ordine geometrico demonstrata*, prompt on moral philosophy]

2. On Venus, this region constantly heats up except for periods every hundred million years which release that heat. The bottom part of this layer on Earth contains post-perovskite and is sometimes denoted D double prime. The upper part generally contains the same rocks as Gros Morne National Park such as peridotite, and much of it contains olivine [OL-uh-veen]. The upper part contains the asthenosphere, and its upper boundary—located by a Croatian scientist tracking seismic waves—is the Mohorovičić [moh-khor-oh-VIH-chik] discontinuity, or Moho. Containing most of the Earth’s volume, name this region between the core and the crust.

ANSWER: mantle

3. After being insulted by the Privy Council, this person supposedly refused to wear the same set of clothes until he could wear them while dismembering the British Empire. Those insults were made by Alexander Wedderburn after this person turned letters written by Thomas Hutchinson over to a newspaper, and he wore those same clothes nine years later while signing the Treaty of Paris. His Plan of Union became a model for the Articles of Confederation and was presented at the Albany Congress, and in 1775 he became the first American Postmaster General. Name this founder of the University of Pennsylvania who published *Poor Richard’s Almanack*, also known for experimenting with electricity.

ANSWER: Benjamin Franklin

4. One poem by this writer, which describes an object “now warm and capable of earnest grasping,” is “The Living Hand”. Another poem begins with three stanzas addressed to somebody “Alone and palely loitering” while “no birds sing.” In another poem, this writer compared himself to Cortez looking at the Pacific after he read a translation of Homer. Another work begins “Thou still unravished bride of quietness”, and ends “Beauty is truth, truth beauty’—that is all / ye know on earth, and all ye need to know”. Name this poet who wrote “La Belle Dame sans Merci”, “On First Looking into Chapman’s Homer”, and “Ode on a Grecian Urn.”

ANSWER: John Keats

5. A female figure who stood in the center of early sketches of this painting was moved to the left, wearing a white robe and staring straight at the viewer. Another figure in this painting bends over on the right over a black slate while a man holds a globe above him. That last figure is speaking to the painter on the right and is named Strabo. One of the last additions to this painting is a mean-looking man who rests his elbow on a white table in front of the central staircase, Heraclitus. Plato stands in the middle of what painting of an ancient place of learning by Raphael?

ANSWER: *The* School of Athens [or Scuola di Atene]

6. This drug is often combined with the anesthetic procaine, also known as novocain, when it is used in intramuscular injections. Its V form can be taken orally but generally is less effective than the G form. It works by preventing the application of peptidoglycan to new cell walls, which is particularly destructive against gram-positive bacteria. Along with cephalosporins [SEF-uh-loh-"SPORE"-inz], these antibiotics are classified as beta-lactams. Name this antibiotic discovered when a halo-shaped region was noticed around some blue-green mold in 1928 by Alexander Fleming.
ANSWER: (benzyl)penicillin [accept penicillium or penam; prompt on antibiotic until "V form"]

7. One novel by this author, set in a town excited about the arrival of a bishop to bless a wedding, involves the murder of Santiago Nasar by the twins Pablo and Pedro. This author also wrote about the son of Pilar Ternera, a man named Arcadio who is eventually killed by firing squad after becoming a dictator. Another work starts with the suicide of Jeremiah de Saint-Amour, which is investigated by his friend Dr. Juvenal Urbino. Dr. Urbino's wife, who is loved by Florentino Ariza, is Fermina Daza. His story "Leaf Storm" was the first time he mentioned the town of Macondo, the home of the Buendia family. Name this author who wrote *Chronicle of a Death Foretold*, *Love in the Time of Cholera*, and *One Hundred Years of Solitude*.

ANSWER: Gabriel Garcia Marquez [prompt on Marquez]

8. Johann Sebastian Bach's concerti [kun-"CHAIR"-tee] for organ borrow heavily from this composer's collection of twelve concerti for one, two, and four violins, his *L'estro Armonico*. Another collection of twelve concerti by this composer contains pieces nicknamed "The Sea Storm" and "Pleasure", and the last section of its second concerto is nicknamed "The Storm". That section goes with the words "Alas, his fears are justified. The sky is filled with thunder and lightning and hail cuts down the proud grain"; those words are taken from the second of the four sonnets that go with the the first four concerti. Name this early 18th-century composer known as the "Red Priest", whose *The Contest Between Harmony and Invention* includes *The Four Seasons*.

