

Scobol Solo 2018

Packet 4 (Round 4)



1. A character in this novel soberly says “I don’t believe many of your mule drivers will get back.” Another character in this novel is described as “a listener in a country store to wondrous tales told among the sugar barrels” and as “the tattered man”; he had been shot twice. When a color sergeant dies, this novel’s protagonist and his friend have a small scuffle to determine who will carry a flag. That protagonist, who is often referred to as “the youth”, is Henry Fleming. The title of this novel refers to a battle wound. Name this novel set during the Civil War that was written by Stephen Crane.

Answer: *The Red Badge of Courage*

2. This quantity tends to be high where the Hadley and Ferrel cells border each other, and it tends to be low where the Ferrel and Polar cells border each other. This quantity tends to be high at 30° north or south, explaining the horse latitudes, which are also characterized by low precipitation. One way to measure this quantity uses an aneroid [AN-uh-royd] cell and uses the same principle as instruments used to approximate altitude. This quantity can be measured in millimeters of mercury, pascals, or atmospheres. Name this quantity measured with a barometer.

Answer: atmospheric pressure or barometric pressure

3. This thinker used the example of a sea battle to claim that future contingents are neither true nor false. In another work, this thinker distinguished between potential and actual infinities before ruling out actual infinity to refute Zeno’s [ZEE-noh’z] paradox. This thinker wrote *De Interpretatione* [day in-tur-preh-tah-tee-OH-nay] and a work that claims the highest goal of human life is eudaimonia [yoo-dih-MOH-nee-uh] and argues that virtue is the balance between extremes. This author of *Nicomachean* [nik-oh-MAH-kee-un] *Ethics* defined tragedy in *Poetics*. Name this ancient Greek student of Plato.

Answer: Aristotle [or Aristotéles]

4. A Holy Roman Emperor with this name tried to set Catholic domains back to the Peace of Augsburg boundaries through the Edict of Restitution. Another ruler with this name was the second king to abdicate in the abdications of Bayonne [bah-yawn], following his father Charles IV. That man, sometimes called the Felon King, regained the throne after the abdication of Joseph Bonaparte. Another king with this name was the father of Joanna the Mad and was one of the two issuers of the Alhambra decree, making him a leader of the Spanish Inquisition. Give this name of a ruler who began the unification of Spain by marrying Isabella.

Answer: Ferdinand [accept Ferdinand II or Ferdinand VII]

5. A portrait by this artist shows a man resting his head against his right hand, sitting at a table with a fox-glove plant. This artist discussed one of his paintings by saying “I have tried to express the terrible passions of humanity by means of red and green.” This painter of *Portrait of Dr. Gachet* [ga-shay] showed red walls with a green ceiling in a room where a man stands next to a billiards table in *The Night Café*. This artist painted the view from his asylum room in *Saint-Rémy-de-Provence* [sawn reh-mee deh proh-vanss]. Name this Dutch artist of *The Starry Night* and *Self-Portrait with Bandaged Ear*.

Answer: Vincent (William) van Gogh

Check the score.

6. When performing mass spectrometry on proteins, it is helpful to use non-radioactive labeling named for these substances on amino acids. The kinetic effect of these substances is the fact that lighter ones can react faster than heavier ones. 8, 20, and 50 are “magic numbers” for these substances, explaining why tin has ten stable ones. Atomic masses displayed on the periodic table are found by weighting an average of the masses of these substances based on how frequently each one occurs. Tritium [TRIT-ee-um] and deuterium [doo-TAIR-ee-um] are examples of this type of substance for hydrogen. Carbon-14 is a radioactive example of what atoms of an element that have varying numbers of neutrons?

Answer: isotopes [prompt on atoms]

7. In a letter to the narrator’s cousin before the main part of this novel, the narrator complains about a paragraph praising the queen and describes this book as an “incorrect account”. At the end of this novel, the narrator says that he allows his wife to eat dinner with him only “at the farthest end of a long table” because he no longer likes people, whom he refers to as “yahoos” after he meets the houghnhnms [WIN-imz]. This novel also features Glum-dal-clitch, who is 40 feet tall and lives in Brob-ding-nag, and tiny people who live in Lilliput. Name this satirical British novel by Jonathan Swift.

Answer: *Gulliver’s Travels* (or *Travels into Several Remote Nations of the World. In Four Parts. By Lemuel Gulliver, First a Surgeon, and then a Captain of Several Ships*)

8. A kingdom named for this city was formed after this city was surrendered by Iftikhar ad-Dawla [IF-tuh-kar ad DAW-luh] to Raymond of Saint-Gilles [sawn zheel]. Before capturing this city, Peter the Hermit gave religious sermons to his troops at the Valley of Josaphat. The 16-year-old leper King Baldwin IV of this city won a surprise victory at the Battle of Montgisard [mawn-gih-sard], though 10 years later his successor decisively lost the Battle of Hattin [hah-TEEN]. Though his forces reclaimed Jaffa [YAH-fah] and Acre [AH-kur], Richard I of England was never able to reclaim this city from Saladin [SAL-uh-din]. Name this holy city that Christian forces briefly claimed at the conclusion of the First Crusade.

