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Tossups

1. This man was killed by a man who had eaten a stew of snake venom and wolf flesh. In another story, this man's future wife resolves not to marry after she dreams of a falcon being killed by two eagles; that wife is a princess of Burgundy who is murdered by Hildebrand. This man tested the sharpness of his sword by cutting a tuft of wool in the river, and cut the chain mail off of a (*) sleeping woman, a daughter of Budli who was cursed by Odin after turning a battle for Agnar. This man tries to obtain the Otter's Gold, which was involved in a strange form of taxidermy when the Aesir used it to stuff Otr's skin. That treasure is guarded by a figure who owns the cursed ring Andvaranaut, and whose blood allows this man to understand the language of birds. For 10 points, name this wielder of Gram and slayer of Fafnir, the hero of the *Völsunga Saga* and the *Nibelungenlied* (nee-buh-LUNG-en-leed).

ANSWER: Sigurd or Siegfried

2. This man was inspired by Vasily Kandinsky to champion his theory that in which lines and shapes represent the "vibrations of the soul." He put together the Seven Americans Exhibit, which showcased the work of Paul Strand and Marsden Hartley at the Anderson Galleries. This artist created the photograph *The Dancing Trees* while at his summer home at Lake George. His series (*) *Equivalents* are shots of the sky and depict various clouds. Smoke surrounds the bodies of horses in this artist's photograph *The Terminal*, which is one of the first examples of "straight photography." This photographer founded the journal *Camera Work* and also created a series of photos depicting his wife's hands. For 10 points, name this modernist photographer who showed the lower class section of a boat going to Germany in *The Steerage*, the onetime husband of Georgia O'Keefe.

ANSWER: Alfred Stieglitz

3. A collection of pieces for this instrument is the third set in a series that also includes six keyboard partitas, the *Italian Concerto*, and the *French Overture*. The chorale prelude is a musical genre for this instrument. A G minor piece for this instrument is nicknamed "little" to contrast it with a piece whose opening Great Fantasia is in the same key. A C minor piece for this instrument closes with a double fugue whose first subject is simply the bass line of the piece's opening (*) passacaglia (PASS-uh-KAG-lee-uh). J.S. Bach walked over two hundred miles on foot to attend an Abendmusik concert for this instrument played by Dietrich Buxtehude (BUCKS-tuh-ood). One of Bach's pieces for this instrument has a two-part title that suggests that its virtuosic first section is followed by its contrapuntal second section. For 10 points, name this instrument which plays the *Toccata and Fugue in D minor*.

ANSWER: organ [or pipe organ]

4. While imprisoned in Pendennis Castle, this man wrote his government urging the kind treatment of prisoners and was the subject of an impromptu fundraiser at Cork. John Leacock dramatized one incident featuring this man who exchanged a series of letters with Beverly Robinson and founded the Onion River Land Company. Earlier, he led a gathering at Hand's Cove and later negotiated with Frederick Haldimand over potential (*) independence for a republic headed by Thomas Chittenden. He defended deist ideas in *Reason, the Only Oracle of Man* and led a group that met at the Catamount Tavern. This man participated with Benedict Arnold in the capture of Fort Ticonderoga. For 10 points, identify this hero of the American Revolution who led the Green Mountain Boys in what would become Vermont.

ANSWER: Ethan Allen

5. A method of doing this was proposed by Gaudi and Loeb using relativistic beaming. An equation governing one method of performing this action is derived by considering four contact points, and in that method the square of the ratio of radii is equal to the decrease in flux. The ZIMPOL/CHEOPS mission uses a polarimetric (POLE-uh-ruh-MET-rick) method of performing this action. One method for performing this action relies on the changing from redshift to blueshift and the objects in question move toward and away from the detector; that is the (*) radial velocity method. Another method of doing this relies on finding a periodic decrease in the light from a star and is called the transit method; that method is used by the Kepler satellite. For 10 points, name this action in which objects orbiting stars that aren't the sun are found.

