

2023 IQBT Undergraduate Championship

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Round 13 – Tossups

1. A symbol containing three of these things is found on the yellow portion of a flag called the “exalted ensign.” In one ritual, one of these things is touched to the surface of a sweet pudding called *kara parshad*. A pair of these things called the *Miri and Piri* represent spiritual and temporal components of one role, and were carried by *Hargobind* (“her-GOH-binned”). One of these things appears over a (*) *chakra*, which in turn is flanked by two of these objects, in a symbol called the *khanda* (“HAHN-duh”). One of these things is used to stir a vessel of sugar-water as part of the *Khalsa* (“HALL-sah”) initiation. Along with undergarments, a comb, a bangle, and not cutting hair, carrying these things is the last of the 5 K’s. For 10 points, name these objects, one of which called the *kirpan* (“keer-PAHN”) is carried by initiated Sikh males.

ANSWER: sword [or knife; or dagger; accept kirpan or khanda before mentioned; accept anything referring to a bladed weapon; prompt on weapon]

2. Near the end of the first canto of Byron’s *Don Juan* (“JOO-in”), the speaker notes that “not a pinch of dust remains of” a ruler from this country, asking “What are the hopes of man?” In a William Wordsworth poem, Merlin wrecks a ship carrying a maid from this country nicknamed the “water lily,” who is then brought back to life by Galahad. The desolation of this country is compared to a hunter who stumbles upon the ruins of London in a poem by (*) Horace Smith written as part of a competition with a friend in 1818. A poem describes “a shattered visage” from this country with a “wrinkled lip, and sneer of cold command” near a pedestal inscribed “king of kings: / Look on my works, ye Mighty, and despair.” For 10 points, Percy Shelley’s “Ozymandias” (“oz-ee-MAN-dee-us”) was inspired by a statue of a pharaoh from what country?

ANSWER: Ancient Egypt [or Kemet; accept Old Kingdom; accept New Kingdom]

3. 280 of these objects were hung in different positions in the installation *November 6 and 7*, a memorial for an attack on Colombia’s Palace of Justice created by Doris Salcedo (“sal-SAY-doh”). 1001 of these objects were collected for the project *Fairytale* by Ai Weiwei, who also arranged hundreds of them into the installation *Bang*. A photograph of one of these objects hangs on the wall alongside a blown-up dictionary definition in a (*) Joseph Kosuth installation titled for *One and Three* of these objects. Gerrit Rietveld (“REET-velt”) designed “Zig-Zag” and “Red and Blue” examples of these objects. One of these objects designed to resemble a worn catcher’s mitt was a signature product of Charles and Ray Eames. For 10 points, Eero Saarinen (“AY-roh SAR-uh-nen”) designed the “Tulip” variety of what common type of furniture, which provides seating?

ANSWER: chairs [or stools; prompt on seats; reject “couches” or “sofas”]

4. This effect is made particularly worse by north-south oriented canyons. Masson et al. developed the TEB model to study this phenomenon, and methods of mitigating it are assessed using the MIST (“mist”) screening tool. The SnailSnap project revealed that this effect may be selecting for yellow snails. Using the MODIS (“MOH-diss”) remote sensing apparatus, Bonafoni et al. showed that the (*) surface version of this effect persists diurnally, unlike the canopy version. The fact that impervious surfaces strengthen this effect is one reason why it disparately affects low-income communities. This effect can be mitigated by tree protection ordinances and light-colored roofs. For 10 points, name this phenomenon in which cities absorb thermal energy, creating a region of increased temperature.

ANSWER: urban heat island effect [or UHI effect; prompt on global warming or climate change]

5. This man was tasked with leading representatives and the translator Felipillo (“FAY-lee-PEE-yoh”) to a meeting at some hot springs, where this man gave a horsemanship demonstration to an indigenous leader. This man stole heaps of pearls from the Lady of Cofitachequi (“KOH-fee-tuh-CHECK-kee”), who misled his forces in their search for Coosa. On one expedition, this man rescued Juan Ortiz, who had been taken captive during an earlier expedition led by (*) Pánfilo de Narváez (“PAN-fuh-loh nar-VAH-yess”). While serving as Governor of Cuba, this man launched an expedition based on the stories of Cabeza de Vaca. This man befriended Atahualpa (“AH-tuh-WAL-puh”) while serving under Francisco Pizarro. Like Ponce de León before him, this man began an expedition in *La Florida*. For 10 points, name this Spanish explorer, the first European to cross the Mississippi.

