# Scobol Solo 2021

# Packet 12 (Round 12)

1. During this person's presidency, Minnesota, Oregon, and Kansas were admitted as states. This U.S. president appointed Robert J. Walker as the territorial governor of Kansas, but Walker resigned after seven months when this president supported the Lecompton Constitution. In this person's inaugural speech, he praised the upcoming *Dred Scott* decision. This man is the only president who never married. Name this U.S. president who served when the first states seceded before the Civil War and who was followed by Abraham Lincoln.

Answer: James <u>Buchanan</u>

2. This person's Nobel Prize in Chemistry was given in part for isolating an element that was similar to bismuth. That element was discovered when this person noticed that pitch blende remained highly radioactive even after the uranium was removed from it. In addition to the Nobel Prize for the discovery of radium and polonium, this person shared an earlier Nobel Prize in Physics. Polonium was named to honor this person's native country. Name this scientist from what is now Poland who worked in France with her husband Pierre.

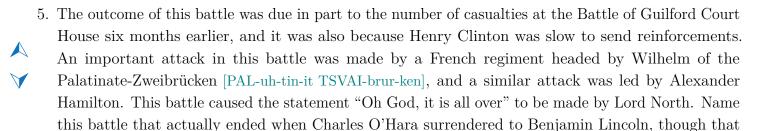
Answer: Marie (Salomea Skłodowska) Curie [or Maria Skłodowska; prompt on Curie]

3. A common prayer in this religion begins "Om Bhur Bhuva Svah" and is called the Gayatri Mantra. Some adherents of this religion believe that we live in the era of Kali Yuga, which is full of sin. Temples in this religion are designed based on a square grid of padas [PAH-duhz], and they have kalasams with grain on top of their entrance towers, which are called gopurams [GOH-puh-rumz]. Religious texts in this religion include the Upanishads [oo-PAH-nee-shahdz], which are part of the Vedas. Another scripture in this religion is the *Bhagavad Gita*, which is part of the *Mahabharata*. Name this ancient religion that is the most popular religion in India.

Answer: <u>Hinduism</u> [accept <u>Sanatana</u> Dharma]

4. One work by this painter shows Mary being crowned by two angels while three angels watch her write a prayer and baby Jesus sits on her lap. That circular work by this artist is *Madonna of the Magnificat*. Another painting by this artist depicts several mythological figures in the woods, including a blindfolded Cupid at the top seeming to aim an arrow at Chastity, who is one of the three Graces. Another painting by this artist shows a goddess about to be clothed by one of the Horae [HOR-ee] as she arrives at shore on a half-shell. Name this Italian painter of *Primavera* and *The Birth of Venus*.

Answer: Sandro Botticelli [boh-tee-CHEL-ee] [or Alessandro (di Mariano) Filipepi]



Answer: Battle of <u>Yorktown</u> [accept Siege of <u>Yorktown</u> or Surrender at <u>Yorktown</u>]

act represented Lord Cornwallis surrendering to George Washington.

#### Check the score.

6. In a story by this writer, one of the characters "always wanted to go to Italy and paint a picture of the Bay of Naples" but she is suffering from pneumonia. This author titled that story after a work by Old Behrman that saves Johnsy but gives Behrman pneumonia. This writer said of two of his characters in another story, "Of all who give gifts, these two were the wisest." This writer started that story with Della repeatedly counting one dollar and 87 cents. Della then sells her hair to buy a platinum pocket watch chain. Name this writer of "The Last Leaf" and "The Gift of the Magi".

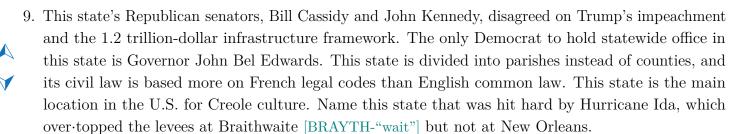
Answer: O. Henry [or William Sydney Porter; prompt on Henry]

7. An adjective indicating that this law is *not* followed is used to describe gas discharge tubes, Schottky barriers, and tungsten filaments. While this rule by itself is used to solve simple problems, it is often combined with Kirchhoff's [KEER-kawff'z] laws to solve more complicated problems. This law is equivalent to stating that current density equals electric field times conductivity. Multiplying both sides of this law by current gives the statement "power equals current squared times resistance". Name this law that describes the voltage drop across a resistor as "V = IR" ["V = IR"].

