

# Scobol Solo 2019

## Packet 10 (Round 10)



1. In a novel by this writer, Arthur and Jeremiah become the protagonist's assistants, though Jeremiah later becomes a waiter and causes the protagonist's fiancée to leave him. In that novel, this author described the protagonist's attempts to locate Klamm. In a story by this author, the protagonist enjoys the violin playing by his sister Grete [GREH-tuh]. This writer portrayed the title character having apples thrown at him by his father in that story. Name this author who wrote *The Castle* and who described Gregor Samsa suddenly changing into a giant insect in "The Metamorphosis".

Answer: Franz Kafka

2. The independence movement in this country began after a 1903 request by the Jamiat Kheir [JAM-ee-at "care"] to assist grieving families was denied. This country's independence would soon be supported by the organizations Budi Utomo [BOO-dee oo-TOH-moh] and Sarekat [sah-RAY-kaht] Islam. Since declaring independence with Japan's support in 1945, this country has gone through periods labelled "Guided Democracy" and "New Order". Those eras were overseen, respectively, by Sukarno and Suharto. Japan occupied this country during World War II by defeating the Netherlands. Name this country that used to control what is now East Timor [TEE-mor] and which still includes the islands of Sumatra and Java.

Answer: (Republic of) Indonesia or (Republik) Indonesia

3. In thermo-dynamics, this quantity equals the integral of pressure with respect to volume. In electrostatics, this quantity equals charge times the integral of electric field strength with respect to position. In a conservative vector field, this quantity depends only on the start and end of the path a particle takes, not the actual route. This quantity is the dot product of force and displacement, so if the force is in the direction of motion, this quantity equals force times displacement. Name this quantity equal to a system's change in energy.

Answer: work [accept change in energy before the end; do not accept or prompt on "energy"; accept answers specifying a change in a particular type of energy]

4. This city's new Museum of Tomorrow was designed by Santiago Calatrava and is close to where this city is connected to a neighbor by the Niterói [nee-teh-ROY] Bridge. That neighboring city contains the Niterói Contemporary Art Museum, which was designed by Oscar Niemeyer, a native of this city. Government officials were criticized for ignoring this city's older museums when a fire destroyed the National Museum in 2018. This city is overlooked by Paul Landowski and Heitor da Silva Costa's *Christ the Redeemer* statue. Name this original home of Oscar Niemeyer's Samba-drome, which is used during this city's Carnival [kar-nah-AWL].

Answer: Rio de Janeiro, Brazil

5. During one of these events, Tata and Nena were not supposed to eat, but they ate anyway, so Tlaloc [t'-LAH-lohk] turned them into dogs. The god Ea [AY-uh] was supposed to keep another one of these events secret, but told a person about it and later blamed Enlil for being too harsh. In that event, which was added to the *Epic of Gilgamesh*, the hero is Utnapishtim [oot-nuh-PISH-tim]. The son of Prometheus survived one of these events by staying in a chest for nine days. Another one of these events is in chapters 6 through 9 of Genesis and ends with a covenant symbolized by a rainbow. Name this event survived by Noah in his ark.

Answer: (great) floods [or deluges; prompt on extinction]

6. In one novel by this author, the protagonist is distracted from her needlework by the “truly dramatic” reading of Shakespeare’s *Henry VIII* [8] by Henry Crawford. This author described that woman falling in love with her cousin Edmund, who becomes a clergyman. Another novel by this author follows the sisters Margaret, Marianne, and Elinor, who must move when their father dies. Marianne marries Colonel Brandon, and Elinor marries Edward Ferrars. Name this British author who wrote about Fanny Price in *Mansfield Park* and the Dashwood sisters in *Sense and Sensibility*.

Answer: Jane Austen

7. One of the first U.S. actions during a war in this country was to establish Camp Rhino. Before being told to resign due to his criticism of the U.S. government, Stanley McChrystal led the U.S. effort in this country. NFL athlete Pat Tillman was killed by friendly fire in this country. The U.S. was assisted by this country’s Northern Alliance, which had been losing a civil war. During the Battle of Tora Bora, U.S. forces in this country thought they had a chance to capture Osama bin Laden. Name this country where the United States fought the Taliban starting in 2001, including fighting in Kandahar and Kabul.

Answer: (Islamic Republic of) Afghanistan

8. The argument of a number is a measure of this concept. Leonhard Euler [LEN-ard OY-lur] devised a system using three of these quantities to describe the orientation of a solid. In spherical coordinates, you use one variable representing a radius and two variables that each represent this concept. Two intersecting planes form examples of this concept that are called “dihedral” [“die”-HEE-drul]. When a transversal crosses two lines, eight of these figures are formed. If two polygons are similar, then the corresponding examples of these figures are congruent. Name these figures formed by two rays with a common endpoint, and which can be classified as reflex, right, obtuse, or acute.