ANSWER: Hernando de Soto

6. In a late sculpture by this artist, a medallion displaying an image of a horse captioned with the word “SUPERBIA” hangs backwards from a general’s partly-severed neck. Another sculpture by this artist includes a helmet decorated with a Neo-platonic scene depicting *putti* pulling a chariot in triumph. This sculptor of *Judith and Holofernes* employed a trademark “flattened,” or *schiacchiato* (“skee-uh-kee-AH-toh”), relief style in works like the (*) *Feast of Herod*. In another of this artist’s sculptures, a wing from a plumed helmet runs up the inner leg of the subject, who wears a shepherd’s hat crowned with laurel. In that sculpture by this artist, the title character is depicted as an effeminate, nude boy carrying his fallen enemy’s sword. For 10 points, name this Florentine Renaissance sculptor of a nude, bronze *David*.

ANSWER: Donatello [or Donato di Niccolo di Betto Bardi]

7. The last sensation that this novel’s protagonist feels before dying is the hallucination of another woman’s baby tenderly pressing its head against her arm. In this novel, a woman maliciously insinuates that her husband is sleeping with the protagonist, by telling guests that the protagonist “is not going back to the yacht.” That malicious woman in this novel is the subject of incriminating love letters that the protagonist burns after they were sold to her by a blackmailing (*) charwoman. This novel’s protagonist portrays Joshua Reynolds’s *Mrs. Lloyd* at a *tableaux vivants* (“tab-LOH vee-VAHN”) and pays her debts by accepting money that Gus Trenor earns through stock tips from Simon Rosedale. For 10 points, Lawrence Selden never declares his love for doomed socialite Lily Bart in what novel by Edith Wharton?

ANSWER: *The House of Mirth*

8. In his 800-page book on this passage, Edzard Visser argued that its use of determinants, variables, and free elements contradicts Denys Page's theory that it is a later insertion. This passage concludes with a description of the "tree-clothed slopes" of Pelion and begins by invoking the Muses to aid a task which could not be accomplished with "ten tongues," a "tireless voice," and "lungs of bronze." This passage, which comes after Agamemnon sacrifices meat and grains to the gods, proceeds from Boeotia ("bee-OH-shuh") to the (*) Peloponnesus ("PELL-oh-puh-NEE-suss"), then from Crete and the Aegean ("eeh-JEE-un") to northern Greece. It occurs during Book II ("two"), is followed by a shorter, similar summary of Hector's host, and names 29 distinct groups. For 10 points, what passage of the *Iliad* enumerates the Greek captains and their vessels?

ANSWER: the catalogue of ships [or neōn katálogos; accept answers which indicate a list of all of the ships of the Greeks; accept answers which indicate a list or catalogue of the Greek captains, or Achaean captains, before "captains"; prompt on Book II of the *Iliad* before "Book II"]

9. This ethnic group refused to sell poppies to British soldiers in a movement inspired by the article "The Battle of the Flowers," written by Doreen Young. In 1956, the "[these people] Only" Act set these people's language as the only one to replace English in their country. After a monk assassinated her husband at the Hotel Tintagel, a woman of this ethnic group became the world's first female prime minister. Mobs primarily composed of this ethnic group perpetrated a massacre during (*) Black July; two years earlier, mobs of this ethnic group burned a massive library in Jaffna. This ethnic group fought a lengthy civil war against the ethnic group who assassinated Rajiv Gandhi. For 10 points, name this majority ethnic group of Sri Lanka, who were opposed by the Tamil Tigers.

ANSWER: Sinhalese [or Sinhala people]

10. A construct used to solve this system is generalized to create a method that is repeatedly applied to the vacuum to create all possible Fock states in second quantization. A method of solving this system introduces a new variable equal to the square root of the quantity " m -omega over h -bar," all times x , and then assumes the term containing the square of that variable dominates. That method leads to a solution for this system of either even or odd parity depending on n , since it contains a (*) Hermite ("air-MEET") polynomial. Another solution to this system relies on defining constructs that increase or decrease the energy by " h -bar omega," called the ladder operators. This non-classical system has evenly spaced energy levels and its potential is given by Hooke's ("hook's") law. For 10 points, name this quantum system similar to a mass on a spring.

ANSWER: quantum harmonic oscillator [or QHO, prompt on partial answers like "harmonic oscillator" or "oscillator"; reject "simple harmonic oscillator" or "classical harmonic oscillator"]

11. Stephen Zeldes argued that "constraints" on this property, such as those imposed by leverage limits, weaken the validity of the permanent income hypothesis. In their model of this property's "spirals," Brunnermeier and Pedersen used the ratio of transaction price to fundamental value as a measure of this property's "market" variety. Two measures of this property are termed "current" and "quick" and assess the "accounting" variety of this property, which indicates a firm's ability to cover (*) short-term obligations. "Preference" for this property is an alternate name for money demand, which is represented by the LM curve. Preferences for assets with this property can become absolute in a recession where interest rates are low, called this property's namesake "trap." For 10 points, name this property of assets which can easily be sold for cash.

