

**2022-2023 IQBT Regular Season Set #1**  
**Round 2 – Tossups**

1. A painting of one of these events in the Louvre includes depictions of Suleiman (SOO-lay-mon) the Magnificent and Charles V (the fifth). That ten-meter mannerist painting by Paolo Veronese (paa-OW-low ver-oh-NAY-zay) shows one of these events from John 2 (John chapter two). A convex (\*) mirror surrounded with scenes from the Passion of Christ is in the back of a painting often titled for one of these events that shows a man in a fur-trimmed hat and a woman in a green dress. For 10 points, name this type of event for which Jan (yahn) van Eyck's *Arnolfini* (AR-nul-FEE-nee) *Portrait* was likely created, and which Veronese painted “at Cana.”

ANSWER: wedding [or marriage; or matrimony; or *The Wedding Feast at Cana*; or *The Wedding at Cana*; or *The Marriage at Cana*; or *The Arnolfini Wedding*; or *The Arnolfini Marriage*]

2. The negative derivative of the Hamiltonian with respect to position gives the generalized form of this value. The phase space consists of all possible values of position and this quantity, which is the Fourier (FOO-ree-ay) transform of position. According to Noether's (NUR-tar's) theorem, this quantity is conserved due to (\*) translational invariance. This quantity squared over two times the mass gives the kinetic energy. The change in this quantity is impulse, and it is conserved in inelastic collisions. For 10 points, name this product of mass and linear velocity.

ANSWER: linear momentum [or translational momentum; do not accept or prompt on “angular momentum”]

3. In a novel by this author, Guitar joins the radical Seven Days organization, which randomly kills White people. In that novel by this author, Freddie the janitor nicknames the main character Milkman Dead. Another novel by this author features a man who follows a trail of flowers after escaping from a (\*) chain gang. That novel by this author begins, “124 was spiteful. Full of a baby's venom” and describes how Sethe (SETH-uh) kills her daughter to prevent her return to slavery. For 10 points, name this author of *Song of Solomon* and *Beloved*.

ANSWER: Toni Morrison [or Chloe Anthony Wofford Morrison]

4. A demonym for people from this city sometimes names the Saint Thomas Christians of India and became a Quranic term for Christians. ISIS soldiers sprayed the first letter of that demonym for this city onto Christian homes, inspiring a protest symbolized by the Arabic letter “nun.” In this city, competing Catholic and Greek Orthodox churches mark proposed sites of the (\*) Annunciation. After the flight into Egypt, Joseph returned to this city with Mary and a child born in Bethlehem. For 10 points, name this childhood hometown of Jesus.

ANSWER: Nazareth [or an-Nasira; or Natsrat; or Nasrath]

5. A thixotropic substance was added to one of these devices perfected by Paul Fisher in 1965, who mass-marketed that example as the AG7 and “bullet” models. The Sheaffer and Parker companies specialize in luxury examples of these things that feature (\*) metal nibs. The Museum of Modern Art displays a best-selling example of these things called the Bic Crystal. Rollerballs are sometimes used in these devices, which are often capped by a ball to control liquid flow. For 10 points, name these devices with ballpoint and fountain varieties for writing.

ANSWER: pens [or space pens; or ballpoint pens; or fountain pens]

6. The April 26 Editorial criticized people in this location, some of whom went on a hunger strike prior to a Soviet leader's visit. People at this location drafted a list of seven demands that denounced the campaign against “bourgeois (boo-j-wah) liberalization.” Jeff Widener (\*) photographed a man in this location whom *Time Magazine* dubbed the “Unknown Rebel.” Taiwan, Tibet, and this location form the “three Ts” of contentious issues surrounding the CCP. For 10 points, name this public area in Beijing where the Tank Man photo was taken in 1989.

ANSWER: Tiananmen Square

7. Two groups of these objects, the Planctae (PLANK-tee) and Symplegades (simp-LEG-uh-deez), were given the epithets Wandering and Cyanean (sai-uh-NEE-un) respectively. Polyphemus (pah-lif-EE-mus) killed Galatea's (gal-uh-TAY-uh's) lover Acis (AY-sis) with one of these objects out of jealousy. One of these objects called the Omphalos (ahm-FAA-lus) marked (\*) Delphi as the center of the world. The husband of Merope (mer-OH-pay) is given a punishment involving this type of object after tricking Thanatos (THAN-uh-tohs) and temporarily stopping death. Sisyphus's punishment involved endlessly rolling for 10 points, what type of object up a hill?

