

2015 Virginia Tech Academic Competition Occasion (VTACO)

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Tiebreakers and Spares: Tossups

1. One character in this work saves a trapped sailor, while another character in this work is tied to a pole after attempting to infiltrate the Friends of the ABC. Yet another character in this work is the daughter of Felix Tholomyes and, following the death of Eponine, marries Marius Pontmercy. That character, who is watched after by this novel's protagonist following the death of her mother Fantine, is Cosette. For 10 points, name this long novel in which Inspector Javert pursues Jean Valjean, who had earlier been imprisoned for nineteen years for stealing a loaf of bread, a work of Victor Hugo.

ANSWER: Les Misérables [accept equivalent English translations]

2. One side during this battle intended for it to coincide with a bombing of Dutch Harbor, and George Gay was the only surviving Devastator pilot during it. This battle was preceded by Station HYPO breaking the JN-25 code, and the illness of Bull Halsey forced Raymond Spruance to take command of Task Force 16 during this battle. This battle saw Admiral Tamon Yamaguchi go down with the *Hiryū*, one of the four Japanese aircraft carriers sunk during it. For 10 points, name this June 1942 battle fought near a namesake atoll, often considered the turning point in the Pacific during World War II.

ANSWER: Battle of Midway

3. This organ contains spindle-shaped cells that secrete bicarbonate ions called centroacinar cells. The point at which the main duct of this organ and the common bile duct meet is known as the Ampulla of Vater. Certain people have an extra accessory duct in this organ known as the Duct of Santorini, and the main duct of this organ is known as the Duct of Wirsung. Alpha cells in this organ secrete glucagon, which works in opposition to another hormone secreted in this organ's Islets of Langerhans. For 10 points, name this organ whose beta cells produce insulin to control blood sugar levels, malfunction of which results in diabetes.

ANSWER: Pancreas

Tiebreakers and Spares: Bonuses

1. This novel sees Paul D, who had previously been enslaved on a plantation with Baby Suggs, cornered and made to have sex with the title character. For 10 points each:

[10] Name this novel that sees the escaped slave Sethe attempt to kill her own daughters rather than let them be captured and returned to the Sweet Home plantation.

ANSWER: **Beloved**

[10] This author of such novels as *Sula* and *Song of Solomon* wrote *Beloved*.

ANSWER: Toni **Morrison**

[10] This Morrison novel set in Harlem sees Joe Trace's wife Violet enter into a peculiar friendship with the conservative Alice Manfred.

ANSWER: **Jazz**

2. It was subtitled "On the Regulation of Birth." For 10 points each:

[10] Name this encyclical letter written by Pope Paul VI, which reaffirmed the Catholic doctrine condemning artificial birth control methods.

ANSWER: **Of Human Life** [or **Humanae Vitae**]

[10] Pope Paul VI reconvened this council which primarily addressed the role of the Catholic Church in the modern world. The widespread use of the vernacular language in the Mass along with the officiant facing the congregation are changes that resulted from this council.

ANSWER: The **Second Vatican** Council [or **Vatican II**; prompt on Vatican]

[10] This predecessor to Pope Paul VI who initially convened the Second Vatican Council. This author of the encyclical *Pacem in Terris* was canonized in April of 2014.

ANSWER: Pope Saint **John XXIII**

3. The elementary electric charge was measured by Robert Millikan and Henry Fletcher. For 10 points each:

[10] This was the name for that experiment in which a liquid of known density was suspended in mechanical equilibrium between two electrodes.

ANSWER: **Oil Drop** Experiment

[10] The elementary electric charge developed in Millikan's Oil Drop experiment would later be attributed to the amount of negative charge in this subatomic particle.

ANSWER: **Electron**

[10] This experiment observed the deflection of electrically neutral particles as they passed through an inhomogeneous magnetic field. Because the particles deflected in only very specific amounts, it demonstrated the existence of quantized spin numbers.

ANSWER: **Stern-Gerlach** Experiment