## Scobol Solo 2021

## Championship III (Phase III: Questions 41-50)

41. Eight years after this person won a Nobel Prize in Physics, prizes for confirming this scientist's predictions were shared by J. J. Thomson's son G. P. Thomson, who sent electrons through thin metal films, and Clinton Davisson, who scattered electrons using nickel crystals. This person's theoretical work can be replicated using two of Einstein's equations, namely that energy equals both Planck's constant times frequency and mass times the speed of light squared, combined with the relativistic definition of momentum. Name this French physicist whose thesis gave the equation  $\lambda = h/p$  ["lambda equals h over p"] to describe the wave nature of electrons.

Answer: Louis Victor Pierre Raymond, 7th Duc de Broglie [duh broy or duh broh-lee or duh brohg-lee]

42. One piece by this composer has its first, second, and fifth variants in B modal minor and its third and fourth variants in D modal minor. That work was conducted by Adrian Boult at a World's Fair and at this composer's funeral. Another work by this composer shares a theme with this composer's opera The Pilgrim's Progress. That work is based on a 16th-century theme that is in turn based on the Biblical question "Why Fumeth in Sight?". Name this 20th-century English composer who wrote Five Variants of Dives and Lazarus and Fantasia on a Theme by Thomas Tallis.

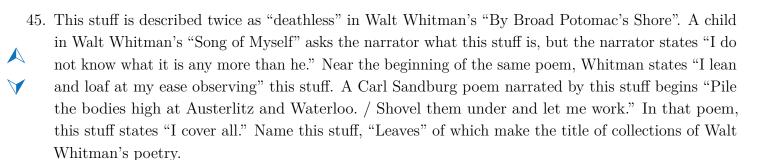
Answer: Ralph [rayff] Vaughan Williams [prompt on partial last name]

43. One group of fighters in this battle wore red and was nicknamed "Red Devils"; they were on the winning side, but their leader died two years later, supposedly from his wounds. One of the unsolved mysteries surrounding this battle is the location of Shima Sakon's [shee-muh sah-kohn'z] head. After about four hours of fighting, this battle turned when a group that had been watching on a hill joined the Eastern Army. The government that was set up after this battle lasted through the 17th, 18th, and much of the 19th centuries. This battle gave full control to the last of the Three Great Unifiers. Name this 1600 battle that led to the creation of the Tokugawa shogunate.

Answer: Battle of Sekigahara

44. American interest in people who played this role increased with Michael Harner's book on *The Way of* these people. In some societies, people take on this role after undergoing a near-death experience. Mircea Eliade [MIR-cheh-ah el-ee-AH-deh] argued that this role exists in many societies outside of just Siberia, where the term for it started, and that people in this role are psycho-pomps in addition to filling several other roles, such as doctor and priest. This role is typically found in northeast Asia and in indigenous American societies. Name these people that are able to enter a trance state that connects them to spirits.

Answer: shamans [accept shamanism or shamankas]



Answer: grass [accept leaves of grass or summer grass or spear of grass]

## Check the score.

46. During this war, Eddie Adams took a photograph set on an urban street, showing a brigadier general using a snub-nosed pistol to shoot a prisoner in the head, and timed so that the prisoner's face is distorted by the impact. Another photograph taken during this war shows five children running in an empty street towards the camera in front of four soldiers. That picture, called "The Terror of War", is centered on a nine-year-old naked girl who is in obvious pain from burns on her back. Name this war during which Nick Ut's photo caused Phan Thi Kim Phúc [fahn tee kim fuuk] to become nicknamed "Napalm Girl".

Answer: Vietnam War

47. When this person died in 1975, his son Warith Deen briefly took over his organization. This person wrote two volumes entitled *How to Eat to Live* and a book about his life and beliefs titled *Message to the Blackman in America*. This person and one of his followers were interviewed for the documentary *The Hate That Hate Produced*, but that follower later accused this person of fathering children with "six different teenage girls that were his private secretaries". This person claimed that his predecessor Wallace Fard was Allah. Name this person who mentored both Louis Farrakhan and Malcolm X.

Answer: Elijah Muhammad [or Elijah Robert Poole]

48. This property and the band gap are used to find energy band offsets for a semi-conductor hetero-junction using Anderson's rule. One of the steps in finding the lattice energy of an ionic solid is subtracting the value of this property for the nonmetal. This property is negative for nitrogen, some metals, and some noble gases. This property is most useful as a measure of chalcogens [CHAL-koh-jenz] and halogens because those elements so often become negative ions. This quantity is similar to electro-negativity but is a measure of energy. Name the amount of energy released when an electron is attached to a neutral atom or molecule.

Answer: (first) electron affinity [accept affinity after "electron"]

49. This novel compares its first chapter to a restaurant bill of fare. In this novel, Jenny goes by the name "Mrs. Waters" at one point and eventually marries Parson Supple. Early in this novel, Jenny is located by Deborah Wilkins and then banished from the parish. One family in this novel contains a doctor who does not want to be a doctor. The doctor's brother is a captain who marries Bridget, who turns out to be the mother of this novel's title character. That family is the Blifils. This novel is about a boy who is raised by the Allworthy family. Name this 1749 novel by Henry Fielding.

Answer: The History of <u>Tom Jones</u>, a Foundling

50. This organization was represented in Saudi Arabia by Mohammed al-Khudari [koo-DAR-ee], who is now retired and in prison. In 2021, some of this organization's manufacturing plants were attacked after it used incendiary balloons and kites to start fires. Since 2017, this organization's political leader is Ismail Haniyeh [hah-NEE-yuh]. This organization uses Qassam [kah-SAHM] rockets, which are often blocked by the Iron Dome. This organization is opposed by the United States because it refuses to practice non-violence and to recognize Israel. Name this organization that won a 2006 election and the subsequent Battle of Gaza.

Answer: <u>Hamas</u> [or <u>Harakat al-Muqawamah al-'Islamiyyah</u>]

This is the end of the packet.