

Scobol Solo 2017

Championship II (Phase II: Questions 21-40)



21. Characteristic ‘T’-shaped doors are found in this state’s Cuarenta Casas [kwah-REN-tah KAH-sayss] archaeological site, built by the Mogollon [moh-goh-YOHN] culture. The Basa-se-achic [BAH-sah-say-AH-cheek] Falls and Copper Canyon are in this state’s Sierra Madre Occidental [see-AIR-ah MAH-dray ohk-see-den-TAHL] Range, which separates it from Sonora. In this state’s southern city of Hidalgo del Parral [ee-DAHL-goh del pah-RAHL] there is a museum of its former governor, Pancho Villa. This largest Mexican state is between Coahuila [koh-ah-WEE-lah] and Sonora. El Paso, Texas is directly across the Rio Grande River from this state’s largest city, Ciudad Juárez [see-ooH-dahd WAH-rez]. Name this Mexican state that shares its name with Mexico’s largest desert and a small breed of dog.

Answer: (Free and Sovereign State of) Chihuahua [chee-WAH-wah], Mexico

22. During this geologic period, the Kamura event was a cooling time that may explain the decrease in diversity during the Capitanian Age. During this geologic period, therapsids replaced pelycosaurs as the dominant lifeform on land, paving the way for mammal population. Near the beginning of this period, Siberia joined Pangaea. The middle portion of this geologic period is named for the area of New Mexico in which many fossils from it were found: the Guadalupian Epoch. The Carboniferous [“carbon”-IF-ur-uss] period was followed by what last period of the Paleozoic Era, which led to the Great Dying or P-T extinction event?

Answer: Permian period

23. A text attributed to Francis Thynne is about a meeting between Simon Certain and the title character of this poem. This poem states “For if heaven be on this earth, and ease to any soul, / It is in cloister or in school, by many skills I find.” The main character of this poem falls asleep, causing him to be criticized by a woman named Holy Church, on a May morning on Malvern hills. When Lady Mede tries to marry False in this poem, Conscience and Reason attempt to prevent the wedding. At the end of the second vision in this poem, the title character seeks Do-Well. Name this 14th-century narrative poem by William Langland.

Answer: (*William’s Vision of*) Piers Plowman or (*Visio Willelmi de*) Petro Ploughman

24. This leader made a deal with Pope John XIX [19] to lower the fees paid by English archbishops when this leader attended the coronation of Holy Roman Emperor Conrad II. It is unclear whether this king married Ælfgifu [ALF-yih-voov] of Northampton when he was young, but it is known that he was the second king to marry Emma of Normandy. This king strengthened his power after the death of Edmund Ironside, and his realm grew after the death of his brother Harald II. His father Sweyn [sven] Forkbeard died after they forced Æthelred [ATH-ul-rad] the Unready to flee. Name this 11th-century king of England, Denmark, and Norway.

Answer: Cnut the Great or Canute

25. In Seminole mythology, Fastachee was made of this substance and was often thanked because he gave away this substance and medicine. In Aztec mythology, this substance was represented by the god Centeotl [sen-TEH-oh-tul] and the goddess Chicomecoatl [chik-oh-meh-KOH-ah-tul], who were celebrated in a festival that involved women going out into the fields. In Pueblo mythology, this substance grows from the heart of Iyatiku, who started humanity underground and led people to Earth's surface. Several Native American myths involve a mother who gets this substance from sores on her body, and it then grows from where her dead body is buried. Name this food that was a central part of Native American harvests.

Answer: corn or maize

Check the score.

26. This process is used in many fertilizers because it gets more micronutrients to the plants rather than having them oxidized or precipitated in the soil. Hexa-dentate ligands such as TPEN are very useful in this process. Substances that have performed this process on gadolinium are useful MRI contrast agents. In vitamin B12, heme, and chlorophyll, a por-phyrin ring has performed this process. Substances that can perform this process on mercury, arsenic, and lead are used to remove those toxins from people. Name this process in which coordinate bonds sequester metal ions, often using the compound EDTA.