ANSWER: detecting exoplanets [accept anything equivalent to finding extrasolar planets]

6. During this period, a man whose supposed name literally means "lustful misdeed" underwent a fake castration to enter the royal women's court, but went on to father two children with the emperor's mother. One politician active during this dynasty avoided expulsion by telling the emperor about "the sultry girls of Zhao." Jia Yi wrote an

“Essay on the Transgressions” of this dynasty, blaming its demise on its lack of focus on education. A man whose political career began by noting how the rats in the barn were more well-fed than their counterparts was betrayed by the eunuch (*) Zhao Gao and executed; that politician was Li Si. A merchant who commissioned the *Springs and Autumns of Mr. Lu* during this dynasty was sent a sword by its founding emperor, who notably searched for an elixir of immortality, conducted the “burning of the books and burying of the scholars,” and built a terracotta army. For 10 points, name this dynasty which embraced Legalism and oversaw Chinese unification under Shi Huangdi.

ANSWER: Qin Dynasty [pronounced “chin”; do NOT accept “Qing”; ask them to spell it if you have to]

7. This man is the second namesake of an effect in which a matter wave is diffracted by a standing wave of light; he names that effect with Kapitsa. An equation named for this man predicts that a free particle undergoes a trembling motion of frequency $2mc^2/\hbar$; that equation, when applied to a spherical potential, predicts a slight energy difference between the 2S one-half and 2P one-half orbitals called the (*) Lamb shift. One equation named for this physicist is commonly solved using a set of five anti-commutating gamma matrices; that equation is used to describe the wavefunction of massive spin-one-half particles. For 10 points, name this British physicist who names a relativistic generalization of the Schrodinger equation that predicted the existence of antimatter.

ANSWER: Paul Adrien Maurice Dirac

8. In one work by this author, Mildred Kent runs into Mr. Johnson, after which he gives her and Arthur Adams money to go to Coney Island; his wife spent her day accusing a woman of shoplifting and trying to get a bus driver fired. In another work by this author, chips of wood are abandoned in favor of pieces of paper and members of a town mispronounce the name “Delacroix.” This author wrote a novel whose protagonist feeds Richard Plantagenet (plan-TAH-jun-ette) and uses long things to remind herself to be kind to Uncle Julian, and in which it is revealed that (*) Merricat, not Constance, killed the Blackwoods. This author of “One Ordinary Day, With Peanuts” and *We Have Always Lived in the Castle* is perhaps best known for a work which describes the events of June 27, when Davy Hutchinson helps stone his mother Tessie to death. For 10 points, name this author of “The Lottery.”

ANSWER: Shirley Jackson [or Shirley Hardie Jackson]

9. A woman in a work by this author refuses to take a murder plot seriously because she sees the gun as a phallic metaphor. It’s not by Dostoyevsky, but a man in *that* work by *this* author takes on the pseudonym Raskolnikov, and attempts to prove his worth to Louis and Olga by killing a former member of the Illyrian parliament. Another work by this author features a character who claims that she has only dreamt of murder for the past 15 years; that work ends with that character’s brother telling the story of the Pied Piper after accepting responsibility for the crimes of his people. This author of (*) *Dirty Hands* and *The Flies* also wrote a novel in which a man who loved Anny and makes love to Francoise finds his life overcome by a “sweetish sickness.” For 10 points, name this Frenchman who wrote about Antoine Roquentin in *Nausea* and declared that “Hell is other people” in *No Exit*.

ANSWER: Jean-Paul Sartre [or Jean-Paul Charles Aymard Sartre]

10. In one episode in this work, its author compares the trustworthiness of government officials with that of the captain of a ship heading to Algiers. The sixteenth chapter of this work, “Of Conquest,” explains why a conqueror can be justified in taking prisoner an opposing leader. This work posits that all humans own themselves and that they take items from the “common store” by mixing their labor to acquire an apple. This work, which follows a similar text attacking the monarchist (*) Robert Filmer, proposes that a “state of war” can arise from disputes in the state of nature, and argues that government exists to protect the rights of the people. For 10 points, name this treatise of political theory which claims that people have natural rights of life, liberty, and property and was written by John Locke.