Answer: angles

9. This instrument and the piano are used to play a piece based on the aria “Non più mesta” [nohn pee-oo MESS-tah] from the opera *Cinderella*; that piece is Frédéric Chopin’s *Variations on a Theme by Rossini*. This was the original solo instrument in Claude Debussy’s [deh-byoo-see’z] *Syrinx*, which has been performed by Jasmine Choi and Emmanuel Pahud, and which was written after this instrument was improved by Theobald Boehm [tay-oh-bahld baym]. This instrument is usually made out of metal but is classified as a reed-less woodwind. Name this instrument that is played by blowing air over a hole and is pitched lower than the piccolo.

Answer: (Western concert) (transverse) flute(s)

10. In April 2019, the then-president of this country received only 24 percent of the vote in a runoff election. The winner of that election belonged to the Servant of the People Party, which was named after a popular television show. The U.S. ambassador to this country, Marie Yovanovitch [muh-REE yoh-VAH-no-vich], was fired in May 2019 after losing the confidence of President Trump. Much of this country’s natural gas is supplied by Burisma [buh-REESS-muh] Holdings, whose board used to include Hunter Biden. Name this country led by Volodymyr Zelensky [voh-LOH-dee-mir zuh-LEN-skee] that was invaded by Russia in 2014 to obtain control of Crimea.

Answer: Ukraine [or Ukrayina]

11. This person sent a letter to British minister to the United States Richard Pakenham that was supposed to build support for Texas annexation, but which had the opposite effect. That letter was written when this person was John Tyler’s secretary of state. Because this person was supported by delegates for John Quincy Adams and Andrew Jackson, he was comfortably elected vice president during the disputed election of 1824. This person resigned the vice presidency to run for Senate to oppose the tariffs of 1828 and 1832, and he became a vocal supporter of nullification. Name this U.S. senator from South Carolina.

Answer: John C(aldwell) Calhoun

12. This abstract data type is similar to both a queue and a stack, but without specifications of where items can be added or removed. Unlike a set, this data type may have repeated elements and has a well-defined order. This type of container has a “head” and a “tail”; the elements in between can be traversed by an iterator or accessed—not necessarily efficiently—by their index. This data type can be implemented using an array or a namesake “linked” structure. Identify this abstract data type that contains several items in order, and which can be sorted.

Answer: list(s) [accept array(s) before “array”]

13. In a story by this writer, a man finds a checked apron with a heart and liver tied up in it when he climbs a tree. That occurs after this writer described the man and his wife's desire to talk to a creature commonly called "Old Scratch". Near the end of another story by this writer, a character is confused because a picture of King George III has been replaced by one of George Washington. That story includes a strange game of nine-pin bowling. In another story by this writer, the suitors of Katrina Van Tassel are Brom Bones and Ichabod Crane. Name this author of "The Devil and Tom Walker", "Rip Van Winkle", and "The Legend of Sleepy Hollow".

Answer: Washington Irving [or Geoffrey Crayon]

14. This artist portrayed his lover Madeleine Knobloch [k'-NAH-"block"] looking at a small mirror on a small table while applying make-up [pause] in *Young Woman Powdering Herself*. This painter's first large-scale work depicts workers at leisure in the foreground, while smokestacks and wealthy people on a boat are in the background. This painter set that 1884 painting in a suburb northwest of Paris. Another painting by this artist depicts a woman with a black parasol and pet monkey, and a man smoking a pipe and reclining on his elbow. Name this painter of *Bathers at Asnières* [ahn-yair] who used pointillism in *A Sunday Afternoon on the Island of La Grande Jatte* [zhaht].

Answer: Georges(-Pierre) Seurat [zhorzh soo-rah]

15. According to William of Ockham, this concept is the only truly necessary entity. According to Baruch Spinoza, this concept is a unique substance with infinitely many attributes and modes. When asked about his belief in this concept, Carl Jung [yoong] stated "I don't need to believe; I know." To explain his view of the burden of proof for people who advocate this concept, Bertrand Russell described a small teapot orbiting the Sun. According to Pascal's wager, people should live as though this concept is real. Friedrich Nietzsche said that this concept "is dead". Name this being that, according to several religions, rules the universe.