ANSWER: Antonio (Lucio) Vivaldi

9. The first battle that this ship was engaged in successfully prevented the sinking of the stranded USS *Minnesota*. Lieutenant John Worden commanded this ship that had sailed straight from Brooklyn, but when he was partially blinded during that first battle, Samuel Green assumed command. This ship was not designed by Cornelius Bushnell, but it *was* Bushnell who convinced this ship's designer, John Ericsson, to submit the design to the selection board set up by Navy Secretary Gideon Welles. It was equipped with the first gun turret capable of rotating 360 degrees, and its most famous opponent was actually named the CSS *Virginia* at the time of that battle, Hampton Roads. Name this ship that failed to sink the ironclad formerly called the USS *Merrimack*.

ANSWER: USS Monitor

10. This concept is central to an interpretation of statistics that becomes necessary when situations do not have a natural probability that can be exactly calculated based on the setup of a problem. In an experiment, the expected value equals the sum of the quantity of all the products of the relative type of this, multiplied by their associated values. This term is used as an adjective for the polygon that is a line graph equivalent to a histogram. The relative type of this is calculated by dividing the absolute type by the total number of trials in an experiment. Name this quantity equal to the number of occurrences of a particular outcome in an experiment, which in another context is the reciprocal of period.

ANSWER: frequency

11. In one work by this author, Priscilla and Zenobia are the daughters through different marriages of Fauntleroy, who goes by the name of Old Moodie. He also wrote a short story in which Aylmer believes that his wife Georgiana would be perfect if she drank a potion, and a short story in which Beatrice takes care of her father's poisonous plants. Those stories, included in *Mosses from an Old Manse*, are "The Birth-Mark" and "Rappaccini's Daughter." In one of his novels, Roger Chillingworth learns that the minister Arthur Dimmesdale has impregnated his estranged wife Hester Prynne. Name this author of *The House of the Seven Gables* and *The Scarlet Letter*.

ANSWER: Nathaniel Hawthorne

12. This deity fathered a group of three sons that each had one hundred hands and fifty heads, the Hekatonchires [HEH-kah-tun-KY-reez]. Some stories claim that he imprisoned them in Tartarus with Brontes, Steropes, and Arges, his three sons that were Cyclops. Though stories of his origin vary widely, the *Orphica* claims he and his consort were born from the first egg. His blood created a group of nymphs called Meliae and the three Furies. That blood was spilled by Cronus, a son who castrated him at the request of this deity's wife Gaia—the mother of all of his offspring, including the Titans. Name this primordial deity, the Greek version of Caelus, who personified the sky.

ANSWER: Uranus [accept Ouranus; prompt on Caelus]

13. This quantity varies inversely with a particle's Compton wavelength. Two types of this quantity were found equivalent by Loránd Eötvös [UT-vush] using a torsion balance, a result known as the equivalence principle. In general relativity, this is responsible for spacetime curvature. Progress was recently made on how gauge bosons acquire this property—possibly along with leptons and quarks—through the Higgs mechanism. For two objects, this quantity for each of them is directly proportional to the gravitational force between them, and this quantity is multiplied by acceleration in Newton's second law. Name this quantity, often contrasted with weight, that is measured in kilograms.

ANSWER: mass [prompt on inertia; do not accept or prompt on "weight"]

14. This ruler arrested the killers of the son of the leader of Syria, Marcus Calpurnius Bibulus, furthering a rivalry with the Gabiniani. This pharaoh then raised an army in Syria and used it at Pelusium against Ptolemy XIII [13], but that fighting ended indecisively when Pompey was murdered. This ruler was then allied with Julius Caesar, and after Caesar's death with Mark Antony. Shortly after Antony killed himself, this pharaoh is believed to have committed suicide using a snake. Caesarion was the son of and may have succeeded what possibly last pharaoh of ancient Egypt, a woman?

ANSWER: Cleopatra VII Philopator

15. One work by this author has a speech near its beginning stating that life is miserable, laborious, and short. That speech is made after another character is described as too drunk to remember to shut the popholes. In another work, the protagonist—who has a varicose ulcer above his right ankle—lives near an enormous pyramidal structure of white concrete. That character receives a copy of *The Theory and Practice of Oligarchical Collectivism* by Emmanuel Goldstein from O'Brien and a note saying, "I love you" from Julia. This author wrote "All animals are equal, but some animals are more equal than others." Name this author of *Animal Farm* and *Nineteen Eighty-Four*.

