## Scobol Solo 2015 <br> Championship I (Phase I: Questions 1-20)

1. This leader's rise to power was assured when his rival Agrippa Postumus was killed. This man was forced to divorce his first wife Vip•san•i•a Agrippina and marry Julia the Elder. After injuring his shoulder, he was probably smothered by his adviser Macro. After this leader went to Capri, he ordered the death of Sejanus [sih-JAY-nuss], who had been his closest adviser but may have been responsible for the death of this man's son Drusus Julius Caesar. This person wanted his grandson Gemellus to share power after this man died, but Gemellus was killed by Caligula. Name this adopted son of Augustus, who succeeded him to become the second Roman Emperor.

Answer: Tiberius Julius Caesar Augustus [or Tiberius Claudius Nero, do not prompt partial answers]
2. The prologue of this play ends with the words "Now good or bad, 'tis but the chance of war." A slave in this play states "The common curse of mankind, folly and ignorance, be thine in great revenue!", and calls his first master a "mongrel beef-witted lord" before going to work for a different warrior. Some of this play's background is set up in the second scene by Alexander, the servant of Calchas's [KAL-kus'z] daughter. The primary affair in this play is assisted by that woman's uncle, Pan•dar•us. The male lead in this play becomes jealous of Di•o•me•des. Name this Shakespeare play based on the Iliad and titled for two lovers.

Answer: Troilus and Cressida
3. This person wrote "My religion is of interest only to me" in his posthumously published essay "On My Religion". His writing sought to eliminate the "gravest forms of political injustice" in order to create a "realistic utopia". The fact that "peoples are free and independent" was the first of eight principles in this thinker's book on international relations, The Law of Peoples. His argument that policies should give the greatest possible benefit to the "least-advantaged" people is the difference principle. This writer posited a thought experiment called "original position" in which each citizen's representatives organize political institutions from behind a "veil of ignorance". Name this American philosopher who wrote $A$ Theory of Justice.
Answer: John Rawls
4. Cantor's paradox shows that there is no largest cardinal number by applying this operation to a hypothetically largest set; it thus relies on Cantor's theorem stating that applying this operation always gives a larger result. The continuum hypothesis states that there is no set whose cardinality is between that of the natural numbers and this set derived from the natural numbers. Because each element of the original set can be included or not included in each element of this set, for a finite generating set, this set's cardinality equals two raised to the power of the generating set's cardinality; for instance, if a set has three elements, this set derived from it has eight members, including the empty set and the entire set. Name this kind of set that contains every subset of a given set.
Answer: (finding the) power set
5. Four years before dying, this person negotiated a wide-ranging peace with George Croghan [KROH-un]. Historians disagree as to whether fighting took place after this person was killed in revenge for Ma•ka•ching•a by a Peoria Native American. This person's troops killed James Dalyell at Parent's Creek in the Battle of Bloody Run. An alliance overseen by this person attacked twelve forts around the Great Lakes and Mississippi River in an effort to eliminate English westward expansion. Those attacks came shortly after the French and Indian War. Name this member of the Ottawa tribe who led an unsuccessful attempt to take over Fort Detroit.
Answer: (Chief) Pontiac

## Check the score.

6. The fifth song in this group is in two-four time and its first eight notes are a dotted quarter, eighth, dotted quarter, eighth, dotted quarter, sixteenth, sixteenth, and half. The composer of this song collection was accused of plagiarizing them by the violinist Ede Reményi [ED-uh "remain"-yee]. These pieces were originally written for piano four hands, but there are many different orchestrations. There were ten pieces in two books at first, but the composer later added two more books with 11 more pieces. The fifth of these pieces was mistakenly based on a Béla Kéler composition that the composer believed was a folk song. Name this collection of songs by Johannes [yoh-HAH-nuss] Brahms. Answer: Hungarian Dances [or Ungarische Tänze]
7. In one book by this writer, Lieutenant Anderson is killed by a grenade thrown by a fellow American from Indiana, Chris Chrisfield, during World War I. In another work by this author, one of this writer's characters credited a blue silk crocheted necktie for his luck on Wall Street. That character, Joe Harland, appears in this writer's novel that also features Armand Duval, a wealthy New Yorker who started out as a sailor known as Congo Jake. In another work by this author, Eleanor Stoddard convinces J. Ward Moorehouse's wife that there is no extramarital affair. This author of Three Soldiers included "Camera Eye" sections in some of his books. Name this author of Manhattan Transfer and the U.S.A. trilogy.

