Spring Undergraduate Novice 2020

“Neo-Tournament Arrives from the Future”

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Packet 7

Tossups:

1. **One woman with a straw hat in this painting leans on a diagonal rail while staring at a man and the left side of this painting. Another woman, the future wife of the artist, on the left side of this painting has a flower in her hat and appears holding a dog in her arms. This painting shows its artist's patron Gustave (\*)** Caillebotte (**"kai"-bot**) in the lower right in a straw hat and a sleeveless shirt. The people depicted in this painting enjoy wine and food underneath a red and white awning while at the Maison Fournaise (**for-nezz**) restaurant. For 10 points, identify this Pierre-August Renoir painting which shows a group eating a meal next to the Seine.
ANSWER: ***Luncheon of the Boating Party***[or***Le déjeuner des canotier***] <Bunker, Visual Arts>

2.**The SS *Ypiranga*** (“**ee-peh-ranguh**”)  **was detained to prevent the flow of weapons to this conflict. An urban battle during this larger conflict started after a revolt in which Bernardo Reyes was released from prison. This conflict was slated to start at 6pm on November 20 according to the plan of San Luis Potosi. A prominent fighter in this conflict was killed in an (\*)** ambush led by Jesus Guarjardo after falsely believing the man planned on defecting. This conflict started with the overthrow of the dictator Porforio Diaz by Francisco Madero. General John Pershing led a punitive expedition to capture a fighter in this conflict following a border attack. For 10 points, Emiliano Zapata and Pancho Villa fought in what Latin American armed conflict during the 1910s?
ANSWER: **Mexican Revolution** [or **Mexican Civil War**; accept **Ten Tragic Days** until “ambush” is read]
<Maharjan, World History>

3. **In this language's namesake proto-language, consonants became voiceless fricatives instead of voiced fricatives depending on stress, following Verner's Law. When this language's family diverged from Proto-Indo-European, voiceless stops became fricatives and voiced stops became voiceless. It's not Dutch, but dialects of this language are separated by the Speyer and Benrath Lines. (\*)** Grimm's Law describes sound changes in this language's namesake family. "High" and "low" dialects of this language are distinguished by speakers who say "appel" instead of "apfel" (**app-FELL**). Back vowels, such as /ɑ/ (**ah**), /o/ (**oh**), or /u/ (**oo**), are fronted when the next syllable contains the sound /i/ (**ee**) in this language's umlaut. For 10 points, name this language whose dialects include High Prussian and Bavarian.
ANSWER: **German** [accept **Germanic** or Proto-**Germanic** or of course **Deutsch**; accept specific dialects such as **Hochdeutsch** or **Swiss German** or **Bavarian** until mention] <Fleisig, Other Social Science>

4. **A theorem named after this property says that if *f* is continuously differentiable on some open set and the Jacobian is non zero at some point, then the function has this property in a neighborhood of the point. The notion of the "preimage" weakens a version of this property for all the elements in subset *S*. Every element in a (\*)** group possesses this property by the group axioms. A matrix possesses this property if its determinant is nonzero. This mathematical property means that there exists an element which can generate the identity element for the given operation. For 10 points, identify this property which, under multiplication, guarantees there exists a reciprocal element for nonzero numbers.
ANSWER: **invertibility** [accept logical equivalents such as "has an **inverse**", **additive inverse**, **multiplicative inverse**; accept **inverse function theorem**] <Bunker, Mathematics>

5. **After a sexual encounter in this play, one character states that "it would be an atrocious injustice to judge us by that action alone." During a vision of a different character, another character in this play exclaims "if only you would go away and leave us alone … alone, in those shadows!" Earlier, a character in this play is told that she would break the "neat little framework" of the title group. Another character in this play wishes to be called "Amalia" but is referred to as "the** **(\*)** Mother." This play begins with a group of actors rehearsing *Mixing It Up* and ends with The Child drowning in a fountain and The Boy shooting himself with a revolver. For 10 points, name this absurdist play about the title group by Luigi Pirandello.
ANSWER: ***Six Characters in Search of an Author***[or***Sei personaggi in cerca d'autore***] <Grossman, European Literature>