ANSWER: liquidity [accept liquid or word forms such as "ability to liquidate"; accept liquidity constraints or liquidity spirals or market liquidity or accounting liquidity or liquidity preference or liquidity trap; prompt on descriptive answers such as "how easy it is to get money" or "how easy it is to borrow"]

12. Excavations at this site were used by Charles Piazzi Smyth to argue against the metric system because of the divinity of a structure's namesake "inch." Zahi Hawass ("huh-WASS") and Mark Lehner wrote a book about this site, as did Lehner and Pierre Tallet ("tah-YAY"), who discovered the diary of Merer detailing construction here. The artificial harbor at Wadi al-Jarf transported material from Tura to this site. After falling asleep visiting this site, Thutmose IV ("the fourth") installed the (*) Dream Stele ("STEE-lee"). Caliph al-Ma'mun created the "Robbers' Tunnel" in a structure at this site lined by boat pits, one of which contained an intact solar barque ("bark"). A structure at this site is flanked by two smaller ones named for Menkaure ("men-KAO-ruh") and Khafre ("KAH-fruh"). For 10 points, name this site home to the Sphinx and Khufu's Great Pyramid. ANSWER: Giza pyramid complex [or Giza necropolis or pyramids of Giza or Great Pyramid of Giza; prompt on Pyramid Fields, the Pyramid of Khafre, the Pyramid of Khufu, the Pyramid of Menkaure, the Egyptian pyramids, or the Sphinx]

13. Neighboring groups can influence the multiple rearrangement of these chemicals in the memory effect. During peptide synthesis, tri-isopropyl silane ("SILL-ayn") is used to remove these compounds to prevent branching. These compounds were stabilized using a 1:1 ("one-to-one") mixture of fluoro-sulfuric acid and antimony penta-fluoride by George Olah, who also studied penta-valent (*) non-classical examples of them. These compounds undergo alkyl ("AL-kill") or hydride ("HY-dryde") shifts to improve stability. In one mechanism, solvolysis ("sall-VAH-luh-siss") creates one of these species, which explains why the product of that mechanism is racemic ("ruh-SEE-mick"). Hyper-conjugation explains why the tertiary examples of these species are more stable than primary or secondary. SN1 and E1 reactions proceed through these intermediates. For 10 points, name these carbons with a positive charge. ANSWER: carbo-cations ("KAR-boh-KAT-eye-ons")

14. In the southern part of this administrative region, the development of the Lacq ("lock") gas field brought industry near the city of Pau ("pow"). A countess of Montijo ("mon-TEE-hoh") popularized this region's town of Biarritz ("beer-ITS") as a resort. This region's capital names a wine region divided into "left-bank" and "right-bank" areas, the former of which includes Médoc. This region's major estuary, which receives the flow of the Garonne ("guh-RON") and (*) Dordogne ("dor-DOHN-yuh") rivers, is named Gironde ("zhee-ROND"). In 2014, this region merged with Poitou-Charentes ("pwah-TOO shuh-RAHNT") and Limousin ("lee-moo-ZAN") to form the largest administrative region in France. It contains the western part of historic Gascony and most French speakers of Basque. Bordeaux ("bor-DOH") is the capital of, for 10 points, what region, from whence hailed Henry II's ("the second's") wife Eleanor? ANSWER: Aquitaine ("ACK-wuh-tayn" or "ah-kee-TEN") [or Aquitania; accept Nouvelle-Aquitaine or Eleanor of Aquitaine; accept Guyenne; anti-prompt on Bordeaux or Gascony by asking "what administrative region is that part of?"; reject "Guyana" or "Occitania" or "Languedoc"]

15. A poem titled for this surname uses the refrain "to kill the man of peace" in the opening of each stanza. The death of that man with this surname began an era chronicled in a Dante-inspired poetry trilogy that begins with *Purgatory*, then *Anteparadise*. A novel by an author with this surname includes a mummy-collecting nobleman who has sex with native servants in his photography studio, and another character who goes into labor with twins after recovering the (*) severed head of her mother, Nívea ("NEE-vay-ah"), from a car wreck. The prostitute Tránsito Soto frees a character from Esteban García's clutches in that novel by an author with this surname, in which Rosa the Beautiful and the clairvoyant Clara ("KLAH-rah") are part of the Trueba family. For 10 points, give this surname of the author of *The House of the Spirits*. ANSWER: Allende [accept Salvador Allende; accept Isabel Allende] (The first work is Mario Benedetti's "Allende"; the second is Raúl Zurita's trilogy.)

