

Scobol Solo 2022

Packet 8 (Round 8)

1. The beginning of the sixth part of this poem is told by spirits called “First Voice” and “Second Voice”. In the seventh part of this poem, the narrator summarizes his lesson by saying “He prayeth best, who loveth best all things both great and small.” The speaker of this poem complains about being stuck unmoving in the ocean and says “Water, water, everywhere, nor any drop to drink.” The speaker of this poem was forced to wear a dead bird around his neck. Name this poem narrated to a wedding guest by a man who killed an albatross, written by Samuel Taylor Coleridge.

Answer: *The Rime of the Ancient Mariner*

2. Structures inside this organelle create ribosomes. Those structures are connected by coiled proteins to Cajal [kah-HAHL] bodies inside these organelles. Osteoclasts are unusual because they have several of these structures, whereas most eukaryotic [“you-carry-AH-tick”] cells have just one. The outer membrane of this structure is connected to the membrane of the endoplasmic reticulum [EN-doh-PLAZ-mik reh-TIK-yoo-lum]. In animal cells, this organelle is the largest one. Name this organelle that contains most of the cell’s DNA and is considered the cell’s “control center”.

Answer: cell nucleus [accept nuclei]

3. Several anti-gun activists from this state, including David Hogg, were students at Stoneman Douglas High School when it experienced a shooting in 2018. In March 2022, this state passed the Parental Rights in Education Act that eliminates teaching about sexual orientation or gender identity before grade 3 and was nicknamed “Don’t Say Gay”. Charlie Crist and Val Demings lost statewide elections in this state. This state’s senators are Rick Scott and Marco Rubio, and its governor is Ron DeSantis. Name this state that was hit hard by Hurricane Ian.

Answer: Florida

4. Soon after this country gained independence, Prime Minister Abdullah Khalil [kah-leel] was overthrown by a military coup that put Ibrahim Abboud [ah-BOOD] in charge. In 1983, President Jaafar Nimeiry [nih-MY-ree] imposed Sharia law throughout this country. During the 21st century, people in the western part of this country have been attacked by the Janjaweed, leading to genocide charges against President Omar al-Bashir for atrocities in Darfur. In 2011, what had been the southern part of this country gained independence. Name this country whose capital is Khartoum [kar-TOOM].

Answer: (Republic of the) Sudan [or (Jumhuriyat as-)Sudan]

5. One character in this novel states “Life appears to me too short to be spent in nursing animosity or registering wrongs.” That girl says those words after saying she is disliked by Miss Scatcherd and acknowledging that the title character of this novel is disliked by Mrs. Reed. That girl, who provides a contrast to Mr. Brocklehurst in this novel, is Helen Burns. Another character in this novel is Bertha Mason, who is locked in an attic at Thornfield Hall. Name this novel whose title character is an orphan who falls in love with Edward Rochester, and which was written by Charlotte Brontë.

Answer: Jane Eyre

Check the score.

6. A sculpture by this artist is shown at the very end of the movie *The Monuments Men*, which depicted this artist’s sculpture being taken by the Nazis in a Red Cross truck. That sculpture, showing Mary looking down and young Jesus trying to stand, is this artist’s *Madonna of Bruges* [brooj]. Some of this artist’s sculptures were made for the tomb of Pope Julius II, including *Dying Slave*, *Rebellious Slave*, and a sculpture that appears to show Moses with horns on his head. Another sculpture by this artist is in the Galleria dell’Accademia and shows a naked boy holding his slingshot over his shoulder. Name this Italian sculptor of *David*.

Answer: Michelangelo (di Lodovico) Buonarroti (Simoni) [accept either underlined name]

7. A project named after this scientist has proposed defining the kilogram based on a sphere of silicon atoms. The Faraday constant equals this person’s constant times elementary charge. This scientist is the namesake of a predecessor of the ideal gas law that states that the number of molecules of a gas is constant if the volume, pressure, and temperature are constant. Identify this Italian scientist who is the namesake of a constant equal to about 6.02×10^{23} [“6.02 times 10 to the 23rd”], which is the number of atoms in a mole.

Answer: (Lorenzo Romano) Amedeo (Carlo) Avogadro [ah-meh-DAY-oh ah-voh-GAHD-droh]

8. This person wrote that the founder of civil society was the first man who said “This is mine” about a piece of land and found people who believed him. In another book, this person wrote “One thinks himself the master of others, and still remains a greater slave than they.” This person argued in that book against the divine right of kings, replacing that idea with the idea of a tacit agreement among citizens. In the same book this person wrote “Man is born free; and everywhere he is in chains.” Name this French philosopher who wrote *Discourse on Inequality* and *The Social Contract*.

