NEW TRIER SCOBOL SOLO 2010

CHAMPIONSHIP MATCH — PHASE I

Questions written and edited by David Reinstein with assistance from Matt Bardoe, Mark Grant, Jonah Greenthal, and Mike Laudermith



1. In one work, this writer knows to often ask "Whose spirit is this?" as a group listens to a woman sing by the sea. Another poem by this writer ends with "an old sailor, drunk and asleep in his boots" dreaming of "tigers in red weather" in an area where all of the nightgowns are white rather than strange. Another work by this poet claims, "I was of three minds." That work also states that a man and a woman and the type of bird mentioned in the poem's title are one. Another poem by this man is set at a festive wake and begins, "Call the roller of big cigars." Identify this poet who wrote "The Idea of Order at Key West", "Disillusionment of Ten O'Clock", "Thirteen Ways of Looking at a Blackbird", and "The Emperor of Ice-Cream".

ANSWER: Wallace Stevens

2. This person was the first scientist to use what later became known as Reynolds numbers, which he called an index of friction. When the Reynolds number is low, this person's name is combined with Einstein's to describe the diffusion rate and to describe the size of a sphere that diffuses at the same rate as a molecule. The law named after this person states that in limiting cases you can multiply six pi times velocity times the approximating sphere radius times viscosity to find the drag force on an object, and his eponymous mathematical theorem generalizes the theorems of Gauss and Green. Name this scientist who in 1845 published a new derivation of the equation describing fluid motion, forever linking his name with that of Claude-Louis Navier.

ANSWER: George Gabriel Stokes

3. This shape is the cissoid of a single circle using a point located root two times the radius from the center, and it is the inversion of a hyperbola. This shape also is the envelope of circles centered on a hyperbola and passing through the center of that hyperbola, and it also is the locus of points such that the product of the distances to two fixed points is constant. A specific case of a Cassini oval, this shape can be expressed in polar form as *r* squared equals *a* squared times the cosine of two theta. It is the shape of the slice of a torus if the slice has a point in the center. Name this shape which looks like a figure eight or an infinity sign.

ANSWER: <u>lemniscate</u> of Bernoulli [prompt <u>Cassini oval</u>]

4. According to Richard Poe, this person is the leader of the Shadow Party. This person has partnered with Jim Rogers and Stanley Druckenmiller and has written books such as *The New Paradigm for Financial Markets*. A cofounder of the Quantum Fund, he is blamed for profiting by devaluing the British Pound in 1992. A major supporter of the anticommunist Velvet and Rose Revolutions, he made multimillion dollar donations to America Coming Together and the Center for American Progress and gave a speech titled *Why We Must Not Re-elect President Bush*. This founder of the Open Society Institute recently gave money to J Street, which is considered controversial because he previously supported Arab groups. Name this man who Glenn Beck mistakenly claimed was complicit in sending Jews to Nazi death camps.

ANSWER: György "George" <u>Soros</u> [or György <u>Schwartz</u>; for either possible answer, accept the first and last name in either order]

5. This person's original lawyer was Ernest Besig, and when a judge originally released him on bail, the court was surrounded by military police who arrested him again. In 1983, after showing that the military withheld evidence, the case against him was vacated, but it is still considered established law. Many years earlier, looking forward to his up-

coming marriage and wanting to continue his career as a welder, this man disobeyed Executive Order 9066, trying to change his name to Clyde Sarah when his family went to Tanforan. Name this former resident of Oakland, a native-born American whose attempt to avoid internment camps led to a Supreme Court case.

