

Scobol Solo 2022

Packet 2 (Round 2)

1. When thieves stole eight out of nine horses that this person's family owned, Bo'orchu [boh-OR-chee] helped him, and Bo'orchu became one of this person's warriors. Merkits kidnapped this person's wife, Börte [BOR-tay]. The so-called mausoleum of this person does not contain his body and is located near Ordos City. This person attacked the Great Jin dynasty several times and died while starting an attack against the Western Xia [shaw]. This person was succeeded by his third son Ögedei when he died in 1229. Name this grandfather of Kublai Khan.

Answer: Genghis Khan or Temüjin [do not accept or prompt on "Khan"]

2. One of this author's characters learns at a young age that "sexuality, with all its attendant yearnings and pains, jealousies and taboos, is the most disturbing impulse humans have." This author wrote about that character, Cathy Ames, getting pregnant with twins by either Charles or Adam Trask before moving to Salinas [suh-LEE-nus] Valley, California. In another novel by this author, Tom goes to Uncle John's home and finds his family about to head west along Route 66. This author wrote that novel about Jim Casy and the Joad family, who leave Oklahoma. Name this author of *East of Eden* and *The Grapes of Wrath*.

Answer: John (Ernst) Steinbeck (Jr.)

3. A common formula for the torque-free precession rate uses two values of this quantity, multiplying it by spin rate in the numerator and by the cosine of an angle in the denominator. In some cases, this quantity can be calculated by the Huygens [HOY-gunz]-Steiner theorem, which is also known as the parallel axis theorem. This quantity can be calculated by adding mass times the square of distance from the axis for each part of an object, and it also equals torque divided by angular acceleration. For a solid sphere, this quantity equals 2/5 times the mass times the radius squared. Name this rotational analogue of mass.

Answer: (first mass) moment of inertia [accept rotational inertia; prompt on *I*; do not prompt on "inertia"]

4. This person wrote "He who fights with monsters should look to it that he himself does not become a monster. And if you gaze long into an abyss, the abyss also gazes into you." That quote is in a book by this writer that begins by questioning the will to truth in a section titled "On the Prejudices of Philosophers". Another book by this writer supposedly contains the wisdom of a person who spent 10 years on a mountain with an eagle and a serpent. That book, which claims that humanity's goal should be the Übermensch [UR-bur-mensch], states "God is dead." Name this German philosopher who wrote *Beyond Good and Evil* and *Thus Spoke Zarathustra* [zar-uh-THOO-struh].

Answer: Friedrich Nietzsche

5. One of this composer's pieces had the word "Fantasy" added to its title when it was published posthumously by Julian Fontana. That piece in C-sharp minor is one of this composer's four impromptus, another one of which was written while this composer was having an affair with the writer George Sand. A famous waltz by this composer is in D-flat major, is marked *molto vivace* [vee-VAH-chay], and is sometimes nicknamed "Waltz of the Puppy". This composer also wrote several nocturnes and polonaises [POH-luh-nay-ziz]. Name this Polish-born French composer who wrote the "Minute [MI-nut] Waltz".

Answer: Frédéric (Fran cois) Chopin [fray-day-reek shoh-pan] [or Fryderyk Franciszek Szopen]

Check the score.

6. Soon after this battle, Robert Patterson was discharged, having made a mistake that allowed Joseph E. Johnston's troops to reinforce Confederate fighters. Because of Patterson's mistake, troops under Irvin McDowell were forced to flee from this battle. Before Barnard Elliott Bee Jr. died during this battle, his statement gave Thomas Jackson the nickname "Stonewall". This battle took place just three months after the bombardment of Fort Sumter. Name this battle in Virginia, the first major battle of the Civil War.

Answer: First Battle of Bull Run [accept Battle of First Manassas; prompt on Bull Run or Manassas]

7. When guard cells release this element, it leads to a decrease in water content, which leads to the stomata closing. In smooth muscle cells, high calcium levels can open channels that cause this element to leave the muscle, making it easier to relax. Jens Christian Skou [rhymes with "cow"] discovered an enzyme in cell membranes that brings two ions of this element into a cell while expelling three sodium ions, which is called a "pump" named for sodium and this element. Name this element that is just below sodium on the periodic table.