Answer: Jean–Jacques Rousseau [zhahn zhahk roo-soh]

9. Soon after this leader lost the Battle of Grumentum, the commander who defeated him was also successful at Metaurus [meh-TAW-russ], where this leader's brother was killed. This leader was hit in the thigh by a javelin during his successful siege of Saguntum [suh-GOON-toom]. This leader followed his successes at Trebia and Lake Trasimene [TRAZ-ih-meen] by surrounding and annihilating the enemy at the Battle of Cannae [KAN-ee]. However, this leader was eventually defeated at the Battle of Zama [ZAH-muh] by Scipio [SIP-ee-oh] Africanus. Name this leader who, at the beginning of the Second Punic War, crossed the Alps with elephants while fighting for Carthage.

Answer: Hannibal Barca [accept either name]

10. One performer on this instrument, Julian Bream, commissioned William Walton to write *Five Bagatelles* [BAG-uh-telz], which was later reworked for piano. Joaquín Rodrigo's *Concierto de Aranjuez* [kohn-THYAIR-toh day ah-rahn-HWEDH] prominently features this instrument. The piece *Estudio sin luz* was composed by Andrés Segovia, who often transcribed songs so he could perform them on this instrument. Many older songs played on this instrument were originally written for lutes, which do not have flat backs like these instruments. Name these instruments that usually have a fretted neck and six strings that are strummed.

Answer: (acoustic or classical) guitars

Check the score.

11. In computer science, this word can mean adding an element to the beginning of a queue. This word can also mean a bit-wise operation that can be done to the “left” or “right” in many programming languages. A physical object whose name is this word [pause] is symbolized by a hollow “up” arrow and is involved in typing the plus sign and the colon. Give this word that also means a key on the keyboard that is above the “control” key and can be held down to make capital letters.

Answer: shift(ing) [accept bit shift(ing) or shift key]

12. This country contains almost all of Lake Neusiedl [noy-SEE-dul] and the southeast end of Lake Constance. This country's highest mountains are Wildspitze [VILD-shpit-zuh] and Grossglockner, which are close to where this country hosted the 1964 and 1976 Winter Olympics. This country contains Hofburg and Schönbrunn [SHERN-brun] Palace, both of which were used by many members of the Habsburg dynasty. Liechtenstein is between Switzerland and this country, and this country is between Italy and Germany. Name this country that contains the cities of Innsbruck, Salzburg, and Vienna.

Answer: (Republic of) Austria [or (Republik) Österreich]

13. This character says “I am the best-natured creature in the world, and yet I have already killed three men, and of these three two were priests.” Soon after he says that, the Baron’s Jesuit habit is placed on this character’s head by Cacambo. This character later learns that Baron Thunder-ten-Tronckh is still alive, but the baron’s sister is no longer attractive. This character eventually says “All that is very well, but let us cultivate our garden.” Name this title character who learns from Cunégonde [kyoon-eh-gawnd] and studies under Pangloss in a novel by Voltaire.

Answer: Candide(, ou l’*Optimisme*) [or Candide(, or *Optimism*) or Candide(: *Optimism*) or Candide(, or, *The Optimist*) or Candide(, or, *All for the Best*)]

14. According to Willi Münzenberg, before returning to his home country this person said “Either we’ll be swinging from the gallows in three months or we shall be in power.” This person wrote *The Tasks of the Proletariat in the Present Revolution*, which became known as the *April Theses* and led to the July Days and October Revolution. This person’s disputes with Julius Martov, caused by this person’s support of the idea of a violent revolution, led this person to form the Bolshevik faction. Name this person who led the Soviet Union before Vyacheslav [VICH-ess-lahv] Molotov and Joseph Stalin.

Answer: Vladimir Ilyich Lenin [or Vladimir Ilyich Ulyanov]

15. For massless particles, this quantity equals energy divided by the speed of light. This quantity is a complementary variable with position, which is why the errors of their measurements is multiplied in Heisenberg’s uncertainty principle. According to Newton’s second law, the derivative of this quantity with respect to time equals the net force. Newton’s third law can be derived from the second law and the conservation of this quantity. The change in this quantity is called impulse. This quantity is often used to find the outcomes of both elastic and in-elastic collisions. Name this quantity equal to mass times velocity.

Answer: (linear) momentum [do not accept or prompt on “angular momentum”]

Check the score.

