

Scobol Solo 2019

Packet 1 (Round 1)



1. This president supported the *Flint v. Stone Tracy* decision allowing for a corporate income tax, which was made after he elevated Edward Douglass White to the Supreme Court. At the beginning of this person's presidency, Congress passed the Payne-Aldrich Tariff and the 16th Amendment. This president was unable to win re-election due to a split in the Republican Party which led to the creation of the Progressive Party, or "Bull Moose" Party, under Teddy Roosevelt. Name this president who served between Teddy Roosevelt and Woodrow Wilson.

Answer: William Howard Taft

2. In the standard equation for a hyperbolic paraboloid ["hyper"-BAH-lik puh-RAB-uh-loyd], this operation is performed separately on two of the three variables. This operation is performed in the denominator of the quotient rule for derivatives. The sum of the first n positive odd numbers equals the result of doing this operation to n . Performing this operation on a number and then taking the square root gives the same result as taking the absolute value of the original number. The graph of y equals this operation on x is an upward-facing parabola. Name this operation that is equivalent to multiplying a number by itself.

Answer: squaring or taking the square [accept raising to the 2nd power or raising to the power of 2; accept multiplying a number by itself before "itself"]

3. Shortly before dying in 1921, this composer wrote an Oboe Sonata, a Clarinet Sonata, and a Bassoon Sonata. The third part of one piece by this composer has two pianists move rapidly up and down the keys to simulate running; the seventh part of that piece uses a glass harmonica, flute, and piano to simulate underwater motion. Another work by this composer opens with the harp playing the same note 12 times and is based on a legend about midnight on Halloween. Name this composer who used xylophones in *Danse macabre* [dahns mah-kahb] and who had the orchestra sound like several creatures in his *The Carnival of the Animals*.

Answer: (Charles-)Camille Saint-Saëns [kah-meel san sawn]

4. This U.S. city has 200 species of birds on display at the National Aviary. This city contains a bronze memorial to George Westinghouse in its Schenley [SHEN-lee] Park, and it also contains the George Westinghouse Bridge. This city's Schenley High School is the alma mater of Andy Warhol, to whom this city has a museum dedicated. This city is the location of Duquesne [doo-KAYN] University and Carnegie Mellon University. This city is where the Allegheny and Monongahela [muh-nawn-guh-HEE-luh] Rivers join to form the Ohio River, which is why some of its sites are named "Three Rivers". Name this second-most populous city in Pennsylvania, after Philadelphia.

Answer: Pittsburgh, Pennsylvania

5. In this novel, a man tells his sister “If I am a scoundrel, you must not be.” In this novel, that statement causes the man’s mother to tell him to stop calling himself a scoundrel, and his sister Dounia [DOON-yuh] to tell him that she is marrying for her own sake. Svidrigailov [suh-feed-REE-“guy”-lawf] also tries to prevent this novel’s protagonist’s sister from marrying Luzhin [LOO-zheen]. The protagonist of this novel does not approve of the treatment of Lizaveta [lee-zuh-VET-uh], but he kills her just after killing her half-sister Alyona [al-YOH-nuh], who is a pawnbroker. Name this novel about Raskolnikov [rah-SKOHL-nee-kawff], written by Fyodor Dostoevsky.

Answer: Crime and Punishment [or Prestupléníye i nakazániye]

6. A photo of a soldier in this war who attached a flag to his radio is known as “The Yomper”. In this war, Darwin Schoolhouse was destroyed during the Battle of Goose Green. This war was started by Leopoldo Galtieri [lay-uh-POHL-doh gahl-tee-AIR-ee], and it cost him the presidency. The sinking of the ARA *General Belgrano* in 1982 accounted for half of the casualties of the losing side during this war. Margaret Thatcher gained significant popularity at the conclusion of this war. Name this conflict between the United Kingdom and Argentina that was fought for control over a namesake archipelago [ark-ih-PEL-uh-goh].

Answer: Falklands War

7. This composer’s “Va, pensiero” [vah pen-see-AIR-oh] is also known as the “Chorus of the Hebrew Slaves”. This composer’s “Coro di Zingari” is also known as “Vedi! Le fosche” [VAY-dee leh FOHSS-kay], or the Anvil Chorus. Those songs are in *Nabucco* [nah-BOOK-koh] and this composer’s opera about Leonora’s love for Manrico, *Il trovatore* [eel tro-vuh-TOR-ay]. In another opera by this composer, the Duke of Mantua sings a song whose title means “Woman is fickle”. One of this composer’s title characters sings “O patria mia” while waiting for Radamès [rah-dah-MAYSS]. Name this Italian opera composer who wrote the aria “La donna è mobile” [lah dohn-nah ay moh-bee-lay] for the opera *Rigoletto* and also wrote the opera *Aida* [“eye”-EE-dah].

