

Scobol Solo 2022

Packet 3 (Round 3)

1. This leader said on television that his country would be led by Zakaria Mohieddin [moy-eh-DEEN], but he decided to remain in power when his supporters took to the streets, chanting “We are your soldiers.” This leader died from a heart attack the day after he brokered an end to the Jordanian Civil War. This person led the United Arab Republic, in which his country was combined with Syria. This leader was in power during the building of the Aswan High Dam, and the lake formed is named for him. This person was the president of Egypt between Mohamed Naguib [nag-EEB] and Anwar Sadat [sah-DAHT]. Name this leader who provoked a crisis by nationalizing the Suez Canal Company.

Answer: Gamal Abdel Nasser (Hussein)

2. One poem by this writer is about a person who “would have sinned incessantly could he have been” a Medici. This poet wrote that the person “coughed, and called it fate, and kept on drinking”. This poet also described that person as “born too late” and “child of scorn”. Another poem by this writer is narrated collectively by a group of people who “went without the meat, and cursed the bread”; those people describe a man who was “richer than a king”. This author wrote that poem about a man who “went home and put a bullet through his head”. Name this American poet of “Miniver Cheevy” and “Richard Cory”.

Answer: Edwin Arlington Robinson

3. This creature was sometimes called Hródvitniz [“ROAD”-veet-niz], which is also the given name of the father of Skoll and Hati [HAH-tee], who eat the Sun and the Moon. This creature broke Leyding and Dromi, so dwarves combined six impossible things—including the breath of a fish—to create Gleipnir [GLAYP-neer]. This creature will be killed by Vidar [VEE-dar], the son of Odin, after this creature kills Odin. This creature is raised near the gods, unlike his brothers Hel and Jörmungandr [YOR-moon-GAHN-dur]. As soon as this creature was chained, he bit off the hand of Tyr [teer]. Name this wolf.

Answer: Fenrir [or Fenrisúlfr or the Fenris wolf]

4. The reciprocal of this number solves the hat check problem in which the goal is to find the probability that nobody gets the correct randomly chosen hat. This number is equal to the sum of the reciprocals of the factorials of all positive integers. If this number is raised to the power of i times pi, the result is -1 . This number is the limit, as n approaches infinity, of the quantity $(1 + 1/n)^n$ ["1 plus 1 over n , quantity raised to the n th power"]. This number is used as a base for continuous exponential growth if the constant in the exponent equals the rate of change of the base amount divided by the base amount. Give this number that is equal to approximately 2.718 and which is the base of natural logarithms.

Answer: e [accept Euler's [OY-lur'z] number]

5. This composition is the last one in a group that includes pieces nicknamed "Antretter" and "Gran Partita". The most recognizable passage from this composition is quarter note G, eighth rest, down to eighth note D, back to quarter note G, eighth rest, followed by five eighth notes and a quarter note. This work was completed while its composer worked on the opera *Don Giovanni* [joh-VAHN-nee]. This 20-minute piece is believed to be the most popular one by the composer, though he probably thought of it as background music. Name this composition also known as *Serenade Number 13 for strings in G major* by Wolfgang Amadeus Mozart.

Answer: *Eine kleine Nachtmusik* ["EYE"-nuh KLY-nuh NAHKT-moo-zeek] [accept *Serenade 13* before "Serenade"]

Check the score.

6. Louis William, Margrave of Baden-Baden died during this war, a few years after his successful Siege of Landau and his victory at the Battle of Schellenberg. At the end of this war, the Austrian Habsburgs gained control of Naples and Milan. During this war, the Habsburgs were led in succession by Leopold I, Joseph I, and Charles VI [6]. The Duke of Tallard was captured by the Grand Alliance led by the Duke of Marlborough and Eugene of Savoy at the Battle of Blenheim [BLEN-um]. At the end of this war, Philip V was recognized as a king but was removed from French succession. Name this war fought near the end of the reign of Louis XIV [14] that was triggered by the death of Charles II.

Answer: War of the Spanish Succession

7. Part of this law addressed federal limitations put in place by the *West Virginia v. EPA* Supreme Court decision. This law extended home energy rebate programs and clean energy tax credits. This law imposed a 1% excise tax on stock buybacks, and it imposed a minimum tax on many large corporations. This scaled-down version of the Build Back Better Act was sponsored by Chuck Schumer and Joe Manchin and passed in August 2022. Name this bill whose name is controversial because it does more to address climate change than the problem mentioned in its title.