Answer: chelation ["key-LAY-shun"] [or chelating; accept chelate]

27. One story by this author ends with a woman asking her former husband "What have you to say to us?"; in that story, Mrs. Marroner learns that her husband has impregnated their servant Gerta Petersen. This author wrote the story "Turned" as well as non-fiction books like *Women and Economics* and the novel *Herland*. In one of this writer's stories, the narrator hides her journal from her husband John as she tries to recover from "nervous depression". Name this author who wrote about a woman who strips the walls of a room because she believes there is a trapped woman in the story "The Yellow Wallpaper".

Answer: Charlotte Perkins Gilman [accept either underlined part]

28. This person supported bills proposed by Presidents Kennedy and Johnson as the chair of the House Committee on Education and Labor. This person won his lawsuit against Speaker of the House John William McCormack in a Supreme Court decision declaring that Congress cannot change the Constitutional requirements for office. Congress did not want to seat this person after he was indicted for income tax evasion, refused to pay a slander judgment, and was accused of using a ghost payroll for his wife. Name this person who was succeeded by Charles Rangel in the Congressional district representing Harlem, a prominent African-American politician.

Answer: Adam Clayton Powell (Jr.)

29. In one painting, this landmark is placed on the canvas under the branch of a large pine tree that extends from the upper left corner of the painting. Another painting shows this landmark in the upper left, while the right side shows the Viaduct of the Arc River Valley. The title of one painting states that it shows a view of this object from Bellevue, which is a nearby flat plane. This object can be seen from Aix-en-Provence [[“ex” aw proh-vawns](#)], and the most famous pictures of it were painted in the late 19th century. Name this mountain near where Pablo Picasso bought a château and proclaimed “Cézanne painted these mountains and now I own them.”

Answer: Mont Sainte-Victoire [[mawn sahnt veek-twar](#)]

30. This particle was discovered by observing decays of the Y(9.46) resonance, which is so-named because its decay creates three of these particles. The fusion of these particles is the primary method the Large Hadron Collider used for the creation of Higgs bosons [[BOH-zahnz](#)] and involves the creation of a virtual top- or bottom-quark loop. On a Feynman diagram, a helix represents this particle. This particle is distinguished from a photon in that there are eight types of these particles and they carry the type of charge they mediate. Name these gauge bosons that carry color charge and thereby mediate the strong force.

Answer: gluon(s) [[“GLUE-on”](#)]

Check the score.

31. The narrator of this story says that if somebody does not feel enjoyment from moaning while having a toothache, then the person will not moan. The narrator of this story also states, “My liver is bad, well—let it get worse!” The narrator of this story describes himself as the “nastiest, stupidest, absurdest and most envious of all the worms on earth” to the prostitute Liza, driving her away, and discusses several former schoolmates, including a popular officer that the narrator hated for being a pretty and playful boy named Zverkov [[z’VAIR-kawff](#)]. Name this story that begins “I am a spiteful man”, written by Fyodor Dostoevsky.

Answer: *Notes from (the) Underground* [or *Letters from the Underworld* or *Zapiski iz podpol’ya*]

32. In August 2017, this person wrote a column suggesting that federal and state governments should “fill no more than two-thirds of the vacancies that exist”. While this person was a professor at the University of Missouri-Kansas City Law School, he drafted the Arizona SB 1070 [“S B ten seventy”] anti-immigration law. Hans von Spakovsky criticized this person for working with Democrats such as New Hampshire Secretary of State Bill Gardner. During the summer of 2017, this person sent a letter to each state asking for information, but most of them—including his own state—refused. Name this Secretary of State of Kansas who is the Vice-Chair of the Presidential Advisory Commission on Election Integrity.

Answer: Kris (William) Kobach

33. The bow is played across the bridge in one composition of this type, Helmut Lachenmann’s [HEL-moot LAH-ken-mahn’z] *Gran Torso*. Leoš Janáček [LEH-ohsh yah-NAH-chek] wrote two of these pieces, “Kreutzer [KROYT-zur] Sonata” and “Intimate Letters”. Ludwig van Beethoven wrote several of these pieces, including three using Russian themes that were commissioned by Andrey Razu-mov-sky. One of these nicknamed “The Lark” ends the “Tost” collections of these pieces by Joseph Haydn, who is now credited for 68 of these compositions and increasing their popularity. Name these compositions named for the group of instruments that performs them, which are usually a cello, a viola, and two violins.

