

**2022-2023 IQBT Regular Season Set #1**  
**Round 7 – Tossups**

1. The largest one of these objects was discovered in Low-Frequency Array data, at over sixteen million lightyears across, and is named Alcyoneus (al-SAI-uh-noos). Cosmic voids are generally found in between filaments of these objects. Vera Rubin's study of the (\*) rotation curves of these objects provided evidence for the existence of dark matter. Edwin Hubble created a tuning fork diagram for classifying these objects based on shape, such as elliptical or spiral. For 10 points, name these large star systems such as the Andromeda and the Milky Way.

ANSWER: galaxy [galaxies]

2. A character from a story by this author rants about being descended from the Godhighs and mentions “a plantation and two hundred slaves.” That character created by this author is told to go to “reducing class at the Y” for high blood pressure and gives Carver a (\*) penny, leading to her stroke. This author of “Everything That Rises Must Converge” also wrote a story in which the cat Patty Sing causes a car accident. That story by this author ends with The Misfit shooting a grandmother. For 10 points, name this author of “A Good Man is Hard to Find.”

ANSWER: Flannery O'Connor [Mary Flannery O'Connor]

3. One of these objects “pierced” on its southeast corner commemorates Muhammad's ascension on the Night Journey. *Istilam* (IST-il-em) is performed on one of these objects used to count the seven circumambulations performed during *tawaf* (tah-WAHF). That “Black” object of this type is affixed to the eastern corner of the (\*) Kaaba. On *Eid al-Adha* (EED ahl-AH-dah), three *jamarat* (JAH-mah-raht) are struck with these objects thrown by pilgrims, in memory of Ibrahim throwing them at the Devil. For 10 points, the octagonal shrine on the Temple Mount in Jerusalem is called the “Dome of” what kind of object?

ANSWER: stones [or rocks; or pebbles; or Pierced Stone; or Foundation Stone; or Sakrah; or Sela; or Noble Rock; or Black Stone; or al-Hajaru al-Aswad; or Stoning of the Devil]

4. Members of this religious group were promised tax exemptions in the Edict of Potsdam to encourage them to emigrate to Brandenburg-Prussia. An expedition led by the Duke of Buckingham tried to relieve a siege of members of this group at La Rochelle (RO-shell). Members of this group were targeted in the (\*) St. Bartholomew's Day massacre, 26 years before Henry IV (the fourth) issued the Edict of Nantes (NAHNT) to extend official toleration to this group. For 10 points, name this group of Protestants that fought against the French crown during the Wars of Religion.

ANSWER: Huguenots [or French Protestants, prompt on Protestants]

5. Marc Breau (BRO) and Dee Dee Wood collaborated on the choreography for this musical's song “Step in Time.” In this musical, two children clean their room during a song that describes “an element of fun” in “every job that must be done.” Before (\*) Jane and Michael visit their father in this musical, a character sings “Feed the Birds.” Bert the chimney-sweep sings “Chim Chim Cher-ee” in this musical, whose title character sings “A Spoonful of Sugar” while looking after the Banks children. For 10 points, name this musical about a magical nanny.

ANSWER: Mary Poppins

6. The Chief Justice's concurrence to this case labeled its full holding “unnecessary to decide the case before us” and suggested simply discarding the “viability line.” This Supreme Court ruling raised concerns about the privacy of apps such as Flo. After this ruling was announced, Joe Manchin and Susan (\*) Collins publicly said they felt misled. In 2022, *Politico* published a leaked majority opinion by Samuel Alito months ahead of the official release of this case's ruling. For 10 points, name this Supreme Court case which overturned *Roe v. Wade*.

ANSWER: Dobbs v. Jackson [or Dobbs v. Jackson Women's Health Organization; or *Dobbs v. Jackson Women's Health Organization*]

7. A book written for this emperor has a name translating to “political science” and lists many potential Vyanjana (vee-ahn-YAH-nah), or disguises, that spies can use. Another book, the *Indica*, was written by the Seleucid (sel-YOO-sid) ambassador to this man's court, Megasthenes (meg-AS-thuh-nee-z). Kautilya's (koh-TEEL-yuh's) *Arthashastra* (ARTH-aa-SHAH-struh) was written under this monarch, who conquered (\*) Magadha (MUG-ud-huh) and Pataliputra (PAH-tal-ee-POO-truh), the capital of the Nanda Empire. This man starved himself to death as a Jain monk and left his empire to Bindusara (BIN-doo-sar). For 10 points, name this grandfather of Ashoka (ah-SHOW-kuh) and founder of the Mauryan Empire.