Answer: John (Roderigo) Dos Passos
8. These compounds often have chemical shifts from 12 to 14 parts per million in proton NMR. These compounds often exist as di•mers in solution, where they both serve as hydrogen-bond donors and acceptors. Fully oxidizing a primary alcohol produces one of these compounds. When the functional group that defines these compounds is removed, carbon dioxide is released. One of these compounds and an alcohol form an ester in the Fischer ester-ification [es-TAIR-if-ih-KAY-shun]. The simplest compound of this type, which was found in ant venom, is formic acid. Name these compounds that contain a - $\mathrm{COOH}[\mathrm{C}-\mathrm{O}-\mathrm{O}-\mathrm{H}]$ functional group and are organic acids.

Answer: carboxylic ["car-box"-IL-ik] acids [prompt on carboxyl before the end and accept it after the end]
9. The retiring leader of this organization, John McHugh, recently stopped operations at several labs due to the mishandling of anthrax specimens. To replace McHugh, President Obama nominated Eric Fanning to head this group. Fanning, who had been an adviser to Ash Carter, could become the first openly gay person to head this organization. Its motto is "This We'll Defend." This organization lost control of one of its surveillance blimps in Pennsylvania in October 2015. Name this organization that forms the United States military along with the Navy, Air Force, Marines, and Coast Guard.
Answer: United States Army [accept reasonable variations that contain Army]
10. The title of this song is three words with a total of four syllables, and each of those syllables gets a beat and a half when they are sung. The melody of the questions in this song are quarter note, eighth note, quarter note, quarter note, eighth note, eighth note, quarter note, quarter note. This song is performed after the reprise of "Embraceable You" and "Sam and Delilah" at the end of the first act of the musical Girl Crazy. Gene Kelly has children repeatedly sing the first two of the three words of the title of this song in An American in Paris. Name this song by the Gershwin brothers in which the singer has "daisies in green pasture", "music", and "my girl", so "who could ask for anything more?". Answer: I Got Rhythm

## Check the score.

11. This person wrote a play in which Nina dies from eating ice cream poisoned by her husband Ev•gen•y Ar•ben•in, who is convinced that she had an affair with Prince Zvezdich [z'VEZ-dich]. In a novel by this author, a character is described as having "a remarkable flexibility and that sober common sense which forgives evil wherever it feels it to be necessary". In that novel, the loyalty of the horse Ka•rag•yoz is bragged about by Kazbich. In order to gain that horse, Azamat kidnaps Bela and gives her to the novel's protagonist. This author had part of that novel narrated by Maxim Maximytch ["maxim-itch"], while part of it was narrated by Grigory Alex•and•ro•vich Pech•or•in. Name this Russian author of Masquerade and A Hero of Our Time.
Answer: Mikhail (Yuryevich) Ler•mon•tov
12. In 1991, ice on Mercury was detected based on signals sent from Goldstone, California and received at this observatory. This observatory finished a decade-long upgrade in 2011 and 2012 that allowed it to locate the central black hole of Messier [mess-yay] 32 in 2015. At the end of that upgrade, this facility added the name of the discoverer of Milky Way radio waves to its name. Observatories with almost opposite names to this one exist in Pennsylvania and on the Canary Islands. This New Mexico observatory consists of 27 radio telescopes. Identify this enormous system that is now named for Karl G. Jansky.

Answer: Very Large Array [or VLA; accept Karl G. Jansky Very Large Array before "Karl"]
13. This western-hemisphere country used to have a colony controlled by the Duchy of Courland. This country includes the islands of Cha•ca•cha•ca•re [CHAH-kuh-chuh-KAR-ay] and Monos at the eastern end of the Bocas del Dragon, and it is the eastern shore of the Gulf of Paria. This country's ward Laventille was the site of the Can•bou•lay riots and popularized steel drums. Canboulay music in this country developed into calypso music. A dance that used to be performed at wakes in this country and that portrayed the descent onto slave ship galleys became the limbo. The two main islands of this country are at the south end of the Lesser Antilles [an-TIL-eez]. Name this country just off the coast of Venezuela.
Answer: Trinidad and Tobago [or Trinidad y Tobago; do not accept "Trinidad"]
14. A rift in this group took place when Musta'li came to power instead of Al-Mus•tan•sir Billah's son Nizar. Under Al-Mustansir Billah, this group temporarily controlled Mosul and Baghdad. These rulers spread Isma'ilism, which is a branch of Shi'a Islam. The last ruler of this group was al-Adid, whose decision to appoint Saladin as a vizier eventually led to this group, whose control had shrunk to a region of Egypt, being replaced by the Ayyubid ["eye"-YOO-bid] dynasty. This group tried to expand into territory controlled by the Abbasid [uh-BAH-sid] Caliphate. Name this caliphate that claimed descent from the daughter of Muhammad.
Answer: Fatimid Dynasty [or Fatimid Caliphate; accept Isma'ilism before it is mentioned]
15. This poet used the opening line "Something strange is creeping across me" in a poem narrated by a well-known cartoon character. This poet wrote "Now one must Find a few important words, and a lot of low-keyed, Dull-sounding ones." That poem, "And Ut Pictura Poesis Is Her Name", appeared with "Fantasia on the Nut-Brown Maid" in his collection Houseboat Days. This writer of "Daffy Duck In Hollywood" wrote a poem that titles a collection that mentions the right hand being bigger than the head in a reference to a Parmigianino [parm-ih-zhah-NEE-noh] painting. Name this living American poet of Self-Portrait in a Convex Mirror.
Answer: John Ashbery