Answer: Jerusalem [or Yerushalayim or al-Quds]

9. A spring holiday in this religion involves a bonfire where people pray for their evil to be destroyed, remembering an evil woman who sat on a fire with a cloak under her. Weddings in this religion typically include a ritual in which the bride and groom circle around a yajna [YAHN-yuh], or ritual flame. This religion has a “festival of colors” in which people smear colored powder on each other. This religion’s funeral rites, called antyesti [ant-YES-tee], involve cremating the body and placing the ashes in a nearby body of water. Name this religion from India in which the Upanishads [oo-PAH-nee-shadz], Vedas, and Bhagavad Gita [bah-gah-vahd GEE-tah] are sacred texts.

Answer: Hinduism

10. A so-called “thermometer” made of this substance induces the heat shock response in *E. coli*. Carl Woese [“woes”] proposed a pre-cellular “world” dominated by this substance. The discovery of this substance’s interference with nematode [NEE-muh-“toad”] genes earned Andrew Fire and Craig Mello the 2006 Nobel Prize. One form of this molecule is usually depicted as a cloverleaf, while another requires a 5′ [“5 prime”] cap, a poly-A tail, and the splicing of exons [“EX”-ahnz] to be functional. This molecule serves as the genetic material for retroviruses. It contains the base uracil [YUR-uh-sil] instead of thymine [“THY”-meen]. Codons occur on the messenger form of this molecule. Name this single-stranded molecule that is complementary to DNA.

Answer: RNA [or ribonucleic acid; accept messenger RNA or transfer RNA]

Check the score.

11. Johannes [yoh-HAH-nuss] Brahms collaborated on a piece for this instrument with Robert Schumann and Albert Dietrich, the *F-A-E Sonata*, which was premiered by the musician who inspired Brahms’s concerto for this instrument: Joseph Joachim [YOH-sef yoh-AH-kim]. Peter Tchaikovsky’s concerto for this instrument is in D major, and the most commonly played concerto for this instrument is Mendelssohn’s in E minor. Hilary Hahn and Itzhak Perlman are known for playing this instrument. Two of these instruments are used in most string quartets. Name this highest orchestral string instrument.

Answer: violin(s)

12. This person was originally considered for the role of negotiating Jay’s Treaty, but he instead designed the negotiation framework and then suggested John Jay be the envoy to make the treaty appear less partisan. John Jay had succeeded this person as the leader of the first American political party, the Federalists. While serving in the Cabinet, this person got the federal government to assume states’ debts, and he is given credit for improving our country’s financial system. Name this first Secretary of the Treasury who was killed in a duel with Aaron Burr.

Answer: Alexander Hamilton

13. This company’s Artificial Intelligence Research group is working with the New York University School of Medicine to speed up magnetic resonance imaging scans. This company does not allow its product to be used by Aggregate IQ because of their affiliation with the SCL Group. This company was criticized because of the data access of the SCL subsidiary started by Robert Mercer and Steve Bannon, Cambridge Analytica. This company owns Instagram. Name this social media company headed by Mark Zuckerberg.

Answer: Facebook (Inc.)

14. Heterodyning [“hetero-dining”] is the addition and subtraction of values of this quantity. Electronic filters are designed to select out particular values of this quantity. In the photo-electric effect, the energy of a photon equals Planck’s constant times this property of the photon. For a spinning object, this property equals the angular speed over 2π [“two pi”], while for a moving wave, this property is speed divided by wavelength. This quantity is the reciprocal of period. Name this property describing how often something happens, often measured in hertz [“hurts”].

Answer: frequency

15. In a square in this city, there is a bronze sculpture in which a man stands on the body of a dead woman, holding her head in his left hand and a sword in the other; that sculpture is *Perseus with the Head of Medusa*. The same square in this city also contains Donatello’s *Judith and Holofernes* [hoh-LAH-fur-nee-z] and a huge marble statue of Neptune. Benvenuto Cellini [ben-veh-NOO-toh chel-LEE-nee] mostly worked in this city, where the Galleria dell’Accademia [gahl-leh-REE-ah del-AHK-kah-DEM-ee-ah] has a statue of a man standing *contrapposto*, holding a sling on his shoulder. Michelangelo’s *David* is displayed in this city. Name this Tuscan city whose cathedral is topped by a dome designed by Filippo Brunelleschi [fee-LEEP-poh broon-el-LESS-kee].