Answer: Giuseppe Verdi

8. When a ball rolls down an inclined plane without slipping, this quantity equals the product of radius, coefficient of friction, mass, gravitational field strength, and the cosine of the angle of inclination. In the same situation, this quantity also equals moment of inertia times acceleration divided by radius, which allows a calculation of the necessary coefficient of friction. Gyroscopic precession, which can only occur when this quantity does not equal zero, is said to be “induced” by this quantity. This quantity equals the rate of change of angular momentum, and this quantity also equals the cross product of position with force. Name this rotational analogue of force.

Answer: torque

9. This person’s father did not approve of his writing, so he used the last name of a poet who had written about the Malá Strana district of Prague. A poem by this person states “Here I love you and the horizon hides you in vain. I love you still among these cold things.” Those lines are in a collection by this poet that ends “It is the hour of departure. Oh abandoned one!”. While exiled from his native country, this poet went to Mexico and wrote a poem whose first two sections are “A Lamp on Earth” and “The Heights of Macchu Picchu”. Name this author of *Canto General* [KAHN-toh hay-nay-RAHL] and *Twenty Love Poems and a Song of Despair*, a writer from Chile.

Answer: Pablo Neruda [or (Ricardo Eliecer) Neftali Reyes Basoalto; prompt on Basoalto]

10. This person’s Twitter profile has included the phrases “kind but poorly informed” and “looking forward to a bright and wonderful future” in response to remarks by Vladimir Putin and Donald Trump. At the 2019 World Economic Forum, this person stated “I am here to say ‘our house is on fire.’” At a 2018 U.N. plenary [PLEN-uh-ree], this person stated “You say you love your children above all else, and yet you are stealing their future in front of their very eyes.” A movement inspired by this person is called Fridays for Future. This person first gained fame by standing outside of her nation’s parliament and holding up a sign whose inscription means “School Strike for Climate”. Name this Swedish environmental activist.

Answer: Greta (Tintin Eleonora Ernma) Thunberg

11. This person was often with a group of women who shared her first name and had the last names Fleming, Seton, Beaton and Livingstone. When this person was 24 years old, her second husband’s house was blown up and his body was found in the garden. She later married James Hepburn, 4th Earl of Bothwell, who probably helped with that murder. This woman’s only son became the first ruler under the union of the Scottish and English crowns. This woman was supported by the Rising of the North in an effort to depose her cousin. Name this woman who was eventually convicted of attempting to assassinate her cousin Elizabeth I after being kept in confinement for many years.

Answer: Mary, Queen of Scots or Mary Stuart or Mary I of Scotland [prompt on Mary I]

12. The spectra of Type Ia [“one A”] supernovas show a strong presence of this element, while Type Ib and Ic supernovas do not. Supernovas can be caused by this element fusing to form nickel nuclei. This element is added to a combination of iron and carbon to make electrical steel. This element and oxygen are the primary elements in asbestos. This element is the second-most-abundant element in Earth’s crust, and it combines with the most abundant element—oxygen—to make quartz and sand. This element is above germanium on the periodic table. Name this metalloid, the most commonly used semiconductor.

Answer: silicon [accept Si]

13. At the beginning of one play by this writer, a reporter named Sunshine Morning interviews Prophet Klump about the end of the world. Soon after that, this writer has Sabina say “I can’t do this. I hate this play.” Sabina then gets into an argument with Mrs. Antrobus. In another play by this writer, Rebecca describes a long address ending with “the Solar System; the Universe; the Mind of God”. Rebecca’s mom died while visiting her in Canton, Ohio, and Rebecca’s brother is George Gibbs. This writer set that play in Grover’s Corners, New Hampshire. Name this playwright of *The Skin of Our Teeth* and *Our Town*.

Answer: Thornton (Niven) Wilder

14. On the left side of this painting, a man holds an infantry saber and has a handkerchief around his waist holding a pistol. That man is behind a wealthier man wearing a black coat and top hat, who may represent the artist of this painting. The woman in the center of this painting is based on the legendary character Marianne. A boy in this painting holds two pistols and may have inspired the character Gavroche [gav-rohsh] in *Les Misérables* [lay mee-zair-ahb]. Name this painting set during the July Revolution of 1830 that depicts a woman holding up a tri-color flag and was painted by Eugène Delacroix [oo-zhen del-uh-kwah].

Answer: Liberty Leading the People [or *La Liberté guidant le peuple*]

15. This philosopher wrote that the same illustration could be used in different places in a book to represent a glass cube, an inverted open box, a wire frame, and three boards forming a solid angle. This person then discussed another drawing, saying that it could be described by the sentence “Now I am seeing it as a picture-rabbit.” This person said that if we can talk about something, then it is not private, using his argument of a beetle in a box. This person also developed the concept of a language-game. Name this 20th-century Austrian philosopher who wrote *Philosophical Investigations* and *Tractatus Logico-Philosophicus*.