## Check the score.

16. This phenomenon describes a type of mapping used to find the mass of a black hole at the center of a galaxy. Rooms named for this phenomenon have no absorbers but are used to test electromagnetic compatibility, which is used to reduce interference. The time named for this phenomenon, calculated using the sabin unit, is the amount of time it takes to lose sixty decibels of sound, and that value is supposed to be larger in rooms used for music than rooms used for speech. Name this phenomenon that begins faster than an echo and which is the continued existence of sound after the sound is produced, generally caused by repeated reflections inside a chamber.

Answer: reverberation (time) [prompt on echoing before "echo"]
17. Victor Hugo said that this painting is "beyond small minds". In the lower left corner of this painting, a white horse is pulled against its will by a dark-skinned man using red string wrapped around the man's left hand. In the lower right corner of this painting, a slave is holding a naked woman from behind by her elbow while killing her with his sword. A woman leaning onto the bed in this painting with her arms spread out is believed to be Myrrha, a Lord Byron character. The central character of this painting, an Assyrian king, is dressed in white and lies on the bed, which is adorned with gilded elephant heads, while all of his possessions are burned. Name this French painting made in 1827 by Eugène Delacroix [oo-zhen deh-luh-kwah].
Answer: The Death of Sardanapalus [or La Mort de Sardanapale]
18. The oldest U.S. federal government library, which is run by the State Department, was renamed for this person. This person assisted Gunnar Myrdal in the writing of An American Dilemma. This person assisted Sweden's Folke Bernadotte [FAWL-kuh BAIR-nah-dut], who was assassinated by the Zionist group Lehi [leh-HEE]. This person worked from the island of Rhodes after receiving a promotion from Trygve Lie [TRIG-vuh LEE]. In 1949, this person worked with Moshe Dayan [MOH-sheh "die"-AHN] of Israel and representatives of several Arab states over the status of Palestine. Name this winner of the 1950 Nobel Peace Prize who would later advocate for the U.S. civil rights movement.
Answer: Ralph Bunche
19. According to Strabo [STRAY-boh], the mother of this creature was killed by Theseus [THEE-see-uss]. According to one account, Am•phi•ar•aus blinded this creature in one eye. This creature killed Hyleus and Ancaeus [aan-KAY-uss], and Eurytion [yur-ISH-un] was killed by another person's javelin when he attempted to kill it. This creature damaged an orchard by ripping up trees from the ground. The sons of Thes•ti•us were killed for stealing the skin of this creature, which was sent by Artemis after a king did not offer her a sacrifice. The son of Oeneus [EN-yuss], Meleager [mel-ee-AY-gur], killed this creature after At•a•lan•ta wounded it with an arrow, and Meleager gave its hide to Atalanta. Name this wild swine that was the subject of a famous hunt.
Answer: Calydonian boar [or Aetolian Boar; prompt on boar]
20. These proteins are numbered 1 through at least 13 , and major intrinsic protein is given this name followed by a zero. Endo-somes [END-oh-sohmz] containing number 2 of this protein have a transcription process that is impacted by vaso-pressin [vay-soh-PRES-in]. These molecules were originally called 28 K when they were discovered by Peter Agre [AH-gree] in plant tissues, red cells, and kidney tubes. These proteins are used by the body in cell migration and neural signaling, though they are better known for their role in urine concentration. Name these proteins called "the plumbing system for cells" and also known as water channels.

Answer: aquaporins [prompt on water channels before the end; accept 28 K before it is mentioned]

## This is the end of the packet.