6. **Small-scale and distortion-free measurement of this quantity can be done using field mills. In a semiconductor, this quantity induces a drift current. A restatement of Ohm's law sets current density equal to conductivity times this quantity. This quantity is always perpendicular to (\*)** equipotential lines. The existence of this quantity causes the splitting of spectral lines in the Stark effect. This quantity times perpendicular area times cosine-theta equals the enclosed charge divided by vacuum permittivity in Gauss' Law. This quantity is shown by the arrows extending from positive charges to negative charges. For 10 points, name this vector quantity denoted *E* that exerts forces on charged particles.
ANSWER: **electric field** [accept **E field** until mentioned] <Maharjan, Physics>

7. **The sword of the Icelandic hero Hromundr Gripsson is named for this thing, which is cut with a golden sickle rather than a regular knife by Druids according to *The* *Golden Bough*. A Celtic ritual involving the sacrifice of two white bulls saw this thing being made into an elixir to cure poison or infertility. This thing was spared from swearing an oath not to harm the son of (\*)** Frigg. Loki tricks the blind godHoder into killing Balder with a spear or arrow made from this plant. Associating it with peace and love, the Romans would hang this plant during Saturnalia, a tradition that carried over into a similar holiday. For 10 points, name this plant hung during Christmas celebrations, under which it is traditional to kiss.
ANSWER: **mistletoe** [accept **Mistilteinn**, prompt on oak with "what plant that grows on oak?"] <Maharjan, Mythology>

8. **As an actor, this person made a brief appearance in Sergei Bondarchuk's *Waterloo* as King Louis XVIII and as Cesare Borgia in the *Prince of Foxes*. In one of this director's unfinished films, released in 2018, an aging director attempts to revive his career but is killed in a car accident. In this director's first feature film, he frequently used low angle shots and deep focus, including when the young protagonist plays outside on his (\*)** sled. This director rose to prominence through his Broadway adaptations of Shakespeare as part of the Federal Theater Project. For 10 points, name this director who played the title character who says "rosebud" before he dies in *Citizen Kane*.
ANSWER: (George) Orson **Welles** <James, Other Visual>

9. **During this century, the Merchants of the Staple were granted exclusive rights to trade wool in Calais by the English Crown. During this century, Florentine artisans rebelled against the guild oligopoly on textiles in the Ciompi Revolt. Forces loyal to Richard II killed the rebel leader Wat Tyler during this century. The longbow became the dominant weapon in European warfare following its prominent use at the Battle of (\*)** Crecy during this century. Massive losses of the agrarian labor force sparked popular uprising in this century like the Jacquerie and the English Peasants' Revolt. A third of Europe's population died from the Black Death in, for 10 points, what century that also saw the beginning of the Hundred Years War?
ANSWER: **14th** Century [or the **1300s**] <Harvey, European History>

10. **Writers Elizabeth Pomada and Michael Larsen coined the term "Painted ladies" to refer to a series of Victorian houses that sit near this non-Texas city's Alamo Square. The second highest point in this city is a pair of hills known as "Eureka" and "Noe," which are collectively referred to as “Twin Peaks.” This city's Russian Hill neighborhood is home to Lombard Street, which has earned the nickname of "the (\*)** crookedest street in the world" due to its eight sharp turns. This city's Chinatown is home to the City Lights Bookstore, which was founded by Lawrence Ferlinghetti and served as a spiritual center for the Beat Generation literary movement. For 10 points, name this Northern California city that is linked to Marin County by the Golden Gate Bridge.
ANSWER: **San Francisco** <Grossman, Geography>

