

## 2015 Virginia Tech Academic Competition Occasion (VTACO)

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### Cut Questions: Tossups

1. Residences designed by this man include the Casa Batlló and Casa Milà. This architect designed a square held up by 86 Doric columns and a long bench with imprints of buttocks for one of his projects. That project, which also has a multi-colored dragon statue at its entrance, is the Parc Güell. Joseph Subriachs created the Passion façade for one of this man's designs. That same building by this architect also contains the Nativity and Glory façades along with 18 spires, and it is scheduled to be completed in 2026. For 10 points, name this Catalan architect who died before he could complete La Segrada Família in Barcelona.

ANSWER: Antoni Gaudí y Cornet

2. In these entities, potassium and hydrogen ions enter while salt and water exit through the distal tubule. Varieties of these entities include the cortical and juxtamedullary ("JUC-sta-MED-ju-lair-ee") ones. Vasopressin, or ADH, inserts aquaporins into the collecting duct of these entities. These units contain a capillary known as the glomerulus, which is contained within Bowman's capsule. Reabsorption of water and nutrients occurs in their proximal tubule and in the Loop of Henle. A dialysis machine can replace the function of them, and they are primarily responsible for filtering blood. The human body contains approximately one million of, for 10 points, what functional units of the kidney?

ANSWER: Nephrons [prompt on "kidney" until "million"]

3. This man initially committed to East Carolina after a season in which he hit a New Jersey state record 18 home runs during his senior season at Millville Senior High School. This man hit his first major league home run off of Orioles pitcher Mark Worrell during a temporary call-up to replace the injured Peter Bourjos. This man was drafted with the compensation pick attained from Mark Teixeira's signing with the Yankees, and, in 2012, he won AL Rookie of the Year and finished second to Miguel Cabrera in MVP voting. For 10 points, name this five-tooled centerfielder for the Los Angeles Angels of Anaheim.

ANSWER: Mike Trout [or Michael Nelson Trout]

4. This composer used a Friedrich Hölderlin translation of a Sophocles play for his setting of *Antigona*, and this non-Messiaen composer included J.S. Bach's *Before Thy Throne* in his *Play of the End of Time*. This composer's pedagogical method was known as *Schulwerk*. This composer included his *Trionfo di Afrodite* alongside his most famous work in his *Trionfi* trilogy. This composer's most famous work includes sections like "Court of Love" and "In the Tavern," and it begins with a movement about the Roman personification of luck. For 10 points, name this German composer who included the movement "O Fortuna" in his cantata *Carmina Burana*.

ANSWER: Carl Orff

5. This architect collaborated with John Burgee on a pair of buildings that are alternatively known as the KIO Towers, but they are more commonly collectively referred to as the Gate of Europe. Another building designed by this man has a roof with open pediments often mocked as "Chippendale" and is known as the Sony Tower. The Hazel Wright Memorial organ is housed in this man's Crystal Cathedral. This man designed the Brasserie and Four Seasons restaurants in his collaboration with Mies van der Rohe, the Seagram Building. For 10 points, name this American architect whose most famous design was his personal residence, the Glass House.

ANSWER: Philip Johnson

6. One section of this work uses the timpani to represent a ship in the distance, quoting Mendelssohn's *Calm Sea and Prosperous Voyage*. One section of this work mimics a man changing the pitch of his voice, while another uses woodwinds to depict a woman's stutter. A different section of this work pays tribute to the son of Matthew Arnold and is entitled "R.P.A." The most well-known section of this work is thought to have been inspired by a night-time conversation between the composer and his best friend and is entitled "Nimrod." For 10 points, name this fourteen movement work depicting the friends of its composer Edward Elgar.

ANSWER: Enigma Variations

7. The majority opinion of this case relied heavily upon the precedent of *First National Bank of Boston v. Bellotti*. The decision of this case overturned *Austin v. Michigan Chamber of Commerce*, and it also overturned certain portions of a case in which Mitch McConnell was a party. This case held certain later precedents to be inconsistent with the decision in *Buckley v. Valeo*, and it extended the concept of "corporate personhood" to the First Amendment. The majority opinion of this case was written by Justice Anthony Kennedy, and it ruled that *Hillary: The Movie* could be shown within 30 days of the 2010 election. For 10 points, name this Supreme Court case that ruled certain portions of the McCain-Feingold Bill to be unconstitutional.

ANSWER: Citizens United v. Federal Election Commission [or Citizens United v. FEC]

8. In Nepal, dogs are given food for their honesty during *Tihar*, which is concurrent with this holiday. In West Bengal, *Kali Puja* is substituted for this holiday, and this holiday's first day is known as *Dhanteras*. The Sikh equivalent of this holiday celebrates the release from prison of Guru Hargobind Ji, and this holiday's primary festivities take place during the month of *Kartika*. This holiday sees the consumption of *mithai*, or sweets, to commemorate the birth of Lakshmi. This holiday celebrates Rama's victory over Ravana, and it sees the lighting of *diyas*. For 10 points, name this Hindu festival of lights.