Answer: potassium [accept K]

8. One set of poems by this writer begins "It was the time when I do sadly pay my sighs, in tribute to that sweet-sour day." Those poems, which address love, chastity, death, fame, time, and eternity, are this poet's *Triumphs*. In another collection, this poet wrote "To be able to say how much you love is to love but little." This poet popularized calling the time after the fall of Rome "the Dark Ages". Many of this writer's poems combine an octave and a sestet, and the best-known Italian works by this poet are collected in *Il Canzoniere* [eel kahn-"zone"-YAIR-ay]. Name this poet who was obsessed with Laura and wrote many sonnets.

Answer: Petrarch [PET-rark] [or Francesco Petrarca]

9. One song in this musical ends with the lyrics “Follow every rainbow, ’til you find your dream.” That song, which is sung at the end of Act I of this musical by the Mother Abbess, is “Climb Ev’ry Mountain”. During a concert within this musical, a song representing a love of country is sung by a captain who will soon leave his country; that song is “Edelweiss” [AY-dul-“vice”]. The female lead in this musical helps children fall asleep during a storm by singing about “Raindrops on roses and whiskers on kittens” in the song “My Favorite Things”. Name this Rodgers and Hammerstein musical about the von Trapp family escaping from the Nazis.

Answer: *The Sound of Music*

10. When Achilles was disguised as a girl, Odysseus was able to figure out the disguise because Achilles picked up one of these objects. In addition to building a ship, the Sons of Ivaldi built one of these objects for Odin that is called Gungnir and known for its perfect balance. One of these objects is sometimes pictured as a *naginata* [nahg-ih-nah-tah], is named Amenonuhoko [ah-men-oh-noo-hoh-koh], and is used by Izanagi and Izanami to create the first land. One of these objects called Ascalon was used by St. George to kill a dragon. Name these weapons that are similar to lances.

Answer: spears

Check the score.

11. In spherical coordinates, this shape is generated by setting the azimuthal [AZ-ih-MOOTH-ull] angle equal to a constant and allowing the other coordinates to equal anything. This shape is also generated by the equation $x^2 + y^2 = z^2$ [“*x squared plus y squared equals z squared*”]. A slice of this shape can be parabolic. A formula for the volume of this shape is the same as for a pyramid, namely “1/3 times base area times height”. The slant height of this shape equals the square root of the quantity “height squared plus radius squared”. Name this shape that has an apex and a circular base.

Answer: (right circular) cone [accept conical surface]

12. This U.S. president signed the Organized Crime Control Act, which included the RICO [ree-koh] Act to fight organized crime. That bill had strong support from this president’s attorney general John N. Mitchell, who also served on a committee which included Charles Colson and G. Gordon Liddy, and which helped get this person re-elected. That committee, called CREEP, paid legal fees for several burglars who broke into Democratic National Committee headquarters. Name this president who in 1974 resigned during the Watergate scandal.

Answer: Richard Nixon

13. One play by this writer ends with a woman yelling “We shall rest” while a man nicknamed “Waffles” plays the guitar. This author has the title character of that play steal morphine but return it, and the title character also fires two shots at a retired professor. In another play by this author, a young woman agrees to marry Baron Tuzenbach [TOO-zen-bahk], but Tuzenbach is killed in a duel. In the same play, this writer depicts Maria having an affair with Lieutenant-Colonel Vershinin [vur-SHIN-in] but returning to her husband, Kulygin [koo-LEE-gin]. Name this writer of the plays *Uncle Vanya* and *Three Sisters*.

Answer: Anton Chekhov

14. This city is on a bay that shares its name, north of the Uraga [oo-rah-gah] Channel. This city’s Ueno [way-noh] Park is the location of the National Museum of Nature and Science [pause] and the National Museum of Western Art. A public aquarium exists on the 5th and 6th floors of a 2,080-foot tower, which is this city’s Skytree. A bridge over a moat in this city has a popular name that means “double bridge”, though it is actually the Imperial Palace Main Gate Iron Bridge. Name this city that is the center of the most populous metropolitan area in the world and the capital of Japan.

Answer: Tokyo, Japan

15. This group of artists in France started working together at about the same time as Die Brücke [dee BROO-kuh] in Germany, which was also influenced by primitivist [“primitive”-ist] art. One founder of this group painted *Boats at Collioure* [kawl-yur], and the other founder painted *Les toits de Collioure* [lay twah de kawl-yur] and *Open Window, Collioure*. Maurice de Vlaminck [vla-mank], who belonged to this group, criticized Cubists [“cube”-ists] for taking attention from this group. One of this group’s founders painted a portrait of his wife that became called *The Green Stripe*. This group was started by André Derain and Henri Matisse [awn-ree mah-teess]. Name this group whose name means “wild beasts”.