11. **The synoptic gospels report that Jesus visited the home of the woman of Bethany and was annointed after the event honored on this holiday. This holiday honors an event in which Jesus uses the Golden Gate after descending from the Mount of Olives. The day before this holiday honors the raising of Lazarus. Traditional hymns sung on this date borrow from Matthew 21 and repeat "Hosannah in the highest." Products from pussy willows or (\*)** yews are used to make this holiday’s most notable items in colder climates. In traditional liturgy, this day is the first day of Holy Week, and the central objects are traditionally burned to make the ash for a Wednesday event that falls three days later. For 10 points, name this Sunday before Easter, in which people often wave the title green fronds to honor Jesus's entry into Jerusalem.
ANSWER: **Palm Sunday** [accept **Passion Sunday**] <Kirksey, Religion>

12. **One species of these organisms undergoes leftward transcription to express red and gam proteins that assist in recombination. That species uses the gene regulatory elements of cro, cI, and cII, to determine its reproductive state. Seymour Benzer's gene-mapping studies of a type of these organism's rII (R-2) system illustrate that point mutations contribute to genetic variation. Giorgi Eliava helped pioneer their use as an alternative to (\*)** antibiotics in the Soviet Union with their namesake "therapy." These organisms' DNA and proteins were tagged with radioactive phosphorus and sulfur respectively in the Hershey-Chase Experiment. These organisms’ T4 species only undergo the lytic cycle. For 10 points, name these viruses that infect bacteria.
ANSWER: **bacteriophage**s [accept **phage**s; accept **lambda phage** or **T4 phage**; prompt on "viruses"] <Puppala, Biology>

13. **In this city, Georgia Gilmore founded the "Club from Nowhere" to provide meals for protesters. While living in this city, attorney Clifford Durr sponsored his housekeeper's attending of the Highlander Folk School to receive training in workers' rights. E.D. Nixon co-founded this city's namesake “Improvement Association.” Plaintiffs like the teenager Claudette Colvin and other residents of this city were represented in the court case (\*)** *Browder v. Gayle*. The pastor at the Dexter Avenue Baptist Church in this city, Martin Luther King Jr., led a citywide campaign after a NAACP secretary was arrested in 1955 for civil disobedience. The arrest of Rosa Parks for refusing to give up a seat on a bus sparked a boycott in—for 10 points—what Alabama city?
ANSWER: **Montgomery** [accept **Montgomery Improvement Association**] <Zhou/Cheyne, American History>

14. **Anne Sexton tells a person of this type that "this year's jinx rides us apart" in her poem "All My Pretty Ones." A person of this type makes "banked fires blaze" in the "blueblack cold" in the poem "Those Winter Sundays." In one poem, the speaker "hung on like death" to a person of this type who "beat time" on his head "With a palm caked hard by dirt." "The black telephone's off at the root / The voices just can't worm through" in a poem titled after a person of this type with a (\*)** "stake in [his] fat black heart." For 10 points, name this family member who waltzes with whiskey on his breath in a Theodore Roethke poem and is told, "you bastard, I'm through" in a Sylvia Plath poem addressed to a "man in black with a Meinkampf look."
ANSWER: the poet's **father** [accept "**Daddy**" or "My **Papa**'s Waltz"; accept clear equivalents] <Zhou, American Literature>

15. **This language's term for "subtler art" names a Mannerism-era musical style. Five choirs of eight voices each are used in a choral work in this language by Thomas Tallis. This language's term for "fixed song" describes melodies such as "the armed man", which was itself used by Josquin des Prez (zhos-kan day pray) for two works in this language. The most famous work by Hildegard of Bingen is a (\*)** morality play written in this language. An apocryphal story about how Palestrina "saved" polyphony involves a work that sets text in this language, the *Pope Marcellus Mass*. For 10 points, name this language used in Roman Catholic services in the Renaissance, which was also used to write pieces titled *Spem in alium and Ordo virtutum*.
ANSWER: **Latin** <Sims, Music>