ANSWER: Fred Korematsu

- **6.** This artist worked with Josep Llorens Artigas to build the *Wall of the Sun* and *Wall of the Moon* murals for the UNESCO building in Paris. One painting by this artist shows a bird in the upper left corner above a yellow, red, and white ladder. In another painting by this artist with a ladder on the left side, the title figure is next to a jack-in-the-box and wearing a mask that is half purple and half red. This European built a tapestry that was displayed in the World Trade Center, and one of his works is a mosaic in the middle of Las Ramblas in Barcelona. This artist famously said, "I want to assassinate painting." Name this Catalan creator of *Harlequin's Carnival* and a sculpture originally titled *The Sun, the Moon, and One Star* located near the Chicago Picasso, in addition to *Dog Barking at the Moon*. ANSWER: Joan Miró i Ferrà
- 7. The radial distribution functions for these substances lack sharp peaks at large distances, and metallic examples can be made via the splat technique. W. H. Zachariasen first diagrammed the random-network model of these substances that are often produced by laser glazing, melt spinning, or another rapid-quench method. Beryllium diflouride can become a rare ionic example of one of these solids, and the thin films in solar cells consist of silicon in this form. Showing no long-range order at the atomic level, identify this term for solids like polystyrene and window glass that do not have a crystalline lattice structure.

ANSWER: **amorphous** solid/substance [accept **noncrystalline** solid/substance before "crystalline"]

- 8. The narrator of this book has a suit given to him by Sir Edward Blair in the early 1930s and has read Jane Symons's *The Wonder of England*. After not traveling for a long time, he decides to visit Mrs. Benn, who will soon become a grandmother and who is referred to by the narrator as Miss Kenton because he worked with her before she was married. The narrator of this novel now works for Mr. Farraday and would like to bring Miss Kenton back. Identify this novel about Stevens, a butler who used to work for Lord Darlington, written by Kazuo Ishiguro.
- 9. The victors in this battle took their prisoners to Lampsacus and killed all of them except for the son of Leucolophides. Fought the year after the Battle of Arginusae, this battle ended with Conon headed towards Cyprus and the ship *Paralus* returning to Athens to report the results. Before this battle began, the Athenians spent four days trying to engage their enemies, but they finally let their guard down on the fifth day, leading to a decisive defeat for the Delian League. Name this naval victory by Lysander that hastened the end of the Second Peloponnesian War. ANSWER: Battle of <u>Aegospotami</u>
- 10. In Yemen, many people believe that the fifth person to hold this title was Zayd ibn Ali rather than his brother Muhammad al-Baqir, and it used to be common to use this title to denote the leader of Yemen. This title generally takes less importance in Sunni as opposed to Shi'a Islam, but one of its Sunni uses is for the founders of the four madhhabs. In Shi'a Islam, where the Umayyad Caliphs were not recognized, this group of people is considered infallible, starting with the Commander of the Faithful and ending with al-Mahdi, who will return with Jesus. Give this Islamic term which can also be used for a prayer leader.

ANSWER: Imams

ANSWER: The Remains of the Day

11. Halton Arp tried unsuccessfully to prove that these objects could be connected by gaseous bridges, and they are distinguished from BL Lac objects because their continuum spectra show unusual emission lines, which were first explained by Maarten Schmidt. These objects reached their peak population in the universe about ten billion years ago, and the first to be discovered was 3C 273, located in the constellation Virgo. These objects operate under the same mechanism as radio galaxies, with their name derived from the fact they are very strong radio sources, though they are now thought to surround the central supermassive black holes of large galaxies. Producing ten to one hundred times more energy than the entire Milky Way in an area the size of our solar system, name these extremely distant objects, the most luminous objects in the universe.

ANSWER: quasar [accept quasi-stellar radio source]

12. This artist wrote about an analogy of a moving triangle and the importance of deep blue colors in his written work Concerning the Spiritual in Art. This painter used one name for many of his works that were done quickly, including the 31st one which is nicknamed Sea Battle, and a different name for more planned works, but the first three of those ten planned works were labeled as degenerate by the Nazis and destroyed. This painter's 1912 work Last Judgement was rejected from an exhibition, leading Franz Marc to support him. Several artists joined a movement which took its name from a work by this artist showing a man riding a white horse, The Blue Rider. Name this artist of many Improvosations and Compositions, an abstract Russian painter.