Answer: string quartets [prompt on quartets]

34. The Ottoman Empire fought against both sides in this war, stopping the Prut River Campaign before capturing a king at the Skirmish at Bender. In this war there were two Sieges of Tönning, the first of which failed and caused Frederick IV of Denmark to withdraw from this war by the Peace of Travendal. During this war, it took two attempts for Russia to gain control of Narva; Russia also captured Carl Gustav Rehnskiöld [REE-in-h`YOLD] at the Battle of Poltava, a major victory for the anti-Swedish alliance. Name this early-18th-century war that strengthened Peter the Great and killed Charles XII [12] of Sweden.

Answer: Great Northern War [or Second Northern War; prompt on Northern War]

35. This protein commonly binds with villin [VIL-in] and gel-solin [“gel-SOLE-in”]. Some pathogens such as listeria are able to polymer-ize this protein to gain strength inside their hosts. Member A of the Ras homolog gene family organizes this protein into stress fibers that are used in cyto-kinesis. Polymers of this protein form the micro-filaments of the cyto-skeleton, in contrast with the micro-tubules made from tubulin [“TUBE”-yoo-lin]. Many of the filaments that contain this protein also contain tropo-myosin. Name this protein that forms thin filaments in muscle cells alongside the thick filaments formed by my-o-sin.

Answer: actin

Check the score.

36. One play by this writer is about ruin and gold, and starts with a monologue by Old Martin. Another play by this writer begins with an old man asking a famous person to forgive his assassin, and ends with the same character speaking for the mediocrities of the world. In another play by this writer, one character sings about Doublemint gum after he is asked about a word he said in his sleep by the psychiatrist Martin Dysart. Name this playwright who wrote about Pizarro in *The Royal Hunt of the Sun*, about Salieri in *Amadeus*, and about Alan Strang—a boy who blinded six horses—in *Equus*.

Answer: (Sir) Peter (Levin) Shaffer

37. The room named for this sculpture also shows the Statue of Resting Satyr and the Statue of Cupid and Psyche, and it is in the Capitoline Museums in Rome. The subject of this sculpture wears only a neck torc, and is on ground that contains a curved horn, a sword, and a shield. This sculpture is made of marble but is believed to be based on a bronze original that celebrated the victory of Pergamon. The person depicted in this sculpture has one hand on the ground and has a chest wound that is probably fatal. Name this statue representing somebody from what is now Turkey or France.

Answer: *The Dying Gaul* [or *The Dying Galatian* or *Galata Morente* or *The Dying Gladiator* or *Capitoline Gaul*]

38. This person lived in the Hall of Joy and Longevity in the Summer Palace. Many people believe that the Chinese navy was not modernized early enough because this person spent its money on the Summer Palace and a double-decker marble boat. Some people believed that this person was in retirement before the the Hundred Days' Reform was implemented by the Guangxu [GWAHNG-shoo] Emperor, who was this person's nephew. This person is believed to be the source of the Imperial Decree of declaration of war against foreign powers that caused the Boxer Rebellion. Name this consort of the Xianfeng [SHYAHN-feng] emperor and mother of the Tong&zhi Emperor.

Answer: (Empress Dowager) Cixi [or Tz'u-hsi or Xitaihou or Xiaoqin or Xianhuanghou; prompt on Empress Dowager]

39. The multiplicative group of units modulo n is made up of numbers that have this property with respect to n . A “tree” in Euclid's “orchard” is visible from the origin if and only if its coordinates have this property. The Chinese remainder theorem requires moduli to have this property. Euler's [OY-lur'z] totient [TOH-shunt] function gives the number of positive integers less than its input that have this property with respect to the input. A fraction is in simplest terms if its numerator and denominator have this property. Give this term for two integers whose greatest common factor is 1.

Answer: relative primality or co-primality or relatively prime or co-prime

40. This principle was developed from Fechner's [FEK-nur'z] principle of the tendency towards stability, and the person who developed this principle said that it "is deduced from the principle of constancy". The person who developed this principle eventually said that it could not explain "fort-da" children's games or the dreams of people who had been through traumatic experiences. The concept of death drives was developed in a book titled for going *Beyond* [this principle]. This principle describes the motivation of the id to end any "unpleasant state of tension". Name this Freudian principle stating that people try to increase its namesake quality and to avoid pain.

Answer: pleasure principle [or lustprinzip]

This is the end of the packet.