16. **UCSD professor Alex Gelber and others have studied an earnings test associated with this program. Alan Greenspan led a 1983 National Commission on this program which led to a series of reform amendments. Chris Christie argued that this program should not apply to people who make more than $200,000 a year. Accused of trying to "privatize" this program, George. W (\*)** Bush suggested that people should be able to invest their payroll taxes. Some CBO projections show that this program's trust fund will be exhausted by the 2030s. The benefit growth associated with this government program is a COLA based on the Bureau of Labor Statistics' CPI-W. For 10 points, name this New Deal-era program where eligible retirees and disabled people receive money from the US government.
ANSWER: **Social Security** [accept more specific answers like **Social Security and Supplemental Security Income** or **Old-Age, Survivors, and Disability Insurance** or the **Social Security Administration**; prompt on SSI or OASDI]
<Bunker, Current Events>

17. **A man in this short story stops to smell some lavender, leading its protagonist to assert, "It's all the fault... of these absurd class distinctions." The mother of this story's protagonist orders a surprising amount of canna lilies and asks the protagonist to help supervise the placement of a marquee. Jose ("Josie") asserts that a carter who hit the back of his head after being (\*)** thrown from his horse must have been drunk, after Godber's man delivers cream puffs and tells her that Scott was killed. This story's protagonist delivers a basket to Scott's widow and repeats the phrase "Isn't life—?". For 10 points, name this story, in which Laura Sheridan's family hosts the title event, written by Katherine Mansfield.
ANSWER: "The **Garden Party**" <Fleisig, World Literature>

18. **The workup of one reaction of this type using Pyridinium dichromate involves the addition of diethyl ether and then organic phases are filtered through a pad of Celite or Silica. That reagent used in a reaction of this type is the Sarret reagent which contains Chromium VI (six) just like another reagent principally involved in this type of reaction. A variation of this type of reaction reacts aldehydes to form ketones and then hydrocarbons in the presence of a zinc catalyst. Ammonia undergoes a reaction of this type to synthesize (\*)** nitric acid. In a Galvanic cell, this reaction occurs at the anode. Adding chromium to steel will prevent it from undergoing this process. For 10 points, name this type of reaction defined as a loss of electrons which is often contrasted with reduction.
ANSWER: **oxidation** [accept **Jones oxidation**; prompt on "redox"] <Madoerin, Chemistry>

19. **During this conflict, a local friar fired a cannon by himself for hours to fool opposing reinforcements that the Battle of Blore Heath was still ongoing. A major power-broker during this conflict gained his wealth by marrying Anne Beauchamp and later died during a battle fought in thick fog against an army supplemented with soldiers from Burgundy. The Battle of Towton paused widespread hostilities in this conflict after the Act of Accord was rejected by Margaret of (\*)** Anjou. Edward IV ordered the death of his predecessor Henry VI during this war, which ended when Richard III was killed at Bosworth Field. For 10 points, name this English civil war between the Houses of Lancaster and York, named for the houses' similar floral emblems.
ANSWER: **War**s **of the Roses** <Knecht, Other History>

20. **While describing his occupation, one character in this play says "we keep to our usual stuff, more or less, only inside out." A character in this play is threatened with a knife while being told that his depictions of death are inaccurate after leaping out of a barrel. That character in this play leads a group of Tragedians who board a ship headed for England with the main characters following a production of *The (\*)*** *Murder of Gonzago*. This play opens with the title characters repeatedly flipping a coin and receiving heads 92 consecutive times and this play ends with two ambassadors making the title declaration. For 10 points, name this absurdist Tom Stoppard play about two minor characters from *Hamlet*.
ANSWER: ***Rosencrantz and Guildenstern*** *Are Dead* <Grossman, British Literature>

Bonuses:

1. William Styron's memoir about his struggle with depression, *Darkness Visible*, takes its title a line by this poet. For 10 points each:
[10] Name this English poet who asks to "justifie the wayes of God to men" near the beginning of an epic poem. In that poem, demons hold a debate in Pandæmonium.
ANSWER: John **Milton**
[10] John Milton is best known for this epic poem focusing on Adam, Eve, and Satan. He followed it up with the much less-widely read *Paradise Regained*.
ANSWER: ***Paradise Lost***
[10] The oft-quoted first line of Milton's sonnet "On His Blindness" ends with these three words. The line begins "When I consider how my" followed by these four words.
ANSWER: When I consider how **my light is spent** <Harvey, British Literature>