ANSWER: Second Treatise of Government [accept Locke’s Second Treatise; prompt on Two Treatises of Government]

11. A reagent containing six atoms of this element attached to a propyl group is named for Ishikawa, and this element is also present in the ligands of the N-M-R shift reagent EuFOD. This element is added to organic compounds in the Simons (SIGH-mons) process or using the Olah reagent. A functional group containing this element is the leaving group in sarin, and one isotope of it is attached to the two position in glucose in the reagent used for (*) PET scans. Three atoms of this element are present in a reagent used to cleave the t-Boc protecting group in solid phase peptide synthesis. Its 19 isotope is NMR active. A strong derivative of acetic acid has the methyl group bonded to three atoms of it, due to its inductive effect. This is the heavier element in a binary compound used to etch glass. For 10 points, name this element, the most electronegative on the periodic table.

ANSWER: fluorine [accept fluoride or F]

12. This man claimed to have found his calling while at a meeting led by Mordecai Ham after hearing the hymn “Just as I am,” which he used to title his autobiography. This man and John Stott were the founders of an

organization that created an ecumenical confession called the Lausanne Covenant. He hosted a radio show called “Hour of Decision.” This man attracted some controversy for stating that Jews had a “stranglehold” on the media during a meeting with (*) Richard Nixon, and he had previously urged Truman to counter communism in North Korea and asked Eisenhower to send troops to Arkansas during the Little Rock Nine incident. This man once paid Martin Luther King’s bail and refused to preach in front of segregated crowds. For 10 points, name this influential televangelist who led revivals called crusades.

ANSWER: William Franklin “Billy” Graham Jr.

13. The largest island in this country is known for its ridge-backed hunting dogs, and roasted pigs are presented to The Temple of Lady Xu at Sam Mountain in this country. One people who inhabit this country are legendarily descended from the 100 eggs formed by the union of a fairy and a dragon while the Hat Then long poems are features of its Tay minority group. The Degar people of its (*) Central Highlands along the southern part of the Annamite Range were christened Montagnards by French colonizers while prominent karst islands make up the rugged Ha Long Bay. The Red River drains the north of this country while its South contains an array of rice paddies as part of the delta of the Mekong. For 10 points, identify this most populous country of Indochina that is bordered by the Gulf of Tonkin and has capital at Hanoi.

ANSWER: Vietnam

14. This piece is preceded by one in which a woman’s “entente” leads to the change in ownership of a frying pan. A character in this story relates a story in which a river is reduced in size due to the death of a horse and a story in which Cambyzes (cam-BYE-seez) shoots one of his knight’s sons to prove that he still had excellent aim while drunk. This story takes place in the district of Holderness, and the solution to a problem in this work involves a cartwheel with a certain number of spokes. In the prologue to this story, a group of (*) clergymen fly out of Satan’s ass, fly around the room, and return into his ass. A character in this story points out that a farthing is not worth much when split into twelve, and is later forced to ask the squire how one splits a fart into twelve. The speaker of this story is disfigured with boils, wears a crown of oak leaves, and detests friars. For 10 points, name this story about Thomas, which follows the Friar’s Tale.

ANSWER: The Summoner’s Tale

15. Trajan built a 44-mile aqueduct leading into *this city* from the Apennines. Soon after becoming emperor, Augustus built a military harbor near this city, at Classe, to be the headquarters of his Adriatic fleet. He later ordered construction of the *Fossa Augusta* to connect *this city* with the Po River. A building found at this site contains a large triumphal arch depicting Gervasius (jer-VAY-see-us) and Protasius (pro-TAY-see-us). It became the seat of the (*) Byzantine governor of Italy in the sixth century, and its namesake Cosmography was written around 700. In 526, Ecclesius began construction of a church in this city, which contains several mosaic panels of Justinian and Theodora; that is the Basilica of San Vitale. Julius Caesar used this city as a base during his negotiations with the senate, and later gathered his troops here before crossing the Rubicon. For 10 points, name this Italian city, the capital of the Western Roman Empire from 402 to 476 A.D.