Answer: Ohm's law

8. This composer wrote the Mandolin Concerto in C major in 1725 and the Double Mandolin Concerto for 2 mandolins, strings and continuo in G major about 10 years later, about the same time as his Lute concerto in D major. This composer's works are catalogued using a Ryom-Verzeichnis [ree-OHM vur-ZYK-niss] number. Also in 1725, a series of violin concertos by this composer was published as The Contest Between Harmony and Invention. A set of four of those pieces are often performed, starting with "Spring" and ending with "Winter". Name this Italian Baroque composer of The Four Seasons.

Answer: Antonio Vivaldi



Answer: Louisiana

10. At the beginning of this novel, a bishop moves into a hospital so that the hospital can use his palace, which is larger. In this novel, that bishop has a housekeeper named Madame Magloire [mag-l'war] who sometimes uses two silver candlesticks. When the protagonist of this novel steals Bishop Myriel [mir-yel]'s silverware, the bishop gives the thief the candlesticks. Later in this novel, that thief becomes a mayor and factory-owner who fires a woman for having a daughter out of wedlock. That mother and daughter are Fantine [fahn-teen] and Cosette. Name this novel by Victor Hugo in which Inspector Javert [zhah-vair] pursues Jean Valjean [zhahn val-zhahn].

Answer: Les <u>Misérables</u> [accept The <u>Wretched</u> or The <u>Miserable Ones</u>; do not accept or prompt on "Les Miz"]

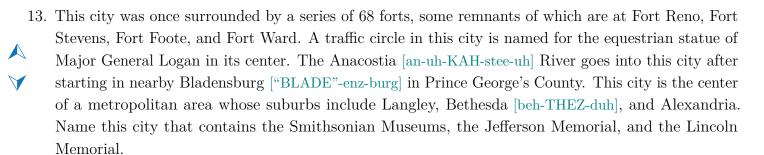
#### Check the score.

11. During an 1807 festival in what is now this city, a bridge collapse killed over 400 people. In 1995, a cult released sarin [SAR-in] in this city's subway system, killing 13 people and injuring thousands. This city was the main target of the Doolittle Raid, and less than a month after the firebombing of Dresden during World War II, this city was the target of Operation Meeting-house, the deadliest bombing raid in world history. This was the most populous city harmed by the 1923 Great Kanto earthquake. This city used to be called Edo [EH-doh] until it became its nation's capital during the Meiji Restoration. Name this capital of Japan.

Answer: <u>Tokyo</u>, Japan [prompt on <u>Edo</u> before "sarin"]

12. This two-dimensional shape is the locus of points that are twice as far from one fixed point as they are from another fixed point. This shape can also be generated by finding the points that are at a right angle when a line through a fixed point intersects another line through a different fixed point. This shape can be generated in polar coordinates by setting r equal to either sine theta or cosine theta, or by setting r equal to a constant. This shape also is the set of points in two dimensions that are a fixed distance from a fixed point. Name this shape whose circumference equals  $2\pi$  ["2 pi"] times its radius.

Answer: circles



Answer: Washington, D. C. [or Washington, District of Columbia; accept any underlined portion]

14. One poem in this form ends with the lines "Better by far you should forget and smile / Than that you should remember and be sad." That poem is Christina Rossetti's "Remember". This type of poem started in Italy but became popular in England with Philip Sidney's Astrophel and Stella. The title of a collection of these poems by Elizabeth Barrett Browning claims that they are "from the Portuguese". Name these poems, many of which were written by Petrarch and William Shakespeare, and which are 14 lines long.

Answer: sonnets [accept Petrarchan sonnets or Italian sonnets before "Astrophel"]

15. The leaders of this ship were First Mate Henry Tingle Wilde and Captain Edward J. Smith. Like the *Atlantic*, the *Republic*, and a famous hospital ship, this ship was owned by the White Star Line, which was controlled by J. P. Morgan. John Jacob Astor IV, Benjamin Guggenheim, and Molly Brown were passengers on this ship, and Molly Brown became famous because of it. This ship left Southampton, England in 1912 and was supposed to go to New York City. Name this luxury liner that hit an iceberg on its maiden voyage and sank.