ANSWER: rock [or stone; or boulder]

8. During this decade, women such as Ruth Nichols and Beryl Markham achieved record success in aviation. During this decade, Hattie Caraway of Arkansas became the first woman elected to the Senate. A woman who chaired the Committee on Economic Security during this decade served as the fourth (\*) Secretary of Labor and helped draft the Social Security Act. Frances Perkins became the first female U.S. cabinet secretary during this decade, under FDR. For 10 points, name this decade in which women advocated for equality during the Great Depression.

ANSWER: 1930s [prompt on 30s]

9. This composer called for a 5/8 (five eight) *jarabe* (hah-RAH-bay)-style trumpet solo before quoting “Goodbye, Old Paint” in a suite that uses clashing kettle drums and snare drum to depict a “Gun Battle.” This composer's *Four Dance Episodes* end with a movement that quotes old-time musician William Hamilton Stepp's version of “Bonaparte's Retreat.” In a (\*) “doppio movimento” excerpt, this composer wrote five variations on Joseph Brackett's Shaker hymn “Simple Gifts.” For 10 points, name this American composer of the ballets *Billy the Kid*, *Rodeo*, and *Appalachian Spring*.

ANSWER: Aaron Copland

10. This organism is utilized in the biopharmaceutical industry to produce hepatitis vaccines and insulin. This organism was genetically modified to ferment xylose (ZAI-lohs) to facilitate the production of ethanol from paper waste. One of these model organisms was the first eukaryote (yoo-KAIR-ee-oat) to have its (\*) genome fully sequenced. *Candida albicans* (CAN-did-uh ALB-ik-anz) is a pathogenic species of these organisms, and the most commonly used species of these organisms is *Saccharomyces cerevisiae* (SAK-air-oh-MAI-seez ser-uh-VISS-ee-ay). For 10 points, name this single-celled microorganism that causes bread to rise.

ANSWER: yeasts [or *Saccharomyces cerevisiae* until “*Saccharomyces cerevisiae*” is read]

11. A poem by this author worries about never tracing “shadows with the magic hand of chance.” This poet, who described concerns about his death in “When I Have Fears That I May Cease to Be,” wrote in another poem how he had “been half in love with easeful Death.” That poem by this author ends by asking (\*) “Do I wake or sleep?” This author wrote about the “flowery tale” of a “Sylvan historian” in a poem that ends by asserting “Beauty is truth, truth beauty.” For 10 points, name this author of odes “to a Nightingale” and “On a Grecian Urn.”

ANSWER: John Keats

12. This man plays electric guitar with his band Corroded Coffin every Tuesday night at The Hideout. Erica notices a chandelier blinking an S.O.S. message being sent by this character, which leads to a journey to the (\*) trailer this character shares with his uncle. This character, played by Joseph Quinn, is close friends with Dustin Henderson, and he witnesses the killing of Chrissy Cunningham by Vecna. For 10 points, name this Hawkins High senior who is the leader of the Hellfire Club in *Stranger Things* season four.

ANSWER: Eddie Munson [or Edward Munson; or Eddie the Banished; prompt on Munson; prompt on The Freak]

13. This object titles a Rodgers and Hart song cited as the earliest use of the '50s progression, whose lyrics state “You saw me standing alone / Without a dream in my heart.” The first number one hit for Mary Ford and Les Paul was titled “How High” this object is. This object now titles Bart Howard's (\*) “In Other Words,” which declares “Fill my heart with song and let me sing forevermore.” For 10 points, a request to “see what spring is like on Jupiter and Mars” appears in a song whose title says to “Fly Me to” what heavenly body?

ANSWER: the Moon [or “Blue Moon”; or “How High the Moon”; or “Fly Me to the Moon”]

14. The location where this politician denounced a “super-state exercising new dominance” became the name of the Bruges (brooj) Group. This politician's government passed an ordinance banning “flying pickets” during a years-long clash with Arthur Scargill over striking coal miners. The “Big Bang” was the sudden deregulation of the (\*) London Stock Exchange under this prime minister, who also transferred all water utilities in England and Wales into the private sector. For 10 points, name this Conservative Party leader who was U.K. prime minister in the 1980s.