ANSWER: Ravenna

16. A cartoon by J. F. Griswold that appeared in the *New York Evening Sun* parodies this painting by using trapezoids and squares to represent the heads of people fighting in the underground subway. Currently at the Philadelphia Museum of Art, this painting was rejected from the 1912 Salon des Independants, since Albert Gleizes and Jean Metzinger felt that its title subject should be shown reclining. This painting was inspired by the photography of Etienne-Jules Marey, who himself inspired (*) Eadward Muybridge to make a work that depicts this work’s title action. *American Art News* offered a ten dollar reward to the first reader who could actually point out the title figure of this painting. The Armory Show exhibited this painting, which Julian Street said depicted an “explosion in a shingle factory.” For 10 points, name this painting of a naked woman by Marcel Duchamp.

ANSWER: Nude Descending a Staircase No. 2 [or Nu descendant un escalier no. 2]

17. This compound binds to a receptor in the endoplasmic reticulum called ETR1, which then allows EIN2 to be cleaved and move into the nucleus. In the biosynthesis of this compound, Met Adenosyltransferase converts methionine to SAM, which is then converted to ACC. The biosynthesis of this compound is referred to as the Yang cycle. The activity of the enzyme regulating ACC conversion increases with high levels of (*) IAA and cytokinins. One notable response to this compound is the thickening of the hypocotyl in seedlings, known as the triple response. This hormone is the reason that one bad apple can spoil the whole bunch. For 10 points, name this gaseous hormone in plants that regulates leaf abscission and fruit ripening.

ANSWER: ethylene [or ethene]

18. One leader of a group in this event was arrested by ambassador Ludwig Lebzelter. It didn't happen in France, but while attempting to defuse a tense situation during this event, a man known as his country's Murat was murdered by an assistant to the editor of *The Polar Star*. The wives of the members of this movement were recognized by law as widows and allowed to remarry. The Union of Salvation was joined by many of those who would later take part in this event, including a (*) Freemason who was hanged for his role in the event after he legendarily had his troops strap him to his horse in a last ditch effort. One part of this event is known as the Chernigov Regiment revolt, and its defeat saw commissioned officers taken prisoner and sent to the Peter and Paul Fortress. For 10 points, identify this 1825 Russian soldier uprising with a namesake month, that was suppressed by Nicholas I.
ANSWER: **Decembrist** revolt [or **Decembrist** uprising]

19. One use of this concept is exhibited in the "Sword of Dardanos" subsection of the Mithras Liturgy, or *PGM IV*. The *PGM* are centered on the use of this concept in a manner similar to its use in *defixiones*. Since this concept is treated as personal property by one group, it is usually transmitted matrilineally or purchased from specialists. For that group, it was analyzed in terms of coefficients of weirdness and coefficients of intelligibility, in that group it serves a pragmatic function as a "verbal act," as outlined in a study of this in coral (*) gardens among the Trobriand Islanders by Malinowski. One work categorized it into contagious and sympathetic varieties, and stated that humans progress from it to religion to science; that work is James Frazier's *The Golden Bough*. For 10 points, name this concept that Evans-Pritchard studied in the Azande along with witchcraft and oracles.
ANSWER: **magic** [accept **spells**, **magic words**, **magic potions**, etc]

20. A character created by this author meets a "television-handed ghostess" and is turned into a cow after being separated from his brother by slavers. The theft of some buried money by Osanyin leads to several of this author's characters later suffering from "inherited poverty." A character created by this man marries a woman who gives birth to an insatiable child from her thumb; later, that child is left with Drum, Dance, and Song. Taban Lo Liyong defended this author's (*) "ungrammatical" style in his most famous book, where the narrator meets such characters as the swindler "Give and Take," the bodiless skull "the Complete Gentleman," and Death, who tries to kill him in a bed made of bones. This author of *My Life in the Bush of Ghosts* wrote about an alcoholic's quest to bring his tapster back from Deads' Town. For 10 points, name this Nigerian writer of *The Palm-Wine Drinkard*.
ANSWER: Amos **Tutuola**

