

NEW TRIER VARSITY 2009

ROUND 4



1. In this composer's first oratorio, Stephen sings "Lo! I see the heavens opened", and a women's choir portraying Jesus sings "Saul, why do you persecute me?" This composer's last symphony uses Wagner's "Dresden Amen" and commemorates the three hundredth anniversary of the Augsburg Confession. This composer of the *St. Paul* oratorio and the *Reformation* symphony portrayed Fingal's Cave in the *Hebrides Overture* and included the "Wedding March" in his incidental music for *A Midsummer Night's Dream*. Name this composer of the *Italian* and *Scottish* symphonies who renewed interest in J.S. Bach by conducting the *St. Matthew Passion*.

ANSWER: Felix Mendelssohn-Bartholdy

2. Johnson's shot noise experiment had the same goal as this experiment, which used X-rays to ionize a gap that contained air as a dielectric. This experiment used three spacer balls to separate the plates of its capacitor, which usually reached a potential of about three thousand volts. The fundamental technique of this experiment was to balance the force of gravity with the forces of buoyancy and viscosity, but its result was off by about six percent due mostly to an incorrect value used for the viscosity of air. Name this 1909 experiment to measure the fundamental charge of an electron, conducted by Robert Millikan.

ANSWER: oil-drop experiment [accept Millikan experiment before the end]

3. Yeats's "The 19th Century and After" was a written response to this poem, which commands the reader to "come to the window", because "sweet is the night-air", and also refers to the naked shingles of the world and sounds that Sophocles heard long ago. Those sounds made him think about the "turbid ebb and flow of human misery." Beginning with, "The sea is calm to-night," the poem goes on to equate the persistence of waves with an "eternal note of sadness." Identify this work in which a "tranquil bay" sits near where "the cliffs of England stand", in a world "where ignorant armies clash by night", a poem by Matthew Arnold.

ANSWER: "Dover Beach"

4. Described as "the epitome of modern British beauty", a statue of this woman entitled *Siren* was given to the British Museum in 2008. She is also the subject of a portrait by Lucien Freud from when she was pregnant with her daughter Lila Grace. In 2005, the *Daily Mirror* ran front page photos of her snorting cocaine with her then-boyfriend Pete Doherty, causing many of her contracts to be dropped; however, a year later, she rebounded with eighteen contracts, including ones for Nikon, Burberry and YSL. In recent songs, Lily Allen sings of buying jeans so that she can look like this model, while Kanye West sings "You can be my black" version of this model "tonight". Identify this British supermodel, the epitome of 1990s heroin chic and the waif look.

ANSWER: Katherine Ann "Kate" Moss

5. Rear Admiral Frank Jack Fletcher was present at this battle which slowed down Operation Mo, sinking the *Shoho*. In this battle, the U.S.S *Lexington* was sunk. Another ship, which started the battle at the island of Tulagi, was damaged, although it was repaired to do battle a month later at the Battle of Midway. Name this battle that took place May Fourth through May Eighth, 1942, the first naval battle to be fought only with carrier-based airplanes, that took place in a namesake sea northeast of Australia.

ANSWER: Battle of the Coral Sea

6. A modification of this equation gives the resting potential of cell membranes, and because electrons loosely pair up in concentrated solution, this law becomes invalid at high ionic concentrations. It can be derived by taking the Gibbs free energy equation for equilibrium systems and substituting for charge. The main term in this equation is $\frac{RT}{nF}$, times the natural log of Q . Name this equation that relates the standard electrode potential to the actual cell potential of a voltaic cell.

ANSWER: **Nernst** equation

7. An opera by Busoni based on this subject was left incomplete at his death but was recently completed. Liszt composed a three-movement symphony based on this subject, with each movement a programmatic description of one of the three major characters. The best known musical example of this work is known for its "Jewel Song" and its Soldier's Chorus, "Gloire, immortelle de nos aieux!" That opera was composed by Charles Gounod. Identify this legend of a medieval scholar who sells his soul to the devil in return for his youth.

