Scobol Solo 2016
Championship III (Phase III: Questions 41-50)

41. This leader might be succeeded by Vice President Joseph Boakai [BOH-uh-kye], or by Prince Johnson, who drank beer while watching his men torture and kill one of this politician's predecessors, Samuel Doe. This person gained power in 2005, following a civil war, by defeating the soccer player George Weah [WAY-uh]. This leader shared a Nobel Peace Prize with Leymah Gbowee [LAY-mah boh-WEE] and Tawakkol Karman [TAH-wah-"coal" KAR-mahn] for their support of female empowerment. During this person's presidency, over 4,000 people in her country died from Ebola. Name this first elected female head of state in Africa, the President of Liberia.
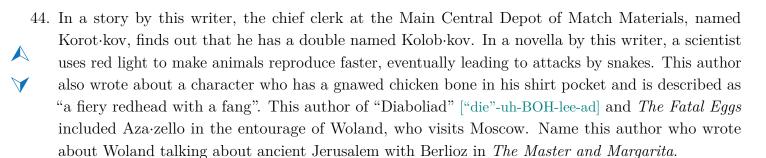
Answer: Ellen Johnson <u>Sirleaf</u>

42. The area of a smooth parameter-ized surface can be calculated by taking the magnitude of this operation applied to the partial derivatives with respect to each parameter. The curl operator can be thought of as this operation between the del operator and a vector field. In the scalar triple product, this operation appears within parentheses. One mnemonic for computing this operation is to take the determinant of a matrix with the unit vectors in the first row. The magnitude of the result of this operation equals the area of a parallelogram whose sides are formed by the two input vectors, since the magnitude of the result of this operation equals the product of the magnitude of the vectors times the sine of the angle between them. Name this operation that gives a vector perpendicular to both of its inputs.

Answer: <u>cross</u> product [accept <u>cross</u>ing; prompt on vector <u>product</u>]

43. Though he featured the piccolo in his song "The Whistler and His Dog," Arthur Pryor gained fame playing this instrument for the Sousa Band. The Jay and Kai [kay] Quintet was headed by two performers on this instrument, Kai Winding [WIN-deeng] and J. J. Johnson. Trumpeter Red Allen led a concert at Newport featuring two performers on this instrument, Kid Ory and Jack Teagarden. Like unfretted string instruments, this instrument can perform a true glissando, and it is the only major brass instrument that usually does not have valves. Identify this instrument whose name means "large trumpet", and which has a sliding mechanism.

Answer: <u>trombone</u>s

44. In a story by this writer, the chief clerk at the Main Central Depot of Match Materials, named Korot·kov, finds out that he has a double named Kolob·kov. In a novella by this writer, a scientist uses red light to make animals reproduce faster, eventually leading to attacks by snakes. This author also wrote about a character who has a gnawed chicken bone in his shirt pocket and is described as "a fiery redhead with a fang". This author of "Diaboliad" ["die"-uh-BOH-lee-ad] and *The Fatal Eggs* included Aza·zello in the entourage of Woland, who visits Moscow. Name this author who wrote about Woland talking about ancient Jerusalem with Berlioz in *The Master and Margarita.*

Answer: Mikhail <u>Bulgakov</u>

45. After the Council of the District of Columbia threatened to revoke this organization's real-estate tax exemption in 1984, this organization admitted Lena Ferguson and updated its bylaws to prevent discrimination. Sol Hurok tried to arrange a concert at this organization's Constitution Hall in 1936 but failed due to its policy permitting only white performers, which led Eleanor Roosevelt to resign from this organization and set up concerts for the contralto Marian Anderson. This organization supports historic preservation and patriotism. Name this group for women who descend from supporters of American independence.

Answer: (National Society of) <u>Daughters of the American Revolution</u> [accept <u>DAR</u>]
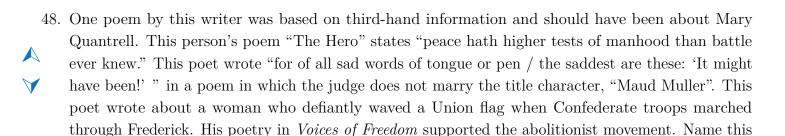
Check the score.

46. This process can be quantified using the Annexin V [5] assay, which detects the expression of surface phospha·ti·dyl·serine [fahss-FAH-ti-DIL-sur-een]. This process can be induced by the Fas ligand, which is part of a class of cyto·kines ["SITE"-oh-kynez] called TNFs. A family of cysteine proteases [SIS-teen "PRO-tee-aces"] which target aspartate ["ASS-part-ate"] residues are active during this process, and are called caspases [KASS-"paces"]. In cells with irreparable DNA damage, p53 initiates this process. This process results in the formation of blebs, unlike lysis, and is contrasted with necrosis. Name this process of programmed cell death.

Answer: <u>apoptosis</u> [possibly AY-poh-TOH-siss]

47. One painting by this artist shows a dead man lying on his back on a white sheet, with his beard pointing up and his eyes rolling back. This artist of *The Body of the Dead Christ in the Tomb* portrayed a king with a glove in one hand and the other hand near his dagger; that portrait was destroyed in a fire at Whitehall Palace, and showed Henry VIII [8]. This painter also portrayed Georges de Selve [zhorzh d'-self] and Jean de Dinteville [zhahn d' deent-veel] in a picture that has a lute with a broken string, and a distorted skull by the floor. Name this painter of *The Ambassadors.*

Answer: Hans <u>Holbein</u> the Younger

48. One poem by this writer was based on third-hand information and should have been about Mary Quantrell. This person's poem "The Hero" states "peace hath higher tests of manhood than battle ever knew." This poet wrote "for of all sad words of tongue or pen / the saddest are these: 'It might have been!' " in a poem in which the judge does not marry the title character, "Maud Muller". This poet wrote about a woman who defiantly waved a Union flag when Confederate troops marched through Frederick. His poetry in *Voices of Freedom* supported the abolitionist movement. Name this Quaker poet who wrote *Barbara Fritchie*.

Answer: John Greenleaf <u>Whittier</u> (The events described in "Barbara Fritchie" probably involved Mary Quantrell, not Fritchie.)

49. After saying "This is a wicked generation" in Luke, Jesus says only the sign of this person will be given, and that something greater than this person is here. This person wished to die when a worm destroyed a plant even though he did not help the plant, causing God to compare the plant to a city. While this person was alive, lots were cast to determine that this person was the cause of a major storm, which had been sent because this man tried to go to Tarshish [TAR-shish] instead of Nineveh [NIN-uh-vuh]. This person asked the sailors he was with to throw him overboard, and he was later saved by prayer. Name this title character of a book of the Bible who was swallowed by a large fish.

Answer: <u>Jonah</u> [or <u>Yonah</u>; accept <u>Yunus</u>]

50. A member of this dynasty is praised in the oldest writing on an iron pillar in the Qutb [KOO-tub] complex. A woman from this dynasty married Rudra·sena II of the Vaka·taka dynasty and then ruled as regent after he died. The start of this dynasty is credited to the father of Ghatot·kacha, though his son was its first emperor. That son married Kumara·devi, a Licchavi princess. Their son Samudra extended the influence of this dynasty, forcing southern kings to pay tribute and taking power from northern kings during the fourth century. Samudra's son's support of the arts led to the Golden Age of India. Name this dynasty that had two rulers named Chandra.

Answer: <u>Gupta</u> dynasty or <u>Gupta</u> empire

This is the end of the packet.