Answer: Inflation Reduction Act of 2022 [accept IRA]

8. In the type of this phenomenon that includes negative surface energy, the Abrikosov [ah-BREE-koh-sawff] vortex was discovered by looking at magnetic properties of mixed states. That type of this phenomenon usually occurs in alloys, though it can occur in vanadium [van-AY-dee-um], technetium [tek-NEE-shee-um] and niobium [ny-OH-bee-um]. This phenomenon is explained by Ginzburg–Landau theory, which was developed before this phenomenon was discovered in cuprates [KOOP-“rates”] and YBCO. The other type of this phenomenon is primarily explained by electrons behaving like bosons [BOH-zahnz] once they form Cooper pairs. Name this phenomenon that takes place at cold temperatures and is characterized by a lack of electrical resistance.

Answer: superconductivity [accept superconducting or superconductance; do not prompt on answers that omit “super”]

9. One novel by this author describes Isidora, “where the buildings have spiral staircases encrusted with spiral seashells, where perfect telescopes and violins are made”. This author ended that novel with one of the two main characters saying that the inferno of the living is already here. Part of another novel by this author contains 10 first chapters that each parody different types of contemporary fiction. This author wrote much of that novel in the second person. Name this author who wrote about Kublai Khan and Marco Polo in *Invisible Cities* and who also wrote *If on a winter’s night a traveler*.

Answer: Italo Calvino

10. One painting by this artist includes a sketch of Alecto in the sky holding a snake and a torch. That painting is the first in this artist’s series *The Judgement of Paris*. Three of this artist’s best known paintings, including *Assumption of the Virgin Mary*, are in the Cathedral of Our Lady in Antwerp, Belgium. The other two paintings in that church by this artist show strong men uprighting the cross holding Jesus [pause] and Joseph of Arimathea [air-uh-muh-THEE-uh], Nicodemus [nih-koh-DEE-muss], Mary Magdalene and others handling the body of Jesus. Name this Flemish artist who painted *The Elevation of the Cross* and *The Descent from the Cross*.

Answer: Peter Paul Rubens

Check the score.

11. Several places along this U.S. river are named for Martins Creek. This river is fed by the Neversink River near the borough of Matamoras and the town of Port Jervis, which are in different states. This river empties into a bay that shares its name and that is the location of both Rehoboth [ruh-HOH-buth] Beach and Cape May. Two of this river’s biggest feeders are the Lehigh River and Schuylkill [SKOOL-kil] River, the latter of which joins it in Philadelphia. This river also goes near Trenton, including its most famous section. Name this river that shares its name with a fairly small U.S. state.

Answer: Delaware River

12. The removal of carbon dioxide from this compound is the first step to making hydraulic cement. Vaterite [“VAT-uh-rite”] and aragonite [uh-RAG-uh-“night”] are two of the crystal forms of this compound. The removal of carbon dioxide from this compound leaves lime. Eggshells, most seashells, and limestone consist almost entirely of this compound. Though blackboard chalk is now usually made from gypsum [JIP-sum], this compound was traditionally used. Name this compound that can combine with hydrogen atoms to create water, carbon dioxide, and calcium ions.

Answer: calcium carbonate [accept CaCO₃]

13. This person’s house is now a museum that displays the horns of Blossom the cow, but Blossom’s hide hangs in a school library. This person was able to test his theories when Sarah Nelmes came to him with a rash on part of one of her hands. This person scraped some material from Sarah’s blisters, which were caused by milking Blossom, and then exposed his gardener’s son James Phipps to it, causing James to get mildly ill but become protected from a deadly disease. In that experiment, this person showed how to use cowpox to protect people from smallpox. Name this Englishman called “the father of immunology”.

Answer: Edward Jenner

14. One of this author’s protagonists says “And if you are really interested in my career, perhaps you’ll be kind enough not to ask me to play bridge again this evening.” That statement is made to Judy Trenor, whom this author described at parties at Bellomont. In another novel by this author, Ellen gets a scandalous divorce from a Polish count and returns to New York City. Ellen is the granddaughter of Manson Mingott and the cousin of May Welland in the novel that led this author to be the first female recipient of the Pulitzer Prize for Fiction. Name this author who wrote about Lily Bart in *The House of Mirth* and about Newland Archer in *The Age of Innocence*.

Answer: Edith Wharton [or Edith Newbold Jones]

15. This professional field is the focus of the autobiography *Stranger and Friend* by Hortense Powdermaker. Conrad Phillip Kottak’s textbook in this field uses the four-field approach, which was developed in the early 20th century and places archaeology and linguistics within this field. A collection of Claude Lévi-Strauss essays is named for the structural branch of this field. The department in this field at Columbia University was led by Franz Boas [BOH-az]. Name this scientific study of humanity that sometimes uses fieldwork to study cultures.