Answer: God [accept answers that specify the Judeo-Christian or Biblical God]

16. This organ has S cells that produce secretin, which increases the activity levels of the pancreas and liver. The inner surface area of this organ is increased by the presence of circular folds called plicae circulares [PLY-kee surk-yoo-LAR-"ace"] or valves of Kerck-ring. The top section of this organ has ducts feeding it from the liver, gallbladder, and pancreas. Material entering this organ has to pass through the pyloric ["pie"-LOR-ik] sphincter. The sections of this organ are the duodenum [doo-AH-duh-num], jejunum [juh-JOO-num], and ileum [IL-ee-um]. This organ goes from the stomach to the large intestine. Name this organ that, despite its name, is actually about 30 feet long.

Answer: small intestine [prompt on duodenum before it is mentioned; prompt on intestines before "intestine"]

17. A poem by this writer states “We, the people, must redeem the land, the mines, the plants, the rivers.” In that poem, this person says of America “Let it be the dream it used to be.” Another poem by this writer states “I’ve known rivers: Ancient, dusky rivers.” In that poem, this person mentions the Euphrates [yoo-FRAY-teez], Congo, Nile, and Mississippi. Those poems are “Let America Be America Again” and “The Negro Speaks of Rivers”. Another poem by this author ends by asking “Or does it explode?”. Name this poet who, in a poem sometimes called “Harlem”, asked “What happens to a dream deferred?”.

Answer: (James Mercer) Langston Hughes

18. Sidney Herbert sent a letter asking for this person to start work on a major project; a year later this person wrote a letter asking Lord Raglan to give significantly more support to the project. This person worked in Scutari [skoo-TAR-ee] during the 1850s and was credited with improving conditions and saving lives. Upon returning to England, this person sent *Notes on Matters Affecting the Health, Efficiency and Hospital Administration of the British Army* to Queen Victoria. Name this nurse whose work during the Crimean War led to her nickname, “The Lady with the Lamp”.

Answer: Florence Nightingale

19. A highway surrounding this city has a name meaning “Great Ring Junction”, which is abbreviated “G.R.A.” in the local language. A famous road connects this city to the city of Brindisi [BREEN-dee-see]. France oversees this city’s Trinità dei Monti Church, which is located at the top of the Spanish Steps. The Catacomb of Callixtus is one of this non-French city’s several ancient catacombs, where people were buried in ancient times. Aventine, Quirinal, and Viminal are three of the seven hills of this city, which is east of the Tiber River and at one end of the Appian Way. Name this city that surrounds Vatican City and which is the capital of Italy.

Answer: Rome, Italy [or Roma]

20. In the context of nuclear physics, “magic numbers” are values of this quantity. Graphs showing stable isotopes plot this quantity on the  $x$ -axis. The highest artificially-created value of this quantity is 118, and the highest natural one is 92. A number *close to* this number accounts for screening and is called “effective nuclear charge”. This number equals the mass number minus the number of neutrons and is the defining characteristic of an element. Name this number equal to the number of protons.

Answer: atomic number [accept proton number or number of protons before “protons”]

***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.***

<sup>TB</sup>21. This character tells a person to stay at the Golden Krone Hotel and sends a note to him there saying “At the Borgo Pass my carriage will await you and will bring you to me.” That guest of this person, who works for Peter Hawkins, is Jonathan Harker. While visiting this person, Harker meets three young women with brilliant white teeth. When this character travels to England, Lucy Westenra develops unusual physical symptoms that are diagnosed by Abraham Van Helsing. Name this title character of a Bram Stoker novel who lives in the Carpathian Mountains in Transylvania and is a vampire.

Answer: Count Dracula [prompt on vampire]

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

<sup>TB</sup>22. Much of the design of this structure was handled by Maurice Koechlin [kek-lawn], Émile Nouguier [ay-meel noog-ee], and Stephen Sauvestre [soh-vest'r]. When the construction of this structure began, several artists signed a petition complaining that it looks like a giant smokestack. This structure is named for the person who created the internal frame of the Statue of Liberty. It was the tallest human-made structure in the world for several decades after it opened in 1889. Name this wrought-iron structure built to commemorate the centennial of the French Revolution.

Answer: Eiffel Tower [or La Tour Eiffel]

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

<sup>TB</sup>23. Mr. Merryweather manages one of these buildings in Sir Arthur Conan Doyle’s “The Red-Headed League”. At the end of his career, Louis Sullivan designed several of these types of buildings called “jewel boxes”. Willie Sutton reportedly said “Because that’s where the money is” when he was asked why he robbed these places. Name these buildings where people deal with financial transactions.

Answer: banks

***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.***