Answer: Les Fauves [lay fohv] [accept the Fauvists or Fauvism]

Check the score.

16. This person worked with Robert Corey on a set of rules for peptide bonds, and Corey and Herman Branson confirmed this person’s protein model that is now called an alpha helix. This person determined that each atom in a stable substance has a charge close to zero, which is his electro-neutrality principle. This person also developed the electro-static valency principle and the principle of parsimony [PAR-sih-moh-nee], which are two of the five rules this person developed about crystal structures of ionic compounds. Name this American scientist who also developed an electro-negativity scale and won Nobel Prizes in Chemistry and Peace.

Answer: Linus (Carl) Pauling

17. This country agreed to resist attacks by Germany or German allies in its Agreement of Friendship, Cooperation, and Mutual Assistance with the Soviet Union. In response, German politicians used a form of this country's name to describe a policy in which a country maintains independence by promising to support a more powerful country's foreign policy. This country fought a civil war between White Guards and Red Guards after declaring independence from Russia in 1917. Name this country that fought the Soviet Union in the Winter War and fought Germany in the Lapland War.

Answer: (Republic of) Finland [accept Suomi or Suomen (tasavalta)]

18. One character in this novel states "Repression is the only lasting philosophy", but the body of that character is found the next day with a note reading "Drive him fast to his tomb. This, from Jacques." That character in this novel is the Marquis, who lives at The Gorgon's Head. In this novel, the Marquis' nephew is acquitted during a trial for treason because he has a strong resemblance to another person at his trial. In this novel, those nearly identical men are Charles Darnay and Sydney Carton. Name this novel by Charles Dickens that is set during the French Revolution and begins "It was the best of times, it was the worst of times."

Answer: *A Tale of Two Cities*

19. A canoe found in this state's Lake Mendota in 2022 is believed to be 3,000 years old. The Republican nominee in this state's 2022 gubernatorial election owns a construction company and recently lived part-time in Manhattan and Connecticut. This state's first Black lieutenant governor tried to become its first Black U.S. Senator. Those people are Tim Michels ["MY"-kulz], who lost to Tony Evers [EH-vurz], and Mandela Barnes, who lost to Ron Johnson, in this state. This state is represented by the first openly lesbian U.S. Senator, Tammy Baldwin. Name this state whose capital is Madison.

Answer: Wisconsin

20. This category of rocks is sometimes subdivided into di-o-ritic or gabb-ro-ic types, and they are sometimes classified using a QAPF diagram. Because of the shape these rocks sometimes have, some examples of them are called "Pele's tears" or "Apache tears". Ellipsoidal vesicles occur in many rocks of this type, such as scoria, giving them a low density due to empty space. Examples of this type of rock include obsidian [ahb-SID-ee-un], pumice [PUM-iss], and basalt [buh-"SALT"]. This type of rock is made by solidifying magma or lava. Name this type of rock that is not sedimentary or metamorphic.

Answer: igneous rock(s) [prompt on magmatic rock(s)]

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. In 2022, researchers at Nankai University built a robot capable of performing this process on pigs. Also in 2022, researchers in Japan performed this process on mice using freeze-dried skin cells. This process is often performed by replacing the nucleus in an egg cell with the nucleus from a somatic [soh-MAT-ik] cell. In 1996, the somatic-cell nuclear transfer type of this process was used to create a sheep named Dolly. Name this process of creating an organism identical to another organism that already exists.
- Answer: cloning [accept clones]

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

- TB22. One of this author's characters thinks "I am listening to the cacophony of my digestive tract" after being asked whether she went to camp with Davis Pickett. This author then describes a search by Daisy Ramirez and Aza Holmes. In another novel, this author describes a trip to Amsterdam to meet Peter van Houten. In that novel, this author describes the pre-funeral of Augustus Waters, a young man with cancer who falls in love with Hazel Grace Lancaster. Name this author of *Turtles All the Way Down* and *The Fault in Our Stars*.
- Answer: John (Michael) Green

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

- TB23. Plotinus [PLAH-tih-nuss] believed that this number was transcendent. This number is assigned to Smitty Werben-jägerman-jensen [wur-ben-YAY-gur-man-JEN-sen] in an episode of *SpongeBob SquarePants*. This number is the multiplicative identity. Identify this number equal to the number of gods in monotheistic religions.
- Answer: 1

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.