ANSWER: Chandragupta (CHAN-druh-gup-TAH) Maurya [or Sandrokottus; do not accept or prompt on “Chandra”]

8. 28 copies of a sculpture of this character are depicted in Salvador Dalí's painting *The Hallucinogenic Toreador* (TOR-ee-uh-dor). A mammoth ivory figurine sometimes known by this proper name was unearthed in Hohle Fels (HOH-leh FELSS); another figurine known by this name is from Willendorf (VEEL-en-DORF). A sculpture of this character, attributed to Alexandros of Antioch (ANT-ee-ock), is missing (\*) both arms. A 1486 painting shows this nude deity standing on a seashell. For 10 points, name this Roman goddess depicted in a sculpture rediscovered on Milos (MEE-lowsh), whose “Birth” was painted by Sandro Botticelli (BOH-tee-CHEL-ay).

ANSWER: Venus [or Venus de Milo; or Venus of Willendorf; or Venus of Hohle Fels; or *The Birth of Venus*; prompt on Aphrodite until “Roman” is read]

9. Many members of this phylum have specialized organelles that raise an operculum (oh-PERK-yoo-lum) to evert drilling threads. A protein that fluoresces (flor-ESS-es) green in ultraviolet light was first isolated in a member of this phylum. Nematocysts (nee-MAT-uh-sists) are found in animals of this phylum, which contains the classes scyphozoa (SAI-fuh-ZOH-uh) and (\*) hydrozoa (HAI-druh-ZOH-uh), the latter encompassing all of its freshwater members. Members of this phylum may progress from a polyp to a medusa, and in either form they are radially symmetrical. For 10 points, name this phylum that includes corals and jellyfish.

ANSWER: Cnidaria (nai-DAYR-ee-uh) [or cnidarians]

10. This poem ends with mourning of its title character as “Kindest to his people and keenest to win fame.” The epithet “God-cursed” for a villain of this poem reflects that character's descent from Cain. The title character of this epic uses the sword (\*) Hrunting (RUN-ting) against the mother of an earlier foe, before finally perishing when accompanied by Wiglaf as he fights a dragon. The main character of this poem severs a monster's arm to defend the hall Hrothgar (ROTH-gar). For 10 points, name this Old English epic in which the title character slays Grendel.

ANSWER: Beowulf

11. The “blue lights” gathered in this state to participate in an event presided over by George Cabot. Joseph Wadsworth protected a document named for this state from Edmund Andros, which was co-written by Thomas Hooker. This state's Royal Charter was hidden in the (\*) Charter Oak. A bicameral legislature balancing the interests of small and large states was included in a compromise named for this state proposed by Roger Sherman. A meeting of Federalists who opposed the War of 1812 took place in, for 10 points, what state's city of Hartford?

ANSWER: Connecticut

12. This man was the older collaborator in a pair that refined Boole's rule and the trapezoidal rule for numerical integration, with Roger Cotes (“COATS”). Derivatives with respect to time often use this mathematician's notation of dots above the differentiated variable. A common differential equations exercise involves calculating temperature changes using this person's (\*) law of cooling. This mathematician and Gottfried Leibnitz (LYBE-nits) independently created calculus. For 10 points, name this scientist who included calculus principles in his three laws of motion.

ANSWER: Isaac Newton

13. A shamisen (SHAH-mee-sen) accompanies traditional performances involving these objects in a practice known as “joruri” (JOR-oo-ree). Three people called the “omozukai” (oh-moh-zoo-kai), “hidarizukai” (hee-dah-ree-zoo-kai), and “ashizukai” (ah-see-zoo-kai) collaborate to hold these objects during performances. “Kuroko” (koo-ROH-koh) are people who wear (\*) black robes and use these objects to perform. These objects are central to a genre of theater that inspired the later kabuki (kuh-BOO-kee). Japanese bunraku (BOON-rah-koo) uses, for 10 points, what painted objects that are manipulated by human operators to perform plays?

ANSWER: puppets [or bunraku puppets; or ningyō; do not accept or prompt on “marionettes”]

14. This song is interpolated into John Corigliano's (kuh-RIL-ee-AH-noh's) piece *The Mannheim Rocket*. Six variations on this song open the first book of violin instruction by Shinichi (she-NEE-chee) Suzuki. A 19th-century poem by Jane Taylor provides the most common set of lyrics to this song, which was the subject of twelve variations by (\*) Mozart. The French melody “Ah! vous dirai-je, maman” (AH VOO deer-ai juh MAH-mahn) became this song in English. The alphabet song shares a tune with, for 10 points, what song about an object “like a diamond in the sky?”