ANSWER: Doctor **Faustus**

8. One law concerning this function describes the radiant intensity from a certain type of surface, and is named for Lambert. The hyperbolic version of this function defines a catenary, and equals half the quantity e to the x plus e to the negative x . A double-angle identity for this function is that with an input of two theta, it equals the quantity one minus the tangent squared of theta over the quantity one plus the tangent squared of theta. Its Maclaurin series is one minus x squared over two factorial, plus x to the fourth over four factorial, et cetera; and its namesake law generalizes the Pythagorean theorem. Name this trigonometric function that, for an angle in a right triangle, equals the ratio of the adjacent side to the hypotenuse.

ANSWER: **cosine** function [or f of x equals **cosine** of x , etc.]

9. This man worked as an attorney for FDR's Agricultural Adjustment Administration, and investigated World War I military contractors on the Nye Committee. He argued with Hede Massing and helped establish the U.N. in his role as Secretary to the Dumbarton Oaks Conference. This author of *Recollections of a Life* met a man he knew as George Crosley, who turned out to be Whittaker Chambers. Even though the statute of limitations ran out, it was easy to give this man a second trial for perjury after the discovery of the "pumpkin papers." Name this politician who was brought before HUAC (HYOO-ak) and investigated for being a Soviet spy by Richard Nixon.

ANSWER: Alger **Hiss**

10. One work by this author opens with the quarrel between Uretsiti and Naotsiti, with the latter becoming a woodrat to escape into the rocks. In addition to *Tales of the Cochiti Indians*, a work similar to the earlier *Zuni Mythology*, this author argued in favor of moral relativism in a work that studied the Dobu people as an example of a human culture as a "personality writ large." She also examined a "shame culture" derived from the concept of giri, although her observations were restricted to internment camps. Name this author of *Patterns of Culture* and a study of post-World War II Japan, *The Chrysanthemum and the Sword*.

ANSWER: Ruth **Benedict**

11. In this novel, an exotic dancer has an American flag tattoo, and another character constructs an analogy wherein a jaybird is paralyzed by some yellow jackets. In a flashback, the narrator receives a briefcase from his grandfather. After an incident with Mr. Norton at the Golden Day, he goes to New York, where he works with Lucius Brockway at Liberty Paints. He masquerades as Rinehart, fights with Ras the Exhorter, and moves to a cellar that he lights with over a thousand light bulbs after being expelled by Dr. Bledsoe from college, joining the Brotherhood, and fighting in a "Battle Royal." Name this novel about a nameless black protagonist, by Ralph Ellison.

ANSWER: **Invisible Man** [do not accept or prompt on "The Invisible Man"]

12. This figure created Hu and Sia from his own blood. The Benu was said to be a manifestation of this god. He gave Sekhmet beer to end her slaughter of man, shortly after he sent his daughter to kill them as punishment for not making offerings. While bathing in the field of rushes, the epithet Harakhte is added to the name of this deity. This deity was bitten by a snake made using his own saliva, and as a result was forced to tell his secret name. He cursed Nut such that her children could not be born on any one day of the year. Also worshipped as Khepri, the pharaohs were said to descend from this figure. Identify this Egyptian solar deity.

ANSWER: Ra [accept Re; allow prefix of "Atum" or "Amun"; accept Benu before mentioned; accept Khepri before mentioned]

13. Nicknamed the Million-Acre Farm and the Birthplace of Confederation, this polity was originally known as St. John's Island. This polity's eastern half contains the cities of Miminogash, Tignish, and its second-largest city, Summerside. Its only connection to the mainland is the Confederation Bridge, spanning the Abegweit Passage of the Northumberland Strait. This island's capital and the suburbs of Cornwall and Stratford form the polity's main urban area. Situated in the Gulf of St. Lawrence, it is located north of Nova Scotia and New Brunswick. Name this island with capital at Charlottetown, the smallest province of Canada.