16. **The *New York Times* asked W. H. Auden to write a poem for this event, but he declined, said it had no meaning, then called it a “phallic triumph” in a satirical poem. Ralph Abernathy spoke with Thomas O. Paine while protesting this event accompanied by two mules and a wagon. William Safire referenced a Rupert Brooke poem in an undelivered memo prepared in case this event failed. This event was almost derailed by a series of unexpected (*) 1201 and 1202 alarms forcing a computer to reboot. This event was the goal of a speech which compared it to asking why Rice plays Texas; that speech said this event was among things pursued “not because they are easy, but because they are hard.” For 10 points, name this event which was called “one small step for a man, one giant leap for mankind.”**

ANSWER: Apollo 11 [or the moon landing; accept answers indicating the launch of the Apollo 11 spacecraft; prompt on Apollo or the Space Race]

17. **The product of lifespan and this variable has no relation to cancer risk, a result called Peto’s paradox that may be explained by duplication in tumor suppressors. Among mammals, plotting the log of this quantity against the species richness generally shows a right-skewed distribution. Birds follow Bergmann’s rule, which states this quantity increases with latitude. This quantity to the three-quarters power scales with the (*) metabolic rate, according to Kleiber’s law. Allometry is the study of the relationship of this variable on other characteristics. *Homo floresiensis* (“FLOR-ess-YEN-siss”) is an example of Foster’s rule, which states that this quantity tends to extremes on islands. For 10 points, name this variable that is very big and very small in gigantism and dwarfism, respectively.**

ANSWER: body size [or body mass, weight, volume, length, height; accept answers like the number of cells in an organism]

18. **An ensemble currently named for this person has recorded the complete Haydn and Beethoven string quartets for the Naxos label. This person advocated reciting quarter and eighth notes on the syllables “ta” and “ti” respectively, rather than counting beats, to learn rhythm. The cello’s lowest two strings are tuned down a semitone to B and F-sharp in this composer’s Sonata for Solo Cello in B minor. This composer adapted John (*) Curwen’s hand signs for solfège (“sol-FEZH”) syllables as part of his namesake method of musical education. An opera by this composer, about a soldier who single-handedly defeats Napoleon, includes the interlude “The Viennese Musical Clock” and opens with a “musical sneeze.” For 10 points, name this Hungarian composer of the folk opera *Háry János* (“YAH-nosh”).**

ANSWER: Zoltán Kodály (“KOH-dye”) [accept names in either order]

19. **A text named for one of these people suggests that fishing is an “acquisitive” art, unlike “productive” arts, such as husbandry and manufacture. In one text, one of these people says that if a city’s success depended on flute-playing, talent at flute-playing would be distributed by education or proclivity, not by heredity. In another text, one of these people divides virtue into five parts, with courage unlike the other four parts. One of these people names a (*) Platonic dialogue in which the idea that justice is giving a greater share to the stronger is proposed by Callicles (“KAAL-ih-kleez”). Another of these thinkers coined the motto, “Man is the measure of all things.” For 10 points, Gorgias (“GORE-juss”) and Protagoras (“pro-tuh-GORE-uss”) were what purported teachers of wisdom, who later gave their name to fallacious argumentation?**

ANSWER: sophists [or sophista; prompt on philosopher; prompt on orator; prompt on rhetorician]

20. A character provides phrases to respond to this object, such as “Somebody fetch my parasol—Those colors fade so in the sun!” as part of a list that includes the inquisitive, enterprising, pedantic, and rustic. That character says that milk from heaven would drip from this object if it were struck, after he claims to have tripped over Scorpio and landed into one scale of Libra. A man repeatedly insults this object to show “that one may be a Norman and have courage” after joining a company of (*) Gascon cadets. The owner of this object believes it will prevent his cousin from requiting his love, inspiring him to write love letters on behalf of Christian de Neuvillette (“nuh-vee-LET”) to that cousin, Roxane. For 10 points, name this prominent facial feature of the title character of an Edmond de Rostand (“rah-STAHN”) play.

ANSWER: the nose of Cyrano de Bergerac [or Cyrano de Bergerac’s nose; prompt on nose by asking “whose nose?”]