ANSWER: “Twinkle, Twinkle, Little Star” [or “Ah! vous dirai-je, maman!” until it is read; or the alphabet song until it is read; or the ABCs until “alphabet song” is read]

15. A goddess of plowing inspired the name of this city's Gefion (GAYF-yahn) Fountain, which is located near its Kastellet (kaas-TEL-et) citadel. Jacques Saly's (SAH-lee's) 39-foot equestrian statue of Frederick V (the fifth) is at the center of the four-palace Amalienborg (ay-MAIL-een-BOR) complex in this city, where the Rutschebanen (ROW-chib-AIN-en) roller coaster may be found at (\*) Tivoli (TEEV-lee) Gardens. Since 2000, this city has been linked to Malmö (maa-AAL-muh) via the Øresund (oo-RAY-sunt) Bridge. The island of Zealand is home to, for 10 points, what national capital, where a statue of the Little Mermaid honors Hans Christian Andersen?

ANSWER: Copenhagen

16. When constructing these measures, psephologists (seff-AH-luh-jists) try to avoid the mistakes infamously made by the *Literary Digest*. The declining use of landlines can lead to a major coverage error when creating these measures. Dishonesty from participants in these measures can manifest as the (\*) “Bradley effect” or “Shy Tory factor.” Improving the reliability of an index of these measures was the original purpose of Nate Silver's website FiveThirtyEight. For 10 points, name these measures created by firms such as Zogby and Gallup to forecast election results.

ANSWER: polls [or opinion polls; or electoral polls; or Presidential polls; prompt on surveys]

17. This poem describes a location which has flames that produce “no light, but rather darkness visible.” This poem ends as characters “hand in hand with wandering steps and slow” take a “solitary way.” This poem opens by describing “Man's First (\*) Disobedience, and the Fruit of that Forbidden Tree.” A character in this epic says it is “better to reign in Hell, than serve in Heav'n” to Beelzebub (**bee-AL-zuh-bub**). Satan rebels against God in, for 10 points, what English epic titled for the expulsion of Adam and Eve from the Garden of Eden and written by John Milton?

ANSWER: Paradise Lost

18. The diameter of a carbon nanotube can be determined using a form of this technique named for an Indian scientist. Samples may be prepared for this technique using a laser shot into a matrix to ionize a sample with minimal fragmentation, in the (\*) MALDI process. The output of a form of this technique consists of a diagnostic region and a fingerprint region. A common form of this technique is used to analyze the mass-to-charge ratio of ions. For 10 points, name this analytical technique that has Raman and infrared (**IN-fruh-red**) variants.

ANSWER: spectroscopy [or spectrometry; or mass spectrometry; or Raman spectroscopy; or infrared spectroscopy; or IR spectroscopy]

19. This team briefly unretired Frank Tripucka's (**trip-YOO-kuh's**) number after signing a free agent in 2012. After trading their Pro-Bowl starting quarterback to the Bears before the 2009 season, this team started Kyle Orton. This team had a disastrous start to Super Bowl XLVIII (**48**) as their center snapped the ball over the head of (\*) Peyton Manning in the first quarter. More recently, this team sent away Noah Fant as part of a trade to acquire a quarterback from Seattle. For 10 points, name this team for which Russell Wilson plays home games in Colorado.

ANSWER: Denver Broncos [or Denver Broncos]

20. The third of three attempts at this feat in 1924 led to the death of Andrew “Sandy” Irvine. Jon Krakauer survived a 1996 “disaster” that killed eight people attempting this feat, an event Krakauer wrote about in *Into Thin Air*. Nearly two decades after George Mallory tried, (\*) Edmund Hillary and Tenzing Norgay became the first documented people to achieve this feat. The “Northern” route to achieve this feat became unfavorable after China took over Tibet. For 10 points, identify this achievement regarding the world's tallest mountain.

ANSWER: summitting Mount Everest [or descriptions of climbing to the top of Mount Everest; or reaching the top of Mount Everest; prompt on mountain climbing; prompt on mountaineering]

21. Sulfonylurea (**sul-FAN-nul-yuh-REE-uh**) compounds can increase the release of this hormone. When this hormone binds to its named receptor, it activates tyrosine kinase (**TAI-roh-seen KAI-nayz**). Thirty-one amino acids are cleaved from this protein before it is secreted, creating a byproduct called the C-peptide. This hormone induces (\*) glycogen (**GLAI-kuh-jen**) synthesis and increases the absorption of glucose from the bloodstream. This hormone works with glucagon (**GLOO-kuh-gahn**) to maintain blood sugar levels. For 10 points, name this pancreatic peptide hormone which is lacking in type I (**one**) diabetes.

ANSWER: insulin