2. This dispute gets its name from the ceremony in which the symbolic ring and staff is presented to newly "elected" bishops and abbots. For 10 points each:
[10] Name this 11th century controversy that arose between the Catholic Church and secular rulers over selections of high-ranking clergy member
ANSWER: **Investiture** Controversy
[10] The investiture controversy began in earnest when this pope forbade the practice of investment in 1075. This led to Emperor Henry IV to declare the deposition of this pope, which in turn led to Henry's excommunication.
ANSWER: Pope **Gregory VII**
[10] Before his deposition, Henry IV ruled this large central European empire that encompassed modern day Germany, Northern Italy and Burgundy.
ANSWER: **Holy Roman** Empire <Harvey, European History>

3. This effect moves the Flettner rotors through the use of spinning cylinders which propels rotor ships. For 10 points each:
[10] Name this effect that causes the path of a spinning ball in the air to become deflected in unintended ways.
ANSWER: **Magnus** effect [or **Magnus** force]
[10] Flettner rotors can also be attached to aircraft as an alternative to traditional engines for generating this force. This force opposes gravity to allow a plane to fly.
ANSWER: **lift**
[10] The Magnus effect can be understood as simply an application of this basic law. When air deflects off a spinning object, this law states that a perpendicular reaction force must be created which then alters the path of the object.
ANSWER: **Newton's third law** of motion <Maharjan, Physics>

4. The final section of this work argues that by embracing determinism, we can achieve a tranquil oneness with God which is the best way to live a happy life. For 10 points each:
[10] Identify this 17th century philosophical treatise originally written in Latin. This work attempts to justify ideas of God and reality using only definitions, axioms and the resulting propositions.
ANSWER: ***Ethics****, Demonstrated in Geometrical Order*
[10] *Ethics* is the most well-known work of this Dutch philosopher of Jewish ancestry.
ANSWER: Baruch **Spinoza** [or Benedict de **Spinoza**]
[10] Spinoza differentiates between substances, attributes and these objects early in *Ethics*. According to him, these objects are particular states of substance (i.e. God) and include objects such as boats, quizbowlers. To Descartes, this term referred to unchanging features of a substance.
ANSWER: **modes** [accept specific instances such as **modes of extension** or **modes of thought**] <Bunker, Philosophy>

5. Though he may not have been Javanese, Jayavarman II subjugated many kingdoms to this larger state and declared himself chakravartin. For 10 points each:
[10] Name this Southeast Asian empire also known as the Angkor Empire which grew out of the Funan and Chenla kingdoms.
ANSWER: **Khmer** Empire
[10] The capital city of the former Khmer Empire is located in this modern-day country which was the site of the murderous regime of Pol Pot.
ANSWER: Kingdom of **Cambodia**
[10] This Thai empire took Angkor in 1431 which marked the demise of the Khmer. In the early history of this empire, the Houses of U-Thong and Suphanburi struggled for control until the reign of King Intharacha.
ANSWER: **Ayutthaya** Empire <Bunker, World History>

6. Players of this sport include Michael Pemulis, Ortho "The Darkness" Stice, and John "No Relation" Wayne.For 10 points each:
[10] Name this sport that, in one novel, is taught at the Enfield Academy run by Charles Tavis and Avril and James Incandenza.
ANSWER: **tennis**
[10] The Enfield Tennis Academy, as well as the neighboring Ennet Drug and Alcohol Recovery House, plays a central role in this encyclopedic novel by David Foster Wallace that takes its title from *Hamlet*.
ANSWER: ***Infinite Jest***
[10] David Foster Wallace described his high school tennis career in his essay "derivative sport in Tornado Alley," which is set in this state. Upton Sinclair set his novel *The Jungle* among the immigrant meat packers in this Midwestern state's largest city.
ANSWER: **Illinois** <Grossman, American Literature>

7. One model of trade assumes that there are only relative abundances of these two resources between two countries. For 10 points each:
[10] Identify these two common macroeconomic stock variables which are typically the inputs, along with an aggregate productivity level, into an aggregate Cobb-Douglass production function.
ANSWER: **labor** and **capital** [accept “**N** and **K**” or “**L** and **K**” in either order obviously]
[10] This model of international trade, developed by two economists at Stockholm, assumes that endowments of capital and labor determine the terms of trade. The rich country is assumed to be capital rich in this model and imports labor from the poorer country.
ANSWER: **Heckscher-Ohlin** model [accept **H-O** model]
[10] The Heckscher-Ohlin model builds off this principle of David Ricardo which argues that a country will produce a good for which they can produce at a lower relative cost.
ANSWER: **comparative advantage** <Bunker, Economics>

8. For 10 points each, answer the following about all the fun ways a volcano can brutally murder you.
[10] This fast-moving current of hot gas and matter can reach speeds of up to 430 miles per hour and temperatures up to 1,830 degrees Fahrenheit. This combination of gas and volcanic matter will destroy you before you even know what hit you.
ANSWER: **pyroclastic flow** [prompt on partial answers]
[10] When lava from a volcano reaches the sea, it can cause the chlorine in the salt and hydrogen in the water to react and form a haze of this strong acid with formula HCl. This acid will then eat away your lungs and skin if exposed to it.
ANSWER: **hydrochloric** acid
[10] If the poison gas and hot wall of death haven't gotten to you yet, maybe you'll get shot by these jets of fragmented material.
ANSWER: **tephra** [accept **tephra** jet, accept **pyroclasts**, which is the name for airborne **tephra**; prompt on “ejections”]

<Maharjan, Earth Science>

9. John Hollander and Anthony Hecht invented the challenging-to-write verse form that uses two of these poetic feet per line. For 10 points each:
[10] Name this foot that consists of a stressed syllable followed by two unstressed syllables. The words poetry, basketball and Washington are all examples of this foot.
ANSWER: **dactyl**s [accept double **dactyl**]
[10] This Roman poet recommended using dactylic hexameter, and indeed used it himself in writing his *Ars poetica*. He his also known for his odes, one of which coined the term *carpe diem*.
ANSWER: **Horace** [accept Quintus **Horatius** Flaccus]
[10] This American poet took Horace's advice and used dactylic hexameter in his epic poem *Evangeline*. He also wrote *The Song of Hiawatha*.
ANSWER: Henry Wadsworth **Longfellow** <Harvey, World/Other Literature>

10. For 10 points each, answer the following about famous political cartoons from the 19th century.
[10] A Thomas Nast cartoon satirizing the idea of a third term for Ulysses Grant led to this animal becoming the symbol of the Republican Party, in contrast to the Democrats' donkey.
ANSWER: **elephant**
[10] This Republican presidential candidate in 1884 was depicted in a cartoon as a "tattooed man," marred with numerous scandals. The Mugwumps refused to support this man, a former Secretary of State, in the 1884 election.
ANSWER: James Gillespie **Blaine**
[10] A frequently reprinted 1889 cartoon by Joseph Keppler for *Puck* magazine depicts business trusts as obese, ominous money bags looming over this specific group of people at work.
ANSWER: the **Senate** [or **senators**; prompt on Congress] <Cheyne, American History>

11. In one part of this process, Coenzyme Q or ubiquinone obtains electrons from FADH2 which then passes through the electron transport chain. For 10 points each:
[10] Name this cellular process in which the oxidation of acetyl-CoA leads to several molecules such as succinate and finally oxaloacetate.
ANSWER: **Krebs** citric acid cycle [accept just citric acid cycle or **tricarboxylic acid cycle** or **TCA** cycle]
[10] In this related metabolic pathway, oxaloacetate is reduced to malate which is then oxidized to make more oxaloacetate and NAD. This pathway, mainly found in the liver and kidneys in humans, is primarily mediated by glucagon.
ANSWER: **gluconeogenesis** [prompt on GNG]
[10] Both the Krebs cycle and gluconeogenesis occur in this organelle whose inner membrane folds are known as cristae.
ANSWER: **mitochondria** <Bunker, Biology>

12. This novella's second part, "Apropos of the Wet Snow", begins with the narrator going to great lengths to exact revenge on an officer who once bumped into him with an expensive overcoat to demonstrate his social status. For 10 points each:
[10] Name this novella about a nameless narrator who lives in a "dark cellar" in St. Petersburg. It ends with a note from the author stating "it seems that we may stop here."
ANSWER: ***Notes from Underground*** [or **Zapiski iz Podpolya**; accept synonyms and translations including **Notes from the Underground** and **Letters from the Underground**]
[10] *Notes from the Underground* is a novella by this Russian author of *The Brothers Karamazov* and *Crime and Punishment*.
ANSWER: Fyodor Mikhailovich **Dostoyevsky**
[10] In *The Brothers Karamazov*, this character listens to his brother Ivan tell the parable of the Grand Inquisitor. This novice monk is identified as the hero of the novel by the narrator at its outset.
ANSWER: **Alyosha** Karamazov [or **Alexei** Karamazov; or A. Karamazov; prompt on **Karamazov**]
<Grossman, European Literature>

13. These texts began appearing in the Gupta Empire period and offer ways to hasten the process of enlightenment such as through union with a deity. For 10 points each:
[10] Name these Hindu and Buddhist meaning literally “looms” or “weavings.” These texts advocate taboo practices such as drinking alcohol and performing sexual rituals as ways to reach Nirvana.
ANSWER: **tantras** [accept **tantric** texts]
[10] The Tantras consider these things to be sacred formulas typically related to a deity. The simplest one of these sounds or words is "Om" which is sacred in various esoteric Buddhist traditions.
ANSWER: **mantra**s
[10] The Buddhist Tantras also use this practice that employs breathing techniques and postures to balance the body and the mind. Its hatha form is popular in western culture as an exercise and relaxation method.
ANSWER: **yoga** [accept hatha **yoga**] <Thomas, Religion>

14. This reaction is used in industry to synthesize cyclopentadiene, which can be used as a precursor to polymer synthesis. For 10 points each:
[10] Identify this doubly-eponymous 4 + 2 cycloaddition in which a conjugated diene reacts with a dienophile. The products of this organic reaction can be predicted under certain conditions by the endo rule.
ANSWER: **Diels-Alder** reaction
[10] A diene displays two of these bonds which also appear in alkenes. These bonds are made of one sigma bond and one pi bond.
ANSWER: **double bond** [accept specific examples such as a **Carbon-Carbon double bond**]
[10] Alkenes, including dienes, are primarily produced through this process in which building block molecules are assembled into larger ones. The chain growth form of this process enables the assembly of molecules such as polyethylene and Polyvinyl chloride or PVC.
ANSWER: **polymerization** [accept specific types of **polymerization** such as chain-growth **polymerization** or step growth **polymerization**] <Madoerin, Chemistry>

15. This dancer had his debut opposite Fanny Elssler in a 1841 production of *The Devil on Two Sticks* at the Paris Opera before moving to the country he is more associated with. For 10 points each:
[10] Name this ballet master who choreographed over sixty full-length works for the Russian Imperial Ballet. This frequent collaborator with Lev Ivanov gave Anna Pavlova her first role as prima ballerina.
ANSWER: Marius **Petipa**
[10] Arguably Petipa and Ivanov's greatest success as choreographers was for a revival of *Swan Lake*, whose music was written by this Russian composer.
ANSWER: Pyotr Ilyich **Tchaikovsky**
[10] *Swan Lake's* Act I ballroom scene features an iconic "classique" type of this dance featuring the Black Swan. This three-word French term describes any ballet dances for two performers, usually a man and a woman.
ANSWER: ***pas de deux*** (**pah de deh**) <Harvey, Other Visual>

16. These writings were called “inscriptions of the dharma” by their creator. For 10 points each:

[10] Name these writings, often inscribed on either pillars or rocks, and whose instances were accompanied by the planting of banyan trees and mango groves.

ANSWER: **edict**s of **Ashoka** [prompt on edicts]

[10] Another notable ancient inscription is found in Behistun and was authored by Darius the Great, a ruler of this empire based in modern-day Iran.

ANSWER: **Persia**n Empire [accept **Achaemenid** Empire]

[10] Royal names inscribed in this script were usually enclosed by an oval-shaped cartouche. This script was the originator of varieties called hieratic and demotic, and was a distant ancestor of Phoenician.

ANSWER: Egyptian **hieroglyphic**s <Sims, Other History>

17. While running from his wife's monstrous form in this location, Izanami is able to escape after throwing peaches at her. For 10 points each:
[10] Izanami ventures into what general realm to retrieve his deceased wife, only for the plan to turn sour when he breaks his promise not to look at her horrible form. This realm is known as Yomi in Japanese myth.
ANSWER: **underworld** [accept answers related to the **land of the dead**; accept the **afterlife**]
[10] This Japanese folk hero emerged from a peach and was adopted by a childless elderly couple. He is later accompanied by a dog, monkey, and pheasant on his quest to defeat a band of oni ravaging his lands.
ANSWER: **Momotaro**
[10] In Chinese mythology, the Jade Emperor and his wife hosted feasts where peaches that grant this attribute were served. Sun Wukong was the protector of those peaches that granted this attribute.
ANSWER: **immortality** [accept Peaches of **Immortality**, accept answers related to **extending** one's **life**; accept **eternal** life or health]
 <Maharjan, Mythology>

18. On *The Orville*, Moclan freedom fighter Heveena calls this artist "the voice of our revolution" after hearing a song in which this artist pours herself "a cup of ambition." For 10 points each:
[10] Name this singer who wrote the working-class anthem "9 to 5" for a film of the same name in which her character overthrows her sexist boss and institutes equal pay, free childcare, and other radical reforms in the office.
ANSWER: Dolly **Parton**
[10] In 2019, Netflix premiered this 8 episode series adapting the stories behind Parton's songs. The first episode stars Julianne Hough in the title role of "Jolene."
ANSWER: *Dolly Parton's* ***Heartstrings***
[10] Parton wrote "Jolene" and this other song on the same night. She declined Elvis Presley's offer to cover this song that Whitney Houston turned into a megahit in 1992.
ANSWER: "**I Will Always Love You**" <Zhou, Trash>

19. This artist is known for his multiple portraits of Adele Bloch-Bauer and his use of gold leaf. For 10 points each:
[10] Name this painter of *The Kiss*.
ANSWER: Gustav **Klimt**
[10] This 7 foot tall work by Klimt includes depictions of gorgons, the giant Typhoeus, and a knight. In November 2004, it was minted as the motif on a collector's coin in Klimt's home country.
ANSWER: ***Beethoven Frieze***
[10] Klimt, along with other artists such as Egon Schiele, were part of the "Secession" movement titled for this city, the capital of his home country.
ANSWER: **Vienna** [accept equivalents like **Viennese Secession**] <Grossman, Visual Arts>

20. "Extended techniques" are unusual ways to perform an instrument. For 10 points each:
[10] This keyboard instrument was frequently "prepared" in John Cage's music, where he would call for people to place objects inside of this instrument to affect the timbre of its hammers hitting its strings.
ANSWER: **piano**forte
[10] Wind instrumentalists can use this technique that requires breathing in through their nose while playing to produce an unusually long tone. It is necessary for performing the didgeridoo.
ANSWER: **circular breathing**
[10] This composer names a technique also called "snap pizzicato," where string instrumentalists pull the string up far enough while plucking that the string makes a snapping sound.
ANSWER: Béla **Bártok** <Dees, Music>