ANSWER: George Orwell [or Eric Blair]

16. Citizens in this country organized a Catch a Harasser campaign to decrease sexual assaults during Eid. In a video released in late October, Al Qaeda leader Ayman al-Zawahiri called on his followers to support protests in this country until it institutes Sharia law; Zawahiri is in fact from this country. Following many demonstrations in this country in 2011, the president temporarily gave power to the Supreme Council of the Armed Forces. Following the disqualification of Khairat El-Shater, this country then elected Mohamed Morsi, who is supported by the Muslim Brotherhood. Name this nation that for thirty years was headed by Hosni Mubarak.

ANSWER: Arab Republic of Egypt [accept Ġumhūriyyat Maṣr al-ʿArabiyyah]

17. This artist collaborated with playwright David Henry Hwang on an adaptation of his play *The Sound of a Voice*. The title character of one of this man's operas employs a general named Horemhab, who sings an Akkadian song in the third act. The central character of another opera by this man meets Arjuna and Krishna "on the Kuru Field of justice" and later leads protesters on a march in the final act. This man's most famous opera features four interconnected "knee plays". Name this composer of *Akhnaten*, *Satyagraha*, and *Einstein on the Beach*.

ANSWER: Philip Glass

18. The theorem for these shapes named after Descartes is used to generate the inner and outer Soddy ones. A family of these shapes forms the solution to the differential equation $y' = -x/y$, and Apollonius demonstrated that this shape is formed by the locus of points k times as distant from one fixed point as they are from another. The osculating type is used to find the curvature of paths at a point, and in Ancient Greece many attempted the impossible problem of drawing a square with the same area as one. In polar coordinates, this is the graph of $r = 1/\cos(\theta)$, whose coordinates are cosine of θ and sine of θ and which is called the "unit" example of these figures. This is also generated by the equation $x^2 + y^2 = r^2$. Name these two-dimensional shapes with a fixed radius.

ANSWER: circles

19. This man resigned as Director of National Service after his proposals for mandatory military service were rejected during World War I. He served three times as Minister of Health before balancing the budget in 1934 as Chancellor of the Exchequer. During his time as Prime Minister, coal was nationalized and the trade war between his nation and Ireland ended. This leader gave a speech titled "peace for our time" after pledging not to interfere in an annexation of the Sudetenland. Identify this British Prime Minister who failed to appease Adolf Hitler in the Munich Agreement and was succeeded by Winston Churchill.

ANSWER: Neville Chamberlain

20. In its excited form, this element yields the bright red and yellow-green colors of the aurora. Before being replaced by carbon-12, its atomic weight was used as the standard of comparison. Antoine Lavoisier studied reactions involving this element to develop the law of conservation of mass and found that its role was opposite the one attributed to phlogiston [floh-JIS-tun]. Karl Scheele [SHAY-luh] first discovered it, but he failed to publish, so its discovery is generally credited to Joseph Priestley. Name this most abundant element in the earth's crust commonly used in combustion reactions, and which combines with hydrogen to form water.

ANSWER: oxygen

TB1. If left untreated, this lymph node infection spreads to a fatal septicemic [sep-tuh-SEE-mik] infection of the blood or a pneumonic infection of the lungs. The pneumonic form is the only one that can be transmitted human-to-human, which is rare. Named after the swellings associated with it, this disease causes skin necrosis and gangrene, and about two-thirds of its untreated cases are fatal. The bacteria which causes it, *Yersinia pestis*, is transmitted by fleas that have lived on infected rodents. Name this now very rare disease responsible in 14th-century Europe for the Black Death.

ANSWER: bubonic plague [prompt on black plague or black death]

TB2. This president unsuccessfully tried to reform welfare so that payments went directly to recipients with his Family Assistance Plan, but when that bill did not pass he enacted payments to local governments through the State and Local Assistance Act. Earlier, after losing a gubernatorial election to Pat Brown, he announced that the media won't have him to kick around anymore. His Secretary of State pushed a foreign policy allowing for a balance of power between the United States and Soviet Union known as détente [day-tawnt], and he visited China after a well-publicized exchange of ping-pong players. In one national campaign, he looked particularly bad compared to his opponent, JFK; during another, he delivered the "Checkers speech". Name this president who was succeeded by Gerald Ford when he resigned during the Watergate scandal.

ANSWER: Richard (Milhous) Nixon

TB3. This is the birth month of Alan Greenspan, James Madison, and Albert Einstein. Name this month featuring the Vernal Equinox, Pi Day, and Saint Patrick's Day that follows February.

ANSWER: March