ANSWER: Wassily Kandinsky

- 13. At one point in this novel, an old man goes to Barbara Smith's house and, after sitting on the bottom step and spilling the contents of his wallet, tells the man who answers the door the heaviest thing of all his years. Earlier, James Jarvis, inspired by the work of his son, reads the Gettysburg Address. James' son Arthur was murdered by Absalom, the son of this novel's protagonist. That protagonist has a pound stolen from him on his way to Sophiatown in an attempt to find his son and his sister Gertrude after receiving a letter from a fellow reverend. This novel starts in Ixopo and moves to Johannesburg with its protagonist Stephen Kumalo. Identify this novel written by Alan Paton. ANSWER: Cry, the Beloved Country
- 14. The founder of this philosophy, who initially worked under Henri de Saint-Simon, believed that each branch of science moved through three stages, the first two being theocratic and metaphysical, and the third having the same name as this philosophy. The application of this belief to social sciences was questioned by Wilhelm Dilthey, Heinrich Rickert, and Max Weber based on the importance of symbols and values. The founder of this philosophy proclaimed himself the High Priest of Humanity and devised a calendar with month names such as Moses, Dante, and Gutenberg. This philosophy emphasized observable phenomena and verifiable scientific laws and de-emphasized causation, and its legal branch is associated with utilitarianism and Jeremy Bentham. Name this philosophy associated with Auguste Comte.

ANSWER: <u>Positivism</u> [or <u>Positivist</u>]

15. This group focused on elections as part of Danny Morrison's Armalite and ballot box strategy. This group's first official leader was Edward Martyn, but it was based on the ideas of Arthur Griffith, who thought Austria-Hungary could be used as a model. In 1970, this group divided into factions nicknamed Gardiner Place and Kevin Street, with the latter eventually taking over. In 1926, this group's leader, Éamon de Valera, left it to found Fianna Fáil. Since 1983, this group has been led by Gerry Adams. Name this group whose name means We Ourselves which is now viewed as the political wing of the Irish Republican Army.

ANSWER: Sinn Fein [prompt on We Ourselves; prompt on Ourselves Alone]

16. In hyperbolic geometry there are two forms of this geometric configuration, ultra and limiting. In Euclidean geometry it is the degenerate conic section found by the limiting case as the focal distance goes to infinity while the vertices remain constant of a hyperbola. This degenerate conic can also be seen as the intersection of a plane and double cone when the vertex of the cone is moved to a point at infinity making the cone into a cylinder. In projective geometry, this configuration cannot exist. Solutions in the coordinate plane to the equation *y* squared equals one provide an algebraic description to this configuration. This configuration also exists in the graph of an inconsistent system of two linear equations—that outcome arises when the two lines have the same slope. Identify this relationship between two lines in the same plane that never intersect.

ANSWER: parallel lines

17. The coelomic (SEE-loh-mihk) sac, found in the coxal glands of crustaceans, is analogous to this microscopic structure in mammals. It has both vascular and urinary poles, and Bright's disease causes this structure to become blocked with crystals and epithelial cells. Ultrafiltering podocytes in this structure can collect solutes smaller than eight nanometers, explaining the high concentration of salt and sugar in its lumen. The proximal tubule links this structure to the loop of Henle and it forms the renal corpuscle together with the structure it surrounds, the glomerulus. Named for a nineteenth-century anatomist, identify this cup-like component of the nephron that first collects the blood filtrate during urine production.

ANSWER: **Bowman's capsule** [accept **capsula glomeruli** or **glomerular capsule** before "glomerulus"]

18. In this play, New York City is described as, "This strange place, in the melting pot where nothing melted," by Rabbi Isidor Chemelwitz. One of the characters is the ghost of Ethel Rosenberg, who eventually feels empathy towards Roy Cohn. Another character, visited by the spirits of two of his relatives who died from the plague hundreds of years ago, is Prior Walter. Prior has a relationship with Louis Ironson that Louis abandons when he learns that Prior has AIDS. This play's two parts, *Millennium Approaches* and *Perestroika*, take a total of about seven hours to perform. Identify this work by Tony Kushner.