Round 13 – Bonuses

1. This language’s word for “know” or “understand” is *sabi*, which ultimately comes from the Portuguese word *saber*. For 10 points each:

[10h] Name this somewhat misleadingly-named creole language, named for the country where it’s most widely spoken. Its common words include *biko*, meaning “please,” and *dey*, which is the verb “to be.”

ANSWER: **Nigerian Pidgin** [or **Naijá**; prompt on **pidgin**; prompt on **rotten English**; reject “Nigerian” or “Nigerian English”]

[10e] This European language forms the base of Nigerian Pidgin, as well as Sierra Leone’s Krio language. It’s also widely used in Ghana.

ANSWER: **English**

[10m] *Linguistic term required.* Like many creoles, Nigerian pidgin often uses this process for intensification; for example, “sabi-sabi” means “know-it-all.” Baby talk is characterized by iconicity, use of diminutives, and this linguistic process.

ANSWER: **re-duplication** [prompt on **copying** or **doubling** or **duplication** or **repetition** by saying “we want the exact linguistic term”]

2. If a space has a basis with this property for its topology, the space is said to have the “second” version of this property. For 10 points each:

[10m] Name this property, which, for a set, occurs if the set can be put in a bijection with the natural numbers.

ANSWER: **countable** [or word forms such as **countability**; reject “uncountable”]

[10e] Unlike the rational numbers, this set of numbers is not countable. This set of numbers is denoted with a blackboard R, and contains both the rationals and irrationals.

ANSWER: **real** numbers

[10h] This topological space is constructed by taking the product of the first uncountable ordinal with the half-open interval $[0, 1)$ with the order topology. This space is not para-compact or compact, but is sequentially compact.

ANSWER: **long line** [or **long ray** or **Alexandroff** line]

3. The abecedarian (“A-B-C-dair-ian”) is a poetic form that follows the letters of the alphabet. For 10 points each:

[10h] This author wrote “B kneels to God, / C telephones to D” in the abecedarian poem “A Primer of the Daily Round.” This sibling of Diane Arbus wrote the collections *The Salt Garden* and *Sentences*.

ANSWER: Howard **Nemerov**

[10m] Both “A Primer of the Daily Round” and Tom Disch’s “Abecedary” begin by linking the letter A to one of these objects. The speaker of a different poem about these objects wonders if his sleep will be like the “Long sleep” of the woodchuck “Or just some human sleep.”

ANSWER: **apples** [accept “After **Apple**-Picking”; prompt on **fruit**] (“After Apple-Picking” is by Robert Frost)

[10e] This author’s experiments with abecedarian poetry led to the book *To Do: Alphabets and Birthdays*. This life partner of Alice Toklas wrote “Rose is a rose is a rose is a rose” in her poem “Sacred Emily.”

ANSWER: Gertrude **Stein**

4. In 2023, China indicated that it would likely ease this policy, as it may have exacerbated real estate market issues by cutting off developers' access to credit markets. For 10 points each:

[10h] Name this policy, introduced in August 2020, which restricts how much a company may borrow based on its assets, equity, and cash on hand.

ANSWER: **three red lines** [or **sān tiáo hóng xiàn**]

[10m] Unsurprisingly, this development group founded by Hui Ka Yan was found to be in violation of the three red lines. This massive company's failure to pay bond coupons in 2021 ignited China's most recent real estate crisis.

ANSWER: **Evergrande** [or China **Evergrande** Group or **Hengda**]

[10e] Partly due to real estate inflation, this Chinese city was ranked the most expensive in the world to live in several times in 2022. China's largest mainland stock exchange is in this city, which is served by Pudong Airport.

ANSWER: **Shanghai**

5. One of these leaders organized a Red Wedding-like butchering of rival chieftains called the Treachery of the Long Knives. For 10 points each:

[10h] Name these legendary leaders who were invited to settle the isle of Thanet ("THAAN-it") in return for leading an army of mercenaries to assist Vortigern.

ANSWER: **Hengist** AND **Horsa**

[10e] The archetype of divine horse-twins shows up in Greek myth as these two sons of Leda. One of these twins was an immortal child of Zeus; the other was a mortal child of Tyndareus.

ANSWER: **Castor** AND **Pollux** [or the **Dioscuri**; accept **Polydeuces** for Pollux]

[10m] In Vedic myth, this god is usually considered the father of the Ashvins, a pair of divine charioteers. This Hindu sun god rides a chariot drawn by seven horses.