Answer: Ludwig (Josef Johann) Wittgenstein [VIT-gun-shtyn]

16. Attempts to explain the mechanism of this ingredient led to the discovery of the enzyme COX-3. Though this medical ingredient is generally considered safe, it is also the most common cause of acute liver failure in the United States. The combination of this ingredient, aspirin, and caffeine is used for initial treatment of migraines, especially when non-steroidal anti-inflammatory drugs are ineffective. This analgesic [an-ul-JEE-zik] and antipyretic [an-tee-“pie”-RET-ik] is commonly used for the same purposes as aspirin and ibuprofen [“eye”-byoo-PROH-fin]. Name this medication for mild pain, the active ingredient in Tylenol.

Answer: acetaminophen [or paracetamol; accept APAP; prompt on Tylenol before it is mentioned; prompt on Tempra or Panadol]

17. In one novel by this writer, the hypnotist Lasker Jones states “England has always been disinclined to accept human nature.” That novel is about the love between Alec and the title character, Maurice. Another novel by this author is named for an estate whose name is temporarily forgotten by Juley [JOO-lee] Munt. The wealthy owner of that estate, Ruth Wilcox, wants to pass it on to Margaret Schlegel [SHLAY-gul]. Another novel by this author is set in the fictional city of Chandrapore, where Ronny Heaslop is visited by Adela Quested. Name this author of *Howards End* and *A Passage to India*.

Answer: E(dward) M(organ) Forster

18. This country’s 1993 election seemed to have been won by Moshood Abiola [muh-SHOOD ah-bee-OH-luh], but Sani Abacha [SAH-nee uh-BAH-chuh] was put in power by a coup and had Abiola placed in solitary confinement. This country’s first prime minister, Abubakar Tafawa Balewa [uh-BOO-buh-kar tuh-FAH-wuh buh-LAY-wuh], was killed shortly after being overthrown in 1966. A year later, Emeka Ojukwu [eh-MAY-kah oh-JOOK-woo] started a very deadly civil war by stating that the eastern region of this country was the Republic of Biafra [bee-AH-fruh]. In 2014, hundreds of schoolgirls from Chibok [chi-BOK] in this country were kidnapped by the terrorist group Boko Haram. Name this West African country that in 1991 moved its capital from Lagos [LAH-goes] to Abuja [ah-BOO-jah].

Answer: (Federal Republic of) Nigeria

19. Shortly before dying, this person set a stone under an oak and said that the stone shall be a witness. Because some looting took place against this person’s orders, Achan [AY-kun] and all of his animals were stoned to death. Earlier, this person had his followers take twelve large stones out of the Jordan River to represent the Twelve Tribes of Israel. The book named for this person is the first book of the *nevi'im* [NEH-vee-eem]—or Prophets—section of the Bible. This person and his followers caused the walls of a city to fall by marching around it while blowing trumpets. Name this successor of Moses who won the Battle of Jericho.

Answer: Joshua [or Yehoshua or Hoshea]

20. Many animals in this phylum have an olfactory organ that can detect silt in water and is called an osphradium [ahss-FRAY-dee-um]. Most animals in this phylum have a tongue-like structure with rows of denticles on it that act like teeth; that structure is a radula [RAD-yoo-luh]. These animals have dorsal body walls called mantles, and many of them secrete nacre [NAY-kur], which is also called “mother of pearl”. This phylum includes the classes Bivalvia [“by-VALVE”-ee-uh], Cephalopoda [seff-uh-loh-POH-duh], and Gastropoda [gass-troh-POH-duh]. Name this phylum of invertebrates that includes mussels, slugs, and snails.

Answer: mollusks or mollusca

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 treaty moved a boundary line set by Pope Alexander VI and was eventually accepted by Pope Julius II. 35 years after this treaty was signed, the Treaty of Saragossa made significant changes to its terms. Ten months after this treaty was signed, a group of pilots, astrologers, sailors, and other people were supposed to meet at Grand Canary Island, which never actually happened. This treaty created a boundary line going from the North Pole to the South Pole that was 370 leagues west of the Cape Verde Islands. Name this 1494 treaty that divided the New World between Spain and Portugal.
Answer: Treaty of Tordesillas [tor-day-SEE-yahss] [or Tratado de Tordesilhas or Tratado de Tordesillas]

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

^{TB}22. In one form of the Schrödinger [SHRAY-din-gur] equation, the derivative of the wave-function is taken with respect to this quantity. This quantity is complementary to energy, so both values cannot be simultaneously known with certainty. According to Lenz's law, electromotive force equals the opposite of the derivative of magnetic flux with respect to this quantity. Impulse is the integral of force with respect to this quantity, which means that the impulse of a constant force equals the force times this quantity. Period is a version of this quantity for repeated things, and its *reciprocal* is measured in hertz ["hurts"]. Name this quantity whose SI unit is the second.
Answer: time [accept duration before "flux"]

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

^{TB}23. This type of building is in the title of an Andre Dubus [duh-BYOOS] novel that names one of *Sand and Fog*, a James Clavell [kluh-VEL] novel that names a *Noble* type of this building, and a Charles Dickens novel that names a *Bleak* type of this building. In Illinois, Ludwig Mies van der Rohe [meess van dur ROH-uh] designed a building of this type for Dr. Edith Farnsworth. Name this type of building that people and families live in.
Answer: house [accept home]

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.