Answer: Florence, Tuscany, Italy [or Firenze, Toscana, Italia]

Check the score.

16. In a novella by this author, Cristo Bedoya [KREES-toh beh-DOY-ah] tries to warn the main character that two people want to kill him, but the main character is murdered just outside his house. This author wrote about that murder committed by the twin brothers of Angela Vicario after she turns out to not be a virgin. In a novel by this author, an unknowing incestuous relationship produces a child with a pig’s tail. That relationship between Amaranta Úrsula and Aureliano [aw-ray-lee-AH-noh] takes place in Macondo, a town founded by the Buendía family. Name this Colombian author of *Chronicle of a Death Foretold* and *One Hundred Years of Solitude*.

Answer: Gabriel (José de la Concordia) García Márquez [prompt on Márquez]

17. An intelligence officer working for this leader was convicted for the bombing of Pan Am Flight 103, which was called the Lockerbie bombing. The United States blamed this person for the *La Belle* Disco bombing in West Berlin, which killed two American soldiers. This leader gained power after overthrowing King Idris the First in 1969. The *Jamahiriyah*, a plan for a government that supports the masses, was outlined in this man's *Green Book*. This person was killed by fighters for the National Transitional Council in Sirte [surt] in 2011. Name this person who spent 42 years as the leader of Libya.

Answer: Muammar Qaddafi [MOO-ah-mar gah-DAF-ee] or Muammar Gaddafi [or Muammar (Mohammed Abu Minyar) Qaddafi or Gaddafi; accept Colonel Qaddafi or Gaddafi]

18. Because of the way this river starts out, the town near its formation is called Three Forks. The Pick-Sloan Plan was used to build the Fort Randall Dam and Garrison Dam along this river in the mid-20th century, after the Fort Peck Dam was built. Those dams were used to try to control major flooding in 2011. The White River begins in Pine Ridge, then feeds this river after going through Badlands National Park. This river separates Council Bluffs, Iowa from Omaha, Nebraska. After starting in Montana, this river goes through the capitals of both North and South Dakota. Lewis and Clark followed this long river. Name this river that joins the Mississippi near St. Louis at the border of Illinois and its namesake state.

Answer: Missouri River

19. Differential equations and systems of equations are called homogeneous ["home-oh-genius"] if their constant terms equal this number. The function that sends every input to this number [pause] is the only function that is both even and odd. If a number is evenly divisible by a modulus, then it is congruent to this number under that modulus. A game in which every gain must be offset by a loss is said to "sum" to this number. A root of a function is an input at which the output is this number. Name this number that is called the additive identity because adding it to any number doesn't change the other number.

Answer: zero

20. This poet introduced some of his poems with a work that begins "Hear the voice of the Bard." In that collection, this writer included two poems about a girl who is found by her parents when a lion leads them to find the girl sleeping among tigers. In addition to those poems about Lyca, this poet wrote about a boy whose parents "are both gone up to the church to pray." That work is one of two poems by this writer titled "The Chimney-Sweeper". This poet asked "What immortal hand or eye dare frame thy fearful symmetry [SIM-ih-try]?" Name this poet who asked that question in "The Tiger".

Answer: William Blake

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.

^{TB}21. This scientist stole a technique from his rival, Jean-Joseph Toussaint [zhahn zhoh-sef too-san], to successfully perform an experiment on sheep. The institute named for this man first isolated HIV. This person saved one industry by discovering the cause of pébrine [PAY-breen] disease in silkworms, while another industry avoids his namesake effect of oxygen on fermentation. This scientist used swan-neck flasks to disprove the idea that microbes could spontaneously generate, and he developed vaccines against anthrax and rabies. Identify this French “father of microbiology” who also created a method of preserving milk by heating.

Answer: Louis Pasteur

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

^{TB}22. A man complained that this position’s “moments of ecstasy would be ransomed by years of torment and hatred”. Arthur Schlesinger argued that the modern form of this position had become “imperial”. One candidate for this position faced questions about his eligibility because he was born in the Panama Canal Zone. Because she was born in Czechoslovakia, Madeleine Albright was never selected as a designated survivor to replace the holder of this position. The first person to hold this position without being directly elected to it was John Tyler. Name this position that has only been resigned once: by Richard Nixon.

Answer: President of the United States of America [accept U.S. president or any other reasonable answer containing president and not contradicting that it’s the president of the U.S.; accept POTUS]

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

^{TB}23. The first song on Fleetwood Mac’s 1975 album is titled for the “Morning” of this day of the week. A song by the the Mamas and the Papas mentions this day of the week twice in its title. A song by the Bangles calls this day of the week “manic”. This day is named for the Moon. Name this first day of the usual workweek.

Answer: Monday

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.