Answer: anthropology [accept anthropologist]

Check the score.

16. The family of constellations named for this constellation includes Monoceros [muh-NAH-suh-rus], Lepus [LEP-us], Canis Major, and Canis Minor. A line through the two brightest stars in this constellation can be used to locate Gemini. One of the stars in this constellation has the widest range displayed by any first-magnitude star, which is why, as with Gemini, there is a controversy over which star should be designated alpha. A famous aspect of this constellation is formed by the stars Mintaka, Alnilam and Alnitak, and the brightest stars in this constellation are Rigel [“RYE”-jul] and Betelgeuse [“beetle-juice”]. Name this constellation that has a famous belt and is nicknamed “the hunter”.

Answer: Orion

17. A detailed description of the capture of this ship was written by Thomas Gedney, who had captained the *Washington*. Captain Ramón Ferrer was killed aboard this ship just before it was taken to Long Island by Don José Ruiz and Don Pedro Montes [MOHN-tayss] despite orders that this ship should change course. Joseph Story wrote the Supreme Court ruling involving this ship after arguments made by former president John Quincy Adams were critical of then-president Martin Van Buren. Name this ship on which, in 1839, enslaved people revolted.

Answer: *La Amistad* or the *Amistad*

18. A woman in this play complains about a Neapolitan prince by saying “he doth nothing but talk of his horse”, and the woman then complains about a County Palatine, French lord, baron of England, Scottish lord, and Duke of Saxony’s nephew. That woman—who later in this play states “The quality of mercy is not strained”—is Portia [POR-shuh]. Portia praises Bassanio [buh-SAH-nee-oe], who in this play’s first scene makes a deal with Antonio. A moneylender in this play asks “Hath not a Jew eyes?”. Name this William Shakespeare play featuring Shylock.

Answer: *The Merchant of Venice*

19. This statue is surrounded by a 15-square-mile national park, which causes conflicts with an Institute for Biodiversity Conservation because this statue has no admission fee but the park does. There is a chapel underneath this statue. This statue is made of concrete and soapstone. The top of this statue was created by Romanian sculptor Gheorghe Leonida [GYOR-geh leh-oh-NEE-duh], and the rest of the work was done by Albert Caquot [ka-koh], Paul Landowski, and Heitor da Silva Costa. The person portrayed in this statue has his arms stretched outward. Name this large statue on Corcovado Mountain in Rio de Janeiro, Brazil.

Answer: *Christ the Redeemer* [accept *Cristo Redentor*]

20. The catalyst named for this molecule had its structure determined by Paul Boyer and John Walker, and it has F_O ["F oh"] and F₁ ["F one"] sub-units. This molecule along with pantothenate ["pant-oh-THEN-ate"] and cysteine [SIS-teen] are used to create co-enzyme A. Two of these molecules are used up to initiate fatty acid beta oxidation, but the oxidation of palmitic ["palm"-IT-ik] acid creates 131 of these molecules. The energy released in glycolysis [gly-KAH-lih-siss] is stored in this molecule and a similar molecule with guanine [GWAH-neen], with both of those molecules being created by substrate-level phosphorylation [fahss-for-ih-LAY-shun]. Name this cell energy source that is created in the mitochondria [my-toh-KAHN-dree-uh].
- Answer: ATP [or adenosine triphosphate; accept ATP synthase before "pantothenate"]

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 novel opens on a stretch of Highway 58, where the bodyguard Sugar-Boy is driving aggressively and stuttering. In this novel, Sugar-Boy is present and armed when his boss offers to build a hospital and put Dr. Adam Stanton in charge of it. That boss has affairs with Adam's sister, Anne, and with the secretary Sadie Burke. The narrator of this novel, who finds out that he is Judge Irwin's son, is a political staffer named Jack Burden. Name this novel about Governor Willie Stark written by Robert Penn Warren.
- Answer: All the King's Men

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

- TB22. Structurally, these compounds are like a water molecule in which one of the hydrogen atoms has been replaced by a group in which the number of hydrogen atoms is one more than twice the number of carbon atoms. The simplest compound of this type can be separated into formaldehyde and hydrogen gas. These compounds have at least one hydroxyl ["hide-ROCK-sill"] functional group bound to a carbon atom of an alkyl [AL-kul] group. The simplest examples of this type of compound are methanol and ethanol. Name these compounds that are used in intoxicating drinks.
- Answer: alcohols

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

- TB23. This number is how many sovereign countries have had control over some or all of Texas. From 1942 to 1967, the NHL had this many teams, and at any time, an NHL team can have this many players on the ice, including the goalie. There are this many types of quark. Give this number of sides of a hexagon.
- Answer: 6

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.