ANSWER: Angels in America: A Gay Fantasia on National Themes

19. This composer's third symphony, which premiered with seventeen-year-old Gustav Mahler in the audience, made several references to works by Richard Wagner, and his seventh symphony uses a Wagner tuba. In addition to his nine numbered symphonies, this composer has early works titled a *Study Symphony* and *Die Nullte*, his zeroeth symphony. This composer's fourth symphony, which contains a morning trumpet blast, a bird song, a hunting theme, and a Volksfest, is nicknamed the *Romantic Symphony*. Name this Austrian composer who is known for having many revised versions of his songs.

ANSWER: Joseph Anton <u>Bruckner</u>

20. Antonio Jose de Sucre was headed towards what would soon become this country when he was killed, which is where he was victorious in the Battle of Pichincha. One of its most controversial leaders, who weakened the role of the Catholic Church before being dragged out of jail and murdered by a Catholic mob, was Eloy Alfaro. Alfaro's policies were in many ways a reaction against Gabriel García Moreno. During the 20th Century, the military on four different occasions removed President José María Velasco Ibarra from office. This country's politics often reflect a tension between the large port city of Guayaquil and the rest of the nation, and it has gotten in many fights with Peru. Identify this country currently headed by Rafael Correa whose capital is Quito.

ANSWER: Republic of Ecuador [or República del Ecuador]

Read the tiebreaker questions only if there is a tie after the above 20 questions. The first correct answer wins the match.

TB A-1. According to John Keats, this being "scared away the meek ethereal hours and made their dove wings tremble." This titan helped his brothers Crius, Coeus, and Iapetus hold down their father Uranus when he was castrated by their other brother Cronus. Some sources claim that he gave sight to mankind, and he was the first being to understand the motion of the sun, moon, and stars. Though Homer called this titan's wife Euryphaessa, most sources called her Theia, who was this titan's sister. Name this father of Eos, Selene, and Helios whose name means "He who goes before the sun" or "He who Goes Above".

ANSWER: **Hyperion**

TB A-2. This composer's second symphony, written during World War Two, was nicknamed "The Bell". One piece by this composer, which was performed many times by William Kapell, is titled *Piano Concerto in D-flat major* and originally called for a flexatone. Just before World War Two, this composer wrote a *Violin Concerto in D minor* that was premiered by and edited by David Oistrakh. This composer wrote a ballet about a woman on a collective farm married to an alcoholic, in addition to a ballet set in ancient Rome, *Spartacus*. Name this Armenian composer who, for the final act of *Gayane*, wrote the *Sabre Dance*.

ANSWER: Aram Khachaturian

TB A-3. In the extracellular matrix, this substance is always surrounded by proteoglycans, and vitamin C deficiency leads to defects in this substance, causing scurvy. It is rich in hydroxyproline and this scleroprotein has a triple helix structure. Type eighteen of this substance is used to form endostatin, while a deficiency of type one causes Osteogenesis imperfecta, which is commonly called brittle bone disease. It yields gelatin when denatured, and is the most abundant protein in animals. Name this fibrous protein that gives skin its elasticity and forms the tendons, ligaments, and other connective tissues of the body.

ANSWER: collagen

TB A-4. This city became the seat of an independent Kingdom led by Ahmed Karamanli starting in 1711, and it was the largest city captured by Italy in the Italo-Turkish War. This capital city was bombed by the United States in 1986 in response to the Berlin discotheque bombing, though twenty years later the United States opened an embassy here, the same year that a treaty signed in this city ended war between Sudan and Chad. The USS *Philadelphia* was captured in this city's harbor in 1803 before it was burned by Stephen Decatur, and the city was later attacked by Edward Preble as part of the First Barbary War. Name this residence of Muammar al-Gaddafi, the capital of Libya.

ANSWER: Tripoli