ANSWER: **Surva** ("SOOR-yuh") [or **Shurja**, or **Aditya**, or **Arka**, or **Bhanu**, or **Savitr**, or **Pushan**, or **Ravi**, or **Martanda**, or **Bhaskara**, or **Prabhakara**, or **Kathiravan**, or **Vivasvan**; prompt on **Mitra**]

6. This text, which argues for a "common stock" of rights which individual members of society draw from when needed, led William Pitt's government to try its author in absentia for seditious libel. For 10 points each:

[10h] Name this text. This text was written because of an ideological feud with a man whom the author had met in Britain while trying to secure funding for his idea for an iron bridge.

ANSWER: *The **Rights of Man*** [or *The **Rights of Man, Part I***; or *The **Rights of Man, Part 2***]

[10m] The author, Thomas Paine, met this diplomat while in France with the pro-America Brissotists ("bree-SOH-ists"). After being sent to the U.S. by the Girondins ("zhee-ron-DENS") to arm privateers at American ports, this man was granted asylum by George Washington.

ANSWER: Edmond Charles **Genet** ("zhuh-NAY") [or Citizen **Genet**]

[10e] Citizen Genet's father arranged for the French edition of this Paine pamphlet, which, like *The American Crisis*, argues for the American Revolution.

ANSWER: **Common Sense**

7. These cells undergo both positive and negative selection when exposed to a variety of antigens by mTECs (“M-tecks”) under the control of the AIRE (“air”) regulator. For 10 points each:

[10e] Name this type of lymphocyte that develops in the thymus. The helper, or CD4, type of these cells is infected by H-I-V.

ANSWER: **T** cell

[10m] This is the name given to the immature T cells that have been released from the thymus, but have not yet encountered their corresponding antigen.

ANSWER: **naive** T cells [or **Th0** (“T-H-zero”)]

[10h] T cells are chemotactically attracted by a phosphate derivative of this lipid. Fingolimod (“fin-GO-luh-mod”) binds to the receptor for that derivative of this lipid, which is also found in a class of lipids that includes ceramides and gangliosides.

ANSWER: **sphingosine** (“s’FIN-guh-seen”) [accept **sphingosine-1-phosphate** or **sphingosine phosphate**]

8. Popular works in this genre include Guān Hàncǐng’s (“gwan han-cheeng’s”) *The Injustice to Dòu É* (“daw uh”) and Lǐ Qiánfū’s (“lee ch’yen foo’s”) *The Chalk Circle*. For 10 points each:

[10h] Name these Chinese variety plays, mixing prose, poetry, singing, and dancing that arose in the Sòng Dynasty but were particularly popular in the Yuán Dynasty.

ANSWER: **zǎjù**

[10m] *The Chalk Circle* is one of many Yuán era plays featuring a character named Bāo with this profession.

ANSWER: **judge** [or **magistrate**; or **justice**; prompt on **politician**, **civil servant**, or **minister** by asking “What specific role does Bāo serve in the play?”]

[10e] Actors playing Judge Bāo often wear a black one of these objects with a design portraying thick white eyebrows. As props, these objects represent emotions in Japanese Noh theater.

ANSWER: **masks**

9. In this piece’s second movement, alternations of dotted-sixteenth notes and thirty-second notes depict the buzzing of gnats and flies. For 10 points each:

[10m] Name this concerto, first published in 1725, whose three movements are all in G minor. Its furious Presto finale depicts a man fleeing from a violent hailstorm.

ANSWER: “**Summer**” [or *L’estate*; accept **RV 315**; accept **Opus 8, No. 2**; prompt on **Opus 8**; reject “The Four Seasons”; reject “*Le quattro stagioni*”]

[10e] “Summer” is part of *The Four Seasons*, a set of violin concertos by this Italian Baroque composer.

ANSWER: Antonio (Lucio) **Vivaldi**

[10h] Vivaldi wrote *The Four Seasons* directly before working at this convent for the second time, where he trained some of the players in its orchestra, which consisted entirely of female orphans.

ANSWER: **Ospedale della Pietà** [prompt on **Ospedale**; prompt on **della Pietà**]

10. Ruth Shady Solis discovered this city, which she claims was settled by coastal fishing people moving inland, the opposite of claims made by Winifried Creamer and Jonathan Haas with whom she feuds. For 10 points each:

[10h] Name this city. Six pyramids and a central obelisk are in this city which provides the alternate name for the Norte Chico civilization.

ANSWER: **Caral**

[10e] Shady accused Creamer and Haas of plagiarism for their claim that Caral was part of this country’s Norte Chico civilization. The Incan capital of Cuzco is in this country.

ANSWER: **Peru**

[10m] Archaeologists have uncovered fragments of a Caral gourd depicting the “Staff God,” a version of whom appears at this city’s Gate of the Sun. This pre-Incan city lies on the southern shores of Lake Titicaca.