ANSWER: Diwali [or Divali; or Deepavali]

9. Along with George Balanchine, this dancer reworked portions of J. S. Bach's *Musical Offering* as well as a work of Anton von Webern into the ballet *Episodes*. Calvin Klein designed the costumes for this dancer's 1990 rendition of Joplin's *Maple Leaf Rag*, and she frequently collaborated with set designer Isamu Noguchi. This dancer's company included Merce Cunningham during the early portion of his career, and she most famously commissioned a work that contains several variations on the Shaker hymn "Simple Gifts." For 10 points, name this dancer who most notably choreographed Copland's *Appalachian Spring*.

ANSWER: Martha Graham

10. This thinker's theories culminated in his "religion of humanity," and this thinker was influenced by the ideas of Henri de Saint Simon. This thinker died shortly after writing a philosophical investigation of mathematics entitled "The Subjective Synthesis." This man claimed that society gradually progresses from theology to science, which became known as his Law of Three Stages. This man coined a word meaning the opposite of selfishness, altruism. This sociologist argued that society operates under its own laws, a doctrine which he called positivism. For 10 points, name this founder of sociology.

ANSWER: Auguste **Comte**

11. One way to calculate this quantity divides an electron affinity found using Slater's rules by the covalent radius. The most recent definition of this quantity, the Allred-Rochow Scale, does not account for d-block elements. Yet another definition of this quantity finds the mean of first ionization energy and electron affinity to calculate it. In addition to the Mulliken definition, the most notable way for calculating this quantity uses lithium as a baseline and assigns fluorine a value of four, the highest of any element. For 10 points, name this quantity measured on the Allen and Pauling scales that is the measure of a bonded atom's ability to attract shared electrons.

ANSWER: **Electronegativity**

### Cut Questions: Bonuses

1. France sure has had a bunch of different political bodies. Name some, for 10 points each.

[10] This body was formed following a radicalization of the ideas of Abbé Sieyès. Consisting predominantly of members of the Third Estate, it took the Tennis Court Oath and drafted the "Declaration of the Rights of Man and Citizen."

ANSWER: **National Assembly** [or **Assemblée nationale**]

[10] This five member political body that came to power following the National Convention was replaced by Napoleon's Consulate after the coup d'état of 18 *Brumaire*.

ANSWER: The **Directory** [or **Directorie**]

[10] Almost a century later, this regime led by Louis Auguste Blanqui briefly dominated a French city before being suppressed by the French Army under Adolphe Thiers during *La Semaine sanglante*.

ANSWER: **Paris Commune**

2. Among it's early teachers was T. M. Preble, who later repudiated it in his article *The World's Crisis*. For 10 points each:

[10] Name this Christian denomination that developed out of the Millerite movement whose unique teachings include the doctrine of investigative judgment and the observance of the Sabbath on Saturday.

ANSWER: **Seventh-Day Adventist** Church [or **Seventh-Day Adventism**; do NOT prompt on "Adventism" or "Adventists"]

[10] Along with Joseph Bates, this female author of the *Conflict of the Ages* series was the most prominent founder of the Seventh-Day Adventists.

ANSWER: Ellen Gould **White**

[10] This early event in Seventh-Day Adventist history saw thousands gather in Ithaca, New York on October 22, 1844. Despite their expectations, Christ did not appear among waves of fire.

ANSWER: The **Great Disappointment**

3. Answer the following about Italian composers, for 10 points each.

[10] This Italian behind the opera *Orlando Furioso* included the violin concertos *The Four Seasons* in his *The Contest Between Harmony and Invention*.

ANSWER: Antonio **Vivaldi**

[10] This Italian composer of the opera *La fiamma* is perhaps better known for his "Roman trilogy," which includes such symphonic poems as *Fountains of Rome* and *Pines of Rome*.

ANSWER: Ottorino **Respighi**

[10] This Renaissance composer supposedly saved polyphony by proving sung text could be intelligible when his six-voice *Pope Marcellus Mass* was played at the Council of Trent.

ANSWER: Giovanni Pierluigi da **Palestrina**

4. Name some Jewish authors, for 10 points each.

[10] This Jewish American author of *Goodbye, Columbus* and *The Plot Against America* is perhaps most famous for penning *Portnoy's Complaint*.

ANSWER: Philip **Roth**

[10] This other Jewish American author traced the titular character's childhood through the Great Depression in *The Adventures of Augie March* in addition to writing the epistolary novel *Herzog*.

ANSWER: Saul **Bellow**

[10] This other Jewish author of the novel *My Name is Asher Lev* wrote about Reuven Malter and Daniel Sauters being members of the title group in his *The Chosen*.

ANSWER: Chaim **Potok**

5. A poem by Vachel Lindsay is titled after how "[This Figure] Walks at Midnight." For 10 points each:

[10] Name this historical figure whose other literary appearances include a biography by Carl Sandburg about his *War Years* and as a *Vampire Hunter* in a Seth Grahame-Smith novel.

ANSWER: Abraham **Lincoln**

[10] Photographically, Lincoln was most famously depicted by this "father of photojournalism." He notably depicted the horrors of the Civil War in exhibitions like "The Dead of Antietam."

ANSWER: Matthew **Brady**

[10] In sculpture, Lincoln is most famously depicted in a statue inside the Lincoln Memorial designed by this man. He used also utilized Brady's photographs for his *Standing Lincoln* in Nebraska.

ANSWER: Daniel Chester **French**