

Scobol Solo 2022

Championship III (Phase III: Questions 41-50)

41. The hypothesis named for these things states that these things can convert certain objects from normal cellular form into these things. These things resist being digested by protease K [**“PRO-tee-ace K”**], and they aggregate into fibrils and beta sheets. The structure of these things was correctly described by Nobel laureate Stanley Prusiner [**PROO-suh-nur**]. These things are responsible for kuru and other transmissible spongiform encephalopathy [**“SPONGE”-ih-form en-seh-fuh-LAH-puh-thee**] diseases. Name these misfolded proteins that are responsible for Creutzfeldt–Jakob [**KROYTS-feld YAH-kohb**] disease and mad cow disease.

Answer: prions [**PRY-ahnz**]

42. This character admits to himself that his only love has been material possessions and sensual acquisition. This man falls in love with Regina, but she is hanged. Later on, this man’s son Lorenzo dies in the Spanish Civil War. Even later, this character’s daughter Teresa asks about this man and Lorenzo “Didn’t he take him from you and from me to warp him?”; she addresses that question to this man’s wife, Catalina. This character remembers important days in his life while a priest offers him extreme unction. Name this lieutenant in the Mexican Revolution whose death as an old man is portrayed in a novel by Carlos Fuentes.

Answer: Artemio Cruz [accept either]

43. Helvidius Priscus [**hell-VID-ee-uss PRISS-kuss**], who had been previously banished by a different emperor, was banished and then executed when he did not refer to this emperor as “Caesar”. According to Suetonius [**sweh-TOH-nee-uss**], this emperor said “Money has no odor” when his son criticized him for a public toilet fee. This emperor initiated major construction projects that were continued under his sons, including the Temple of Peace and Roman Colosseum. Name this founder of the Flavian dynasty who ruled for 10 years, starting during the Year of the Four Emperors that followed the death of Nero, and who was succeeded by his sons Titus and Domitian [**doh-MISH-un**].

Answer: Vespasian [accept Caesar Vespasianus Augustus or Titus Flavius Vespasianus; prompt on Flavius]

44. This person started Narya Capital with support from his former boss Peter Thiel ["teal"]. This person described helping his mother pass a urine test when he was an adolescent, and he credited his success to his Mamaw [MAM-aw], Papaw [PAP-aw], and older sister Lindsay. In September, Donald Trump said of this person "Yeah, he said some bad things about me, but that was before he knew me, and then he fell in love." In May 2022, this person beat Matt Dolan and Josh Mandel in a primary election, and in November he defeated Tim Ryan to become a U.S. Senator. Name this person who wrote about growing up in the town of Middletown, Ohio in his book *Hillbilly Elegy*.

Answer: J(ames) D(avid) Vance [or James Donald Bowman]

45. One work by this composer makes several references to the numbers 10 and 23 and to the initials of himself and his mistress Hanna Fuchs-Robettin [ROH-bet-tin]. That composition, based on Alexander von Zemlinsky's *Lyric Symphony*, is this composer's *Lyric Suite*. This composer's Chamber Concerto for Piano and Violin with 13 Wind Instruments, which is often called *Kammerkonzert* [KAH-mur-kohnt-sairt], has notes that spell out this composer's name and those of two of his colleagues in the Second Viennese School. Name this colleague of Anton Webern [VAY-burn] and Arnold Schönberg [SHERN-berk].

Answer: Alban (Maria Johannes) Berg

Check the score.

46. These locations can be identified using the effective potential, which takes centripetal force into account. A proposed solution to climate change would place silicon bubbles at the first of these locations, and a proposed space colony would be located at the fifth of them. These locations were first described in "Essay on the three-body problem". Those locations are equilibrium points for a small mass when there are two larger masses in orbit. Identify these five points, named for an Italian-French mathematician, that are the locations of trojan asteroids.

Answer: Lagrange points [accept Lagrangian points or libration points]

47. One of this author's characters goes through an annual Days of No Talk starting on August 12th each year. This author's novel about that woman focuses on a translation of her elderly mother's autobiography, which includes the story of Precious Auntie. Another novel by this author begins by describing a duck that stretched its neck to become a swan and an attempt to bring that swan to the United States. Both of those novels by this author are set in San Francisco, and the latter is about women who get together to play mah-jong. Name this author of *The Bonesetter's Daughter* and *The Joy Luck Club*.

Answer: Amy (Ruth) Tan

48. This person, who is not Joseph Conrad, described his failures in Africa in his *Congo Diary*. Soon after that, this person was shot and buried near the town of Vallegrande [VY-ay-GRAHN-day] in Bolivia. This person assisted Jacobo Árbenz before Árbenz was overthrown in Guatemala. This person described his travels with Alberto Granado when this person was a medical student in *The Motorcycle Diaries*. This person's biggest success was as the second-in-command in the revolution that overthrew Fulgencio Batista [fool-HEN-see-oh bah-TEE-stah]. Name this Marxist who worked closely with Fidel Castro.

Answer: (Ernesto) "Che" Guevara

49. One attempt to pursue this nymph was made by a prince who disguised himself as a nymph. That prince made one of the gods jealous, and when his gender was discovered he was killed by other nymphs. That pursuer of this nymph was Leucippus [loo-SIP-uss]. This nymph was shot with a lead-tipped arrow by Cupid at the same time that Cupid shot a god with a gold-tipped arrow. The prizes at the Pythian Games in Delphi honored this nymph. Name this personification of the laurel who prayed for protection from Apollo, causing her to be turned into a tree.

Answer: Daphne

50. This word, as a synonym of "transpose" or "reverse", can mean a directed graph formed by reversing the edges of another directed graph. The logical error called "affirming the consequent" can also be called the "fallacy of" this type of statement. If this type of statement is true, then the inverse of the original statement is also true, because this type of statement is the contra-positive of the inverse. Name this type of statement formed by swapping the hypothesis and conclusion of a conditional statement, so "If p , then q " becomes "If q , then p ."

Answer: converse

This is the end of the packet.