ANSWER: **Tiwanaku** [or **Tiahuanaco** or **Tiahuanacu**]

11. For 10 points each, name these European authors who wrote stories about dogs.

[10e] An unnamed canine attempts to understand where food comes from in this author's story "Investigations of a Dog." His other stories narrated by animals include "A Report to an Academy" and "The Metamorphosis."

ANSWER: Franz **Kafka**

[10m] In this author's short story "Argo and His Master," a man tries to teach his dog to speak Italian. After being encouraged to resume writing by his English teacher, James Joyce, he wrote the novel in which Zeno asks his psychiatrist to help him quit smoking.

ANSWER: Italo **Svevo** [or Ettore **Schmitz**; or Aron Hector **Schmitz**]

[10h] After the Fascists exiled this Italian author to Lipari Island, he wrote several stories about a stray greyhound he befriended there called Febo. Jean-Luc Godard partially filmed *Contempt* at this author's red villa on Capri.

ANSWER: Curzio **Malaparte** ("MAL-uh-PAR-tay") [or Kurt Eric **Suckert**]

12. This philosopher's concept of "The Myth of the Given" is sometimes interpreted as a continuation of the "critical realist" tradition of his father, Roy Wood. For 10 points each:

[10m] Name this American philosopher who wrote "Empiricism and the Philosophy of Mind."

ANSWER: Wilfrid (Stalker) **Sellars**

[10h] In *Science and Metaphysics*, Sellars defended a theory of perception known by this adjective, in which objects of perception are ways of perceiving, not actual objects. Roderick Chisholm ("CHIZ-um") was a leading defender of this kind of theory of perception, which interprets the statement "I see red" as meaning "I see in a red way."

ANSWER: **adverbial** theory of perception

[10e] John Yolton claims that this 17th-century English philosopher espoused an early adverbial theory of perception in his *An Essay Concerning Human Understanding*.

ANSWER: John **Locke**

13. Answer the following about blues progressions, for 10 points each.

[10e] A blues progression normally lasts this many bars. Discounting en-harmonic equivalents, there are this many major keys, because there are this many pitch classes in a chromatic scale.

ANSWER: **12**

[10h] Although jazz musicians debate the number of notes in a blue scale, all standard definitions agree that a C blues scale has these three black-key notes. Name all three, spelling them as flats rather than as sharps.

ANSWER: **E-flat**, **G-flat**, and **B-flat** [accept in any order; accept **E**, **G**, and **B**]

[10m] This bop saxophonist used a modified blues progression with added diminished seventh chords and flat ninths in his song "Tenor Madness." His album *Saxophone Colossus* features his song "St. Thomas."

ANSWER: Sonny **Rollins** [or Walter Theodore **Rollins**]

14. For rocksalt sodium chloride, these values are about plus and minus 1.748. For 10 points each:

[10h] Name these quantities that approximate the electric potential felt by a given ion in an ionic solid. There are as many of these quantities for a structure as there are ions in distinct sites.

ANSWER: **Madelung** ("MAH-duh-lung") constants

[10e] The Madelung constants are approximated as a multiple of 0.88 in the Kapustinskii ("KAP-uh-STIN-skee") equation for calculating the energy of this kind of regular repeating solid crystal structure for an ionic compound, whose types include cubic.

ANSWER: **lattice** [or crystal **lattice** or ionic **lattice**; accept **lattice** enthalpy or **lattice** energy]

[10m] Lattice energy can also be computed by applying Hess's law to a Born-Haber cycle. This works because enthalpy is one of these thermodynamic functions, which only depend on the current equilibrium rather than the path taken to get there.

ANSWER: **state** function

15. The “Headless Council” at Hieria, so nicknamed because none of the five great patriarchs were there, was convened by Constantine V to support this policy. For 10 points each:

[10e] Name this Byzantine policy which opposed the veneration of religious images.

ANSWER: **iconoclasm**

[10m] A monk from Damascus with this name wrote three *Apologetic Treatises against those Decrying the Holy Images*. The commission that created the *Corpus Juris Civilis* was led by a Cappadocian prefect with this first name.

ANSWER: **John** [or **John** Damascene or **John** of Damascus or **John** the Cappadocian]

[10h] Iconoclasm was first implemented at a meeting of the *silention* in this building’s Hall of the Nineteen Couches. The Fifth and Sixth Ecumenical (“eh·kyoo·meh·nuh·kl”) Councils were held in this building’s Trullo Hall.