ANSWER: Prince Edward Island [accept St. John's Island before it is mentioned]

14. Louis Jacobs summarized this man's belief about gods as "God is not 'outside' or apart from Nature; He did not create nature but is nature." This writer stated that a mind could find joy by loving something eternal and infinite in his work *On the Improvement of the Understanding*. He also argued that religion could allow contrarian philosophizing without endangering the state in his *Tractatus Theologico-Politicus*, while his most famous book was called "a geometrical order". Excommunicated in 1656 by the Jewish community, name this Dutch philosopher who wrote *Ethics*.

ANSWER: Baruch Spinoza [or Benedict Spinoza; or Bento de Espinosa]

15. Baber described parenchymatous cells in this organ of a dog, and in humans, one deficiency associated with this organ is cretinism. Four glands surrounding it secrete a hormone that raises the level of calcium in the blood, opposing the calcitonin produced by this gland. It has two lobes connected by an isthmus and is the main gland affected by a disease that can cause the eyes to protrude, Graves' disease. This gland's namesake hormone is produced from tyrosine and iodine. Name this endocrine gland located below the larynx, whose malfunction can lead to a goiter.

ANSWER: thyroid gland

16. Soon after his coronation, this king was defeated at Methven and Strathfillan, causing him to flee to Rathlin Island. Though his brothers Nigel, Thomas, and Alexander were drawn and quartered, his brother Edward at one point became King of Ireland. After the death of King Edward I of England, this leader was successful at Glen Trool, Pass of Brander, and Bannockburn, allowing him to hold Parliament in St. Andrews and ultimately gain recognition from Pope John XXII and Edward III. Name this Scottish king who secured Scotland's independence.

ANSWER: Robert I [or Robert the Bruce]

17. In this work, Pinabel and Thierry duel over the freedom of Pinabel's kinsman, and Thierry is victorious through God's intervention. It also sees the protagonist's fiancé, Aude, die of grief before her fiancé is revenged by the drawing and quartering of Ganelon. The title protagonist dies after blowing his ivory horn with such power that his temples explode, much to the chagrin of Olivier, who had counseled him to blow it before their rear guard was massacred by Saracens. Identify this oldest surviving major work of French literature, chronicling the Battle of Roncevaux Pass.

ANSWER: *The Song of Roland* [or *La Chanson de Roland*]

18. This architect designed the CBS Building in New York City, his only skyscraper, but contrasted its verticality with the horizontal, rectangular style of John Deere Headquarters in Moline, Illinois and General Motors Technical Center in Detroit. Today, he is remembered for the curvy, futuristic TWA Terminal in New York, the swooping roof and mobile lounges of the main terminal of Dulles Airport, and a 630 foot tall structure on the banks of the Mississippi River. Name this Finnish-born architect who designed the Gateway Arch in St. Louis.

ANSWER: Eero Saarin

19. This man went to the Levant of Western Asia for a period of three years beginning in 1685. His most famous work was published by his cousin Richard Sympson, who included a letter to the reader stating that he had “[struck] out innumerable passages relating to...minute descriptions”. Because this man did not know Japanese, he “was not qualified to make any inquiries” regarding Japan’s relationship with the Struldbrugs. He had a notable run-in with Don Pedro de Mendez, a Portuguese sailor who this man considered to be a Yahoo. Identify this man who traveled to locales such as Blefuscu and Lilliput, the title character of the most famous work by Jonathan Swift.

ANSWER: Lemuel Gulliver [accept either or both parts]

20. During this event, Vice Admiral Brown was ordered to “keep clear of foreign op areas, but take no guff from anybody”. It involved a show of force by the ships *Forrestal* and *Roosevelt* and evacuations involving the ships *Coral Sea* and *Randolph*. Lester Pearson won a Nobel Peace Prize for organizing UN forces which prevented further attacks. It began when the UK and US withdrew a contract for completing a dam following recognition of Mao’s China, sparking what has come to be known as the Tripartite Aggression. Both Eisenhower and Khrushchev were strong in their renunciation of Anglo-French conduct. Name this 1956 attempt by the British and French to reclaim an Egyptian canal.

ANSWER: Suez Canal Crisis [accept Tripartite Aggression before it is mentioned; accept reasonable equivalents for “Crisis”]