Scobol Solo 2017
Championship Tiebreakers

1. This writer asked "I who am poisoned with the blood of both, / Where shall I turn, divided to the vein?" in a poem that refers to the Mau Mau Uprising and addressed the person's status as a descendant of Africans who did not live in Africa. In an epic poem by this writer, the blind man Seven Seas sits in Ma Kilman's store and represents Homer. That work by this poet features the retired English officer Major Plunkett and the fisherman Achille [uh-keel]. This person wrote about Felix Hobain's night in jail in *Dream on Monkey Mountain.* Name this native of Saint Lucia who wrote "A Far Cry from Africa" and *Omeros* [oh-MAIR-ohss].

   Answer: Derek (Alton) <u>Walcott</u>

2. This mathematician and Carl Jacobi [yah-koh-bee] give their names to an equation relating a partial derivative of this mathematician's "principal function" to his namesake function; that equation applies the calculus of variations to optics. This man carved the equation $i^2 = j^2 = k^2 = ijk = -1$ ["*i* squared equals *j* squared equals *k* squared equals −1"] on Brougham ["broom"] Bridge after inventing a non-commutative, four-dimensional algebraic system. This man introduced the icosian ["eye"-KOH-see-un] game, in which one tries to find a way of touching every vertex of a dodecahedron [doh-dek-uh-HEE-drun] exactly once, an idea generalized in graph theory as the "paths" or "cycles" named for this mathematician. Name this Irish mathematician whose namesake operator measures the total energy in a system, and who developed the quaternions [kwah-TUR-nee-unz].

   Answer: William Rowan <u>Hamilton</u> [prompt on <u>Hamiltonian</u>]

3. One of the positive reviews of this painting came from a man who is depicted in it sitting with Frank Lamy [lah-mee] and Norbert Goeneutte [gohn-yut]. A Cuban painter dancing with a woman are the most in focus people on the left side of this painting. Camille Mauclair [kah-meel maw-klair] said that this painting demonstrates that its artist "sees the gaiety of Sundays, the flashes of the sun, the oddity of a crowd carried away by the rhythm of the waltzes". This painting shows Estelle wearing a striped dress looking over the back of the bench she is sitting on. Name this Pierre-Auguste Renoir [pyair oh-goost ren-war] painting showing people enjoying a Sunday afternoon in Paris.

   Answer: *Bal du <u>moulin de la Galette</u>* [bahl doo moo-lan deh lah gah-let] or *Dance at Le <u>moulin de la Galette</u>*

4. This city-state was the home of Benedetto I [1] Zaccaria, who made himself the Lord of Chios [KEE-ohss] after capturing the island from the Byzantine Empire in 1304. Before giving it away to France in 1768, this city-state controlled Corsica for almost 500 years. This city-state's first royal ruler was the title character of Giuseppe Verdi's opera *Simon Bocca·negra*. It was the home of Admiral Andrea Doria, whose adopted son commanded ships at the Battle of Lepanto. This city became part of the Kingdom of Sardinia after being the seat of the Ligurian Republic. Name this city that, like Venice, was headed by doges [DOH-jiz] and which was the birthplace of Christopher Columbus.

Answer: <u>Genoa</u> [or <u>Genova</u>]

5. In a 1961 experiment, this person and his doctoral student demonstrated that "UUU" was the codon for the production of the amino acid phenyl·ala·nine [fee-nul-AL-uh-neen]. This person worked with a different researcher on a follow-up experiment in which messenger RNA was passed through ribosomes to decipher a variety of codons. Har Gobind Khorana built on this man's experiments; the two of them shared a Nobel Prize with Robert Holley to recognize their cracking of the genetic code. Name this biologist who carried out famous experiments with J. Heinrich Matthaei and Philip Leder.

Answer: Marshall (Warren) <u>Nirenberg</u>

6. This city's Churkin Naval Cemetery commemorates American, British, and Canadian expeditionary forces of the early 20th century. This city's Eastern Bosphorus strait is spanned by a two-mile-long cable-stayed bridge to Russky Island. In 2015, an economic recovery plan restored this city's status as a free port, making it the only such port in Russia. This capital city of Primorsky Krai was connected to Harbin, China via the Chinese Eastern Railway, and was the eastern terminus of the Trans-Siberian Railway. Name this Russian port on the Sea of Japan which houses the Russian navy's Pacific fleet.

Answer: <u>Vladivostok</u> [vlud-ih-vah-STOHK]

7. In one novel by this author, a woman agrees to "accept the situation" after a man says he does not like her religion but likes *her* intensely. This author wrote about Christopher Tietjens [TEET-jinz] during World War I in a tetralogy beginning with *Some Do Not. . .* that is collectively called *Parade's End*. This author wrote a trilogy about Catherine Howard's relationship to Henry VIII [8], and he collaborated on three novels with Joseph Conrad. In one novel by this author, the title character is Captain Edward Ashburnham, who had an affair with the American narrator's wife Florence Dowell. Name this author of *The Good Soldier*.

Answer: Ford Madox <u>Ford</u> or Ford Hermann <u>Hueffer</u>

8. This building is next to 505 Sansome, which was also designed by William Pereira. This building will soon be surpassed as the tallest building in its city by Salesforce Tower. This building is topped by a 200-foot-tall aluminum spire. The distinctive shape of this building allows it to have an elevator shaft on one side and a stairwell on the other side. Its overall shape accommodates the wish of the CEO of the company this building is named for to have sunlight on the street below it. For a brief time, this was the tallest building west of Chicago. Name this triangular-faced skyscraper in San Francisco.

Answer: <u>Transamerica</u> Pyramid [accept <u>Transamerica</u> Building]

9. The equation named for this person uses 1 minus the reciprocal of the solvent's dielectric constant to find the change in Gibbs energy during the solvation of a gaseous ion. The series named for this person gives scattering wave·functions in terms of powers of the interaction potential, and its first term is this person's namesake approximation. This person determined that squaring wave·functions from Schrödinger's equation gives probability densities, leading to his Nobel Prize. This physicist who worked with Werner Heisenberg to formulate matrix mechanics. Name this scientist who, along with Fritz Haber, is the namesake of a cycle used to calculate energies in the formation of some ionic compounds.

Answer: Max <u>Born</u>

10. This empire killed the English brigadier general Charles MacCarthy during the Battle of Nsamankow [un-SAH-mun-"cow"]. Under the leadership of Asan·te·he·ne Osei Bonsu, this empire gained access to the coast by attacking the Akim and Ak·wa·pim tribes. One of its first leaders, who was killed by Ak·yem snipers, was Osei Kofi Tutu. An attempt by Frederick Mitchell Hodgson to attain the throne of this empire for the British led to the War of the Golden Stool. Leaders of this empire were exiled when Britain took over the Gold Coast. Name this empire that was located in what is now Ghana.

Answer: <u>Ashanti</u> Empire [prompt on <u>Ghana</u>(ian) Empire]

This is the end of the packet.