16. A fortune-telling technique developed in this country that has been adapted in countries to its east is called Four Pillars of Destiny. That technique is based on cycles of 60 years, months, days, and hours. A two-word phrase in this country’s language translates literally as “wind water” and is called geo-mancy; that phrase refers to a practice of orienting and designing buildings using spiritual principles. This country was the site of the development of alternative medical practices such as acupuncture. The *Analects* is a religious text from this country. Name this country that in ancient times was the home of Lao Tzu and Confucius.

Answer: China [or Zhongguó or Zhonghuá; accept People’s Republic of China; prompt on PRC]

17. In a novella by this author, one of the characters holds up a razor that has just drawn blood and states “See, master—you shook so—here’s Babo’s first blood.” In that story, this author has Amasa Delano eventually figure out that the ship he is on has been taken over by slaves. In a novel by this author, one of the characters states “Hemp only can kill thee.” That character, who is later entangled to this author’s title animal, is Fedallah [feh-DAH-lah]. The narrator of that novel eventually floats on Queequeg’s [KWEE-kweg’z] coffin. Name this author of “Benito Cereno” who wrote about Ishmael and Captain Ahab in *Moby-Dick*.

Answer: Herman Melville

18. A few years after this act was passed, Congress repealed it by passing a bill with the word “reciprocal” in the title that was supported by Secretary of State Cordell Hull and deferred some congressional power to the executive branch. This act built on the Fordney–McCumber Act and was named for a Utah senator and an Oregon representative. Despite pleas from many economists, this bill was signed by Herbert Hoover in 1930, and this law is now blamed for worsening the Great Depression. Name this law that made trade more difficult by increasing tariffs.

Answer: Smoot–Hawley Tariff Act [or Hawley–Smoot Tariff Act; prompt on United States Tariff Act of 1930]

19. In triangles described by this adjective, the sum of the squares of the cosines of the angles is less than 1. Triangles described by this adjective have an ortho-center that is inside the triangle, and for such triangles, the sum of the squares of the lengths of any two sides is greater than the square of the length of the other side. If an angle described by this adjective is put in standard position, the terminal side is in the first quadrant. This adjective describes angles for which both the sine and cosine are positive. In a right triangle, both non-right angles must be described by this adjective. Give this adjective that means an angle less than 90 degrees.

Answer: acute [accept acute triangles or acute angles]

20. This artist showed what he called “almost a literal translation of Seventh Avenue”: a fire hydrant, barber’s pole, and illegible window signs, in *Early Sunday Morning*. The top of another painting by this artist shows the reflection of two rows of light fixtures. That painting by this artist shows a woman sitting alone with a cup of coffee. The top of another painting by this artist shows an ad for Phillies cigars, and the rest a man in white serving three customers at a bar. Name this American painter of *Automat* and *Nighthawks*.

Answer: Edward Hopper

This is the end of regulation. Check the score. If it is tied, proceed to overtime tossups. If it is not tied, the game is over.

- TB21. This scientist developed a valvular conduit that makes fluid flow much better in one direction than the other. This scientist claimed that he built an oscillator about seven inches long that caused an earthquake in New York City before he used a sledgehammer on it. The kilogram per second squared per ampere, which is the SI unit of magnetic flux density and measures the strength of magnetic B -fields, is named after this scientist. An air-core double-tuned resonant transformer in the shape of a coil that puts out large arc discharges is named for this person. Name this Serbian-American scientist who promoted alternating current.

Answer: Nikola Tesla

If the score is still tied, continue. If it is not tied, the game is over.

- TB22. Early white settlers in what is now this country were fought by Pemulwuy [PEM-ull-woy] but were befriended by Arabanoo [ar-uh-buh-NOO] and Bennelong [BEN-uh-"long"]. Those people worked for and against Arthur Phillip, an Englishman who arrived in what is now this country in 1788. Bennelong is now the namesake of a division in this country where former Prime Minister John Howard was born; Howard was the second-longest-serving prime minister of this country, after Robert Menzies. The First Fleet brought prisoners to this country, parts of which were used by England as a penal colony. Name this country whose prime minister is Anthony Albanese, whose office is in Canberra.

Answer: (Commonwealth of) Australia

If the score is still tied, continue. If it is not tied, the game is over.

- TB23. This number appears in band names along with "Ben Folds", "Dave Clark", and "The Jackson". The Torah has this many books, and Islam has this many pillars. Starfish have this many appendages. Name this number that gives the length of a hypotenuse if the legs have lengths 3 and 4.

Answer: 5

There are no more overtime questions available. If the score is still tied, contact the control room for further instructions. If it is not tied, the game is over.