ANSWER: Margaret Thatcher [or Margaret Hilda Roberts]

15. The slope of a plot with inverse temperature on the x axis, and natural log of pressure on the y axis, yields a form of this quantity divided by the ideal gas constant. This quantity remains constant in a throttling process. This quantity minus the product of temperature and change in entropy equals (\*) Gibbs free energy. This quantity can be added or subtracted for each step of a chemical reaction to yield its total value, according to Hess's law. For 10 points, name this thermodynamic quantity denoted H.

ANSWER: enthalpy [or H until “H” is read; prompt on heat of vaporization until “throttling” is read]

16. German missionary Johann Rebmann names a glacier near the summit of this mountain, which contains the hiking area of Barranco (bah-RAHN-koh) Wall. The nearby town of Moshi is the starting point for some climbs on this mountain, whose three volcanic cones include (\*) Kibo (KEE-boh), Shira (SHEE-rah), and Mawenzi (mah-WEN-zee). The summit of this mountain, the highest in the world that is not part of an adjacent range, was renamed to mean “freedom peak” in Swahili. For 10 points, name this dormant volcano in Tanzania, the tallest mountain in Africa and the tallest volcano in the Eastern Hemisphere.

ANSWER: Mount Kilimanjaro

17. An estimator of this function, which is applied to the partition function to derive the Maxwell-Boltzmann equation, is used on large numbers and is called Stirling's approximation. The gamma function extends this function for complex numbers. In the general formula for a (\*) Taylor series, this function appears in the denominator. This function of n gives the number of permutations for n distinct objects. For 10 points, name this function that gives the product of a number and all lesser positive integers, and is represented by an exclamation point.

ANSWER: factorial

18. This empire's army snuck through an aqueduct to take control of a city from the Gothic king Vitiges (VID-ig-eez). This empire's historian John Skylitzes (skee-LIT-seez) wrote about a disastrous defeat it suffered to Alp Arslan in 1071 when it lost to the Seljuks at Manzikert (MAN-zik-urt), despite the presence of this empire's elite, (\*) Viking-dominated Varangian (vaa-RANG-ee-un) Guard. In this empire's capital, the Nika (NEE-kuh) Riots ended when the general Belisarius (bel-is-AIR-ee-us) slaughtered thousands of chariot racing fans. For 10 points, name this empire that Justinian the Great ruled from Constantinople.

ANSWER: Byzantine empire [or Eastern Roman Empire; do not accept or prompt on "Roman Empire"]

19. In a novel by this author, Chris and Sam are killed at a naming ceremony for a daughter whose name means "may the path never close," and Samsonite Ossai tortures people with a stapler. This author wrote a novel in which the protagonist is exiled after his gun explodes, killing Ezeudu's (EZ-ay-OO-doo's) son (\*) Ikemefuna (IK-ay-muh-FOO-nah). The main character of a novel by this man gains acclaim for defeating Amalinze (AA-muh-LIN-zee) the Cat in wrestling. For 10 points, name this Nigerian author who wrote about Okonkwo's (oh-KAHN-kwoh's) time in Umuofia (OO-moh-FEE-ah) in *Things Fall Apart*.

ANSWER: Chinua Achebe (ah-CHEB-ay)

20. A deputy chief of staff for this country's president impersonated a police officer and beat a protester in 2018 in what became known as the Benalla (beh-NAH-lah) affair. Teacher Samuel Paty (sam-yoo-EL paa-TEE) was beheaded after a false accusation in this country, five years after this country's Hypercacher (ee-PAIR-kaa-SHAY) market and (\*) satirical magazine *Charlie Hebdo* (SHAH-lee eb-doh) were attacked over cartoons depicting Muhammad. This country's 2022 presidential election ended in the run-off defeat of far-right candidate Marine Le Pen (mah-RIN lay pen). For 10 points, name this country led by president Emmanuel Macron.

ANSWER: France [or French Republic; or République française]

21. Arnaldo Tamayo Méndez was the first Latin American in this profession, serving on a project partly named "38." A politician falsely claimed that a man with this profession said, "I didn't see any god." Three people in this profession died above the Kármán (KAAR-mahn) line after leaving *Salyut 1*. Valentina (\*) Tereshkova (ter-ESH-koh-vuh) was the first female member of this profession, which was held by a man who shouted "Poyekhali!" (POH-yeh-KAH-lee) while on *Vostok 1*. For 10 points, name this profession of Yuri Gagarin (gaa-GAA-rin), who worked on the *Soyuz 1* mission for the Soviet space program.

ANSWER: cosmonauts [or Russian astronauts; or Soviet astronauts; prompt on astronauts]