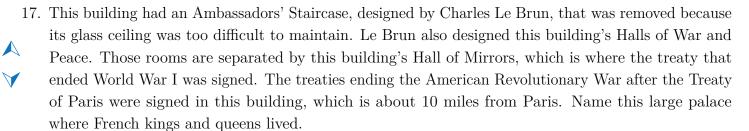
Answer: RMS <u>Titanic</u>

(The hospital ship was the *Britannic*.)

#### Check the score.

16. The stress these objects are under is raised to an exponent between 2 and 4 to find their flow rate according to the Glen flow law. These objects are not foothills in a mountain range, but the piedmont [PEED-mont] types of these objects are spread out, and they are often formed from narrow valley types of these objects. These objects are measured using both multi-temporal airborne laser scanning and ablation stakes. These objects form both cirques [sirks], which are basins, and tarns, which are lakes. These objects have gotten smaller since the end of the Little Ice Age and have gotten even smaller recently due to climate change. Name these large masses of ice.

Answer: glaciers



Answer: Palace of <u>Versailles [vair-"sigh"</u>] [or Château de <u>Versailles</u>]

18. One section of a work by this writer is titled "Concerning God, That He Exists" and makes the argument that God must exist because people are finite and flawed and therefore could not come up with the idea of an infinite and perfect being. Another section of that work by this writer is entitled "The Nature of the Human Mind" and explores what it means to know oneself by describing what it means to know what wax is. Those sections are in this writer's *Meditations on First Philosophy*. Name this French philosopher whose *Discourse on the Method* includes the statement "Cogito, ergo sum" [KOHG-ee-toh air-goh soom], which translates to "I think, therefore I am."

Answer: René <u>Descartes</u> [ren-ay <u>day-kart</u>] [or Renatus <u>Cartesius</u>]

19. In a novel by this writer, a character has a dream in which he learns an old song that ends with the words "Hearken well and spread my tidings of the golden future time." That song, which this author based on a socialist anthem, is "Beasts of England". Another novel by this author begins on a cold day in April with the clocks striking thirteen. This author set that novel in Oceania [oh-shee-AN-ee-uh], where Winston Smith works for the Ministry of Truth, and the Thought Police work for Big Brother. Name this British author of Animal Farm and Nineteen Eighty-Four.

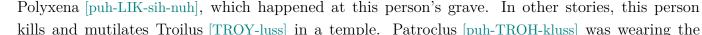
Answer: George <u>Orwell</u> [or Eric Arthur <u>Blair</u>]

20. These structures, which are not part of algae, have tricho·blast ["TRICK-oh-blast"] cells in their epidermis that form extensions coming out of these structures. These structures are often covered with mycorrhizae ["my-core-RYE"-zee] fungi in mutual symbiosis [sim-by-OH-siss]. When the primary example of this part plays a minor role, then these structures form an adventitious ["advent"-ISH-uss] system. The growth of these structures is impacted by positive gravitropism [grav-ih-"TROPE"-izm]. This structure is the commonly eaten part of carrot, parsnip, and radish plants. Name this plant part that absorbs nutrients, usually from underground.

Answer: <u>roots</u> [accept tap<u>roots</u>]

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. According to Euripides [yoo-RIP-ih-deez], this person's ghost demanded the sacrifice of Polyxena [puh-LIK-sih-nuh], which happened at this person's grave. In other stories, this person

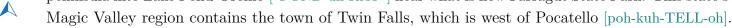


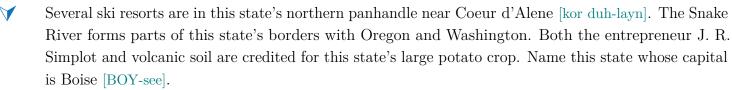
armor of this hero when Patroclus died, but Hephaestus [heh-FESS-tuss] made new armor for this hero before he fought in the Trojan War. Name this hero who is eventually killed by Paris with an arrow to the heel, which was where this person was vulnerable because of the way his mother Thetis dipped him in the River Stvx.

Answer: Achilles

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

TB22. The first white-owned establishment in what is now this state is Kully-spell House, which is on a peninsula into Lake Pend Oreille ["POND uh-RAY"] near what is now Farragut State Park. This state's





Answer: <u>Idaho</u>

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

The 23. This letter represents a note whose minor key has two sharps and whose major key has five sharps. The unit called "tesla" represents a type of magnetic field represented by this letter. The computer-science terms for a base-2 digit and a number made of eight base-2 digits both begin with this letter. This letter is the symbol for boron. Name this second letter.

Answer: b

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.