ANSWER: **Great Palace** of Constantinople [or **Sacred Palace**]

16. A rich nobleman in this story who likes Baudelaire (“bohd-LAIR”) and Wagner (“VAGH-ner”) holds the rank of marquis, an allusion to the Marquis de Sade (“sahd”). For 10 points each:

[10h] Name this story whose unnamed female seventeen-year-old protagonist befriends a blind piano tuner out of loneliness after moving into a castle.

ANSWER: “The **Bloody Chamber**”

[10m] This British author added overt elements of violence and sexuality to fairy tales in her collection *The Bloody Chamber*.

ANSWER: Angela **Carter** [or Angela Olive **Pearce**; or Angela Olive **Stalker**]

[10e] A story in *The Bloody Chamber* ends after a woman has sex with a murderous hunter who turned into one of these animals. Several stories about sexuality and these animals in *The Bloody Chamber* are loosely based on “Little Red Riding Hood.”

ANSWER: **wolves** [or werew**wolves**; or “The Company of **Wolves**”]

17. A feast celebrating this event occurs on the 15th of August. For 10 points each:

[10m] Name this event in which the Virgin Mary fell asleep, died, and was taken bodily up to heaven. This is contrasted with the belief that Mary was taken up to heaven without dying, called the Assumption.

ANSWER: **Dormition** of the Virgin

[10e] This branch of Christianity celebrates the feast of the Dormition on August 15th, while Roman Catholic Churches celebrate the Assumption instead. This church is headed by the Patriarch of Constantinople.

ANSWER: Eastern **Orthodox** Church [or wordforms such as Eastern **Orthodoxy**; accept **Orthodox** Catholic Church; accept Greek **Orthodox** Church]

[10h] A minor feast after Dormition celebrates the creation of an icon of Jesus with this unusual property, which is designated by the Greek word *acheiropoieteta* (“AY-kye-roh-poy-EEH-tuh”).

ANSWER: **not made by a person** [or equivalents such as made **without hand** or **without human intervention** or **miraculously**]

18. One theoretical model of these things is a cavity with radiation trapped inside at thermal equilibrium, with a small hole. For 10 points each:

[10e] Name these ideal objects, which absorb all incident electromagnetic radiation. The cosmic microwave background approximates the radiation from these objects.

ANSWER: **blackbody** [or **black bodies**]

[10m] The irradiance of a blackbody is proportional to this power of temperature, according to a law named for Josef Stefan and Ludwig Boltzmann.

ANSWER: **four** [or **fourth** power]

[10h] One realization of the cavity-with-a-hole blackbody is these devices. In indirect drive inertial confinement fusion, a cylindrical one of these devices is hit with lasers, and then irradiates a pellet with X-rays.

ANSWER: **hohlraum** (“hole-rao’m”)

19. Answer the following about the artistic mecca that is College Park, Maryland, for 10 points each.

[10m] The University of Maryland’s David C. Driskell center is currently hosting an exhibit on these types of works by Faith Ringgold. Ringgold is known for the “story” type of these works, like *Who’s Afraid of Aunt Jemima?*

ANSWER: **quilts**

[10h] Another work of art that makes the University of Maryland campus more liveable is Karel Appel’s *Elephant*. Along with artists like Asger Jorn (“ASS-ghar YORN”), Appel belonged to this postwar art movement favoring childlike forms.

ANSWER: **CoBrA** (stands for “Copenhagen Brussels Amsterdam”)

[10e] Another sculpture on the UMD campus, Andrew Edwards’s depiction of Frederick Douglass, was inspired by this Renaissance artist’s horned sculpture of Moses for the tomb of Julius II.

ANSWER: **Michelangelo** Buonarroti [or **Michelangelo** di Lodovico Buonarroti Simoni; accept Michelangelo **Buonarroti**]

20. Laws named for these things granted a wide swathe of civil servants the power to “endorse out,” which expelled a target from a given area through a signature-based process subject to no control or appeals. For 10 points each:

[10m] Identify these things which a namesake 1952 legislative act required all adults from certain targeted groups to carry, which contained identification information and employer evaluations.

ANSWER: **passes** [or **Pass** Laws Act or **dompas**]

[10h] Also in 1952, Albert Luthuli led this first large-scale action of the ANC. Hundreds were charged with “statutory communism” as a result of this movement consisting of deliberate use of “Europeans only” facilities.

ANSWER: **Defiance Campaign** (Against Unjust Laws)

[10e] Protests against the pass laws led to the Sharpeville massacre, after which this first President of post-Apartheid South Africa founded the armed wing of the ANC, Umkhonto we Sizwe (“oom-con-toe way seize-way”).

ANSWER: Nelson Rolihlahla **Mandela**