Bonuses

1. This molecule can bind to platelet GPIIb surface proteins to form bridges. For 10 points each:
[10] Name this molecule that thrombin converts this molecule into fibrin, which is crosslinked by factor XIII during coagulation.
ANSWER: **fibrinogen**
[10] Deficiency of Factor VIII causes the "A" form of this clotting disorder. Common symptoms of this disorder include bleeding into joints.
ANSWER: **hemophilia**
[10] Von Willebrand factor shares this domain on its C-terminal end with platelet-derived growth factor and transforming growth factor. It contains three disulfide bonds in a rotaxane arrangement.
ANSWER: **cysteine knot**

2. Intermediate intensity examples of these sometimes form waterspouts. For 10 points each:
[10] Name these tropical storms with central eyes that share a definition with typhoons and hurricanes, determined by geographical area.
ANSWER: **cyclone**
[10] Storms become intense tropical cyclones when they reach Category 3 on this five-category hurricane wind scale.
ANSWER: **Saffir-Simpson** scale
[10] This asymmetric type of cyclone resides at a high altitude within the troposphere, its strength growing with height. It is named for its inner air temperature.
ANSWER: **cold-core** low [or **upper level low** or **cold-core** cyclone]

3. Name the following short stories by Jorge Luis Borges, for 10 points each.
[10] The narrator of this 1944 story meets a boy who, following a horse-riding accident, gains the ability to perfectly recall everything he experiences or perceives.
ANSWER: "**Funes the Memorioso**" [or "**Funes el memorioso**"]

[10] This story from *The Garden of Forking Paths* depicts a universe consisting entirely of hexagonal rooms filled with bookshelves containing every possible combination of the letters of the alphabet and basic punctuation.

ANSWER: "The Library of Babel" [or "El Biblioteca del Babel"]

[10] Borges used a quote from Hamlet to title this Lovecraft-inspired story, whose narrator discovers that Max Preetorius, who has bought and strangely modified his dead uncle's house, appears to be a monstrous alien.

ANSWER: "There Are More Things" [or "Hay más cosas"]

4. Answer the following about hospitality in classical mythology, for 10 points each:

[10] Iobates was prevented from killing Bellerophon due to the Greek code of hospitality; Iobates tried to get around it by sending him to kill this monster, which had a goat head, lion body, and snake tail.

ANSWER: Chimera

[10] This couple was approached by Zeus and Hermes in disguise and was rewarded for their hospitality. Upon their death, they were transformed into trees.

ANSWER: Baucis and Philemon

[10] In the *Iliad*, Tros does this to Achilles to invoke *xenia*, the Greek concept of guest-hospitality; Achilles kills him anyway. Although it's not kissing his hands, Priam later does this to Achilles with greater success.

ANSWER: touches his knees [accept reasonable equivalents]

5. This piece was designed for the Decorative Arts Museum, which was never built. For 10 points each:

[10] Name this sculpture, whose top includes *The Three Graces*. Other sculptures that are part of this group include *Ugolino and His Children*.

ANSWER: The Gates of Hell [or La Porte de l'Enfer]

[10] *The Gates of Hell* is by this French sculptor, who sculpted a group of men being lead to their deaths in *The Burghers of Calais*.

ANSWER: Auguste Rodin

[10] The top right hand pilaster of *The Gates of Hell* features this sculpture by Rodin, in which a man grasps a crouched woman in midair. Its name comes from a satirical reading of a Baudelaire poem,

ANSWER: I am Beautiful [or Je suis belle]

6. The central characters of this book ingest LSD in an attempt to enter a state of "intersubjectivity." For 10 points each:

[10] Name this 1968 "nonfiction novel", an early example of New Journalism, that chronicles the cross-country travels of a group who inhabit a psychedelically-painted school bus called "Further".

ANSWER: *The* Electric Kool-Aid Acid Test

[10] Tom Wolfe's *The Electric Kool-Aid Acid Test* is about the adventures of the Merry Pranksters, a group led by this Oregonian author of *Sometimes A Great Notion* and *One Flew Over the Cuckoo's Nest*.

ANSWER: Ken Kesey [or Kenneth Elton Kesey]

[10] This inmate is the central character of *One Flew Over the Cuckoo's Nest*. After he is lobotomized by Nurse Ratched, he is suffocated by the narrator Chief Bromden at the end of the novel.

ANSWER: Randall "R.P." McMurphy [accept any underlined portion or Mac]

7. Show that you're cuckoo for Rococo Puffs by answering these questions about Rococo, for 10 points each:

[10] A Rococo painting named for this island depicts men and women pairing up on a shore near a golden boat manned by cherubs flying away. There is some debate over whether the figures in the painting are leaving or entering this place.

ANSWER: Cythera

[10] This creator of *The Embarkation for Cythera* invented the genre of fetes galantes and painted *The Shop Sign at Gersaint*.

ANSWER: Jean-Antoine Watteau

[10] The Rococo artist André Le Nôtre, who worked at the Palace of Versailles, is known for his work in this art form. In England, the greatest practitioner of this art form is probably Lancelot "Capability" Brown.

ANSWER: landscape architecture; or park design or garden design; do not accept or prompt on "architecture;" prompt on "landscaping"]

8. The majority of this composer's twenty-three motets employ the isorhythmic technique developed by his contemporary, Philippe de Vitry. For 10 points each:

[10] Name this 14th-century Ars Nova composer whose *Messe de Nostre Dame* is the first complete polyphonic setting of the Mass Ordinary by a single composer.

ANSWER: Guillaume de Machaut

[10] This form of medieval polyphony arose late in the first millennium as simple two-part note-against-note singing in perfect fifths.

ANSWER: organum [or organa]

[10] In early organum, the upper voice, or *vox principalis*, was simply one of these monophonic melodies named for a pope.

ANSWER: Gregorian chant

9. This self-described "advocate of unpopular causes" served as a director of the League for Industrial Democracy. For 10 points each:

[10] Identify this Presbyterian Minister, a six-time candidate for President on the Socialist Party ticket.

ANSWER: Norman Thomas

[10] Thomas grew up selling newspapers for the Marion Daily Star, which was owned by this later president from Ohio and run by his wife, Florence, who survived his unexpected 1923 death.

ANSWER: Warren G. Harding

[10] Thomas opposed the Vietnam War in a debate with this conservative host on the first episode of *The Firing Line* in 1966.

ANSWER: William F. Buckley

10. Hilda Gadea wrote about the leadup to this event in her memoir *My Life with Che*. For 10 points each:

[10] Following this event, Gadea learned that Che Guevara had moved on from her to Aleida March, while Che had helped create Radio Rebelde to aid the 26th of July movement in this struggle and led his forces to victory at Santa Clara.

ANSWER: Cuban Revolution [DON'T READ THIS OUT LOUD but accept answers about overthrowing Batista or Castro coming to power]

[10] This vessel, which former Cuban President Prío Socarrás helped buy, was used by Che and the Castros to covertly travel to Cuba in 1956. This yacht is currently on display at the Museum of the Revolution in Havana.

ANSWER: Granma

[10] An aim of the Cuban Revolution was to overthrow this military dictator, who came to power after the ouster of Socarrás and received support from both the American government and mafia.

ANSWER: Fulgencio Batista

11. This poet advised Franz Xaver Kappus to "ask yourself in the most silent hour of your night: must I write?" in the first of a series of missives published by Kappus three years after his death. For 10 points each:

[10] Name this German author of *Letters to a Young Poet*, whose poem "Archaic Torso of Apollo" ends with the exhortation "You must change your life."

ANSWER: Rainer Maria Rilke

[10] This collection by Rilke, completed in the same year as his *Sonnets to Orpheus*, is dedicated to Princess Marie von Thurn und Taxis. Its first poem reads "Who, if I cried out, would hear me among the angelic orders?"

ANSWER: *The* Duino Elegies [or *Die* Duineser Elegien]

[10] Rilke's only major venture into prose resulted in a novel about this fictional Danish poet, who laments his own loneliness and lack of productivity while hanging out in Paris.

ANSWER: Malte Laurids Brigge [accept either underlined portion; accept *The Notebooks of* Malte Laurids Brigge]

12. One song by this artist includes the lyrics "Let's have a toast for the douche bags." For 10 points each:

[10] Name this artist who includes the tracks "Runaway," "Who Will Survive in America," and "Devil in a New Dress" in his fifth studio album, *My Beautiful Dark Twisted Fantasy*.

ANSWER: Kanye West

[10] *My Beautiful Dark Twisted Fantasy* includes this song, whose music video was criticized for its sexual glorification of apparently dead women. Its lines include "Have you ever had sex with a pharaoh?"

ANSWER: Monster

[10] *Monster* features a show stealing rap by Nicki Minaj, which includes this four-word phrase that follows "you could be the king, but..." and is followed by "OK first things first, I'll eat your brains."

ANSWER: "watch the queen conquer"

13. Laser flash analysis is used to measure a diffusivity parameter relevant to this phenomenon. For 10 points each:

[10] Name this phenomenon in which heat is transferred by collisions between particles. It is often contrasted with convection and radiation

ANSWER: heat or thermal conduction

[10] This law states that the heat flux density is equal to the negative conductivity times the gradient of the temperature. It is a reduction of the heat equation.

ANSWER: **Fourier**'s law of heat conduction

[10] This formula describes fundamental solutions to the heat equation in which the fixed boundary of the space in question has some constant temperature and a heat source is added at time t equals zero.

ANSWER: **heat kernel**

14. In his *Contributions to Philosophy*, this philosopher claimed that "making itself intelligible is suicide for philosophy."

For 10 points each:

[10] Name this German existentialist who argued that Western philosophy had hitherto misunderstood the nature of "being" in his unfinished *Being and Time*.

ANSWER: Martin **Heidegger**

[10] In this work, originally delivered as the lecture series "Insight Into What Is," Heidegger compared a hydroelectric dam with Holderlin's poetry to argue that the title concept is a "challenging forth" rather than a "bringing forth."

ANSWER: *The **Question Concerning Technology*** [or ***Die Frage nach der Technik***]

[10] The German words for "there" and "to be" name this philosophical concept, which Heidegger uses to denote the "entity which each of us himself is."

ANSWER: **Dasein**

15. Jules Michelet's history of France was the first work defining this time period, which the "continuity thesis" asserts is a myth. For 10 points each:

[10] Name this cultural movement beginning in Italy based on humanist ideals, during which great advances were made in the arts, sciences, and other fields. Its name literally means "rebirth".

ANSWER: **Renaissance**

[10] This Swiss historian wrote the important 1860 work *Civilization of the Renaissance in Italy*.

ANSWER: Jacob **Burckhardt**

[10] Burckhardt's ideas were adopted by scholars working in the history of this field, including Kenneth Clark. Erwin Panofsky also wrote about the history of this thing.

ANSWER: **art** [accept more specific answers]

16. In a famous passage, this character claims that having "seen the face of God / and tasted the eternal joys of Heaven", he is forever "tormented with ten thousand hells / in being deprived of everlasting bliss." For 10 points each:

[10] Identify this character who first appears after another character creates a magic circle and delivers an incantation that revokes his baptism.

ANSWER: **Mephistophilis**

[10] Mephistophilis helps the title character of this Christopher Marlowe play sign his soul over to Lucifer in exchange for 24 years of life with Mephistopheles as his servant.

ANSWER: **Doctor Faustus** [or *The Tragical History of **Doctor Faustus***]

[10] After suggesting that Helen of Troy's face "launch'd a thousand ships" and "burnt the topless towers of Ilium," Faustus begs her to do this to him "with a kiss."

ANSWER: "**make me immortal** with a kiss"

17. These compounds react with alcohols in the Fischer esterification. For 10 points each:

[10] Upon full oxidation with potassium permanganate a primary alcohol results in the formation of this functional group. This functional group is usually written COOH.

ANSWER: **carboxylic acid** or **carboxylate**

[10] This reagent, a solution of chromium trioxide in sulfuric acid and acetone, is commonly used for the oxidation of primary and secondary alcohols.

ANSWER: **Jones** reagent

[10] This reagent, an alternative to Tollen's and Brady's reagents, is used to distinguish between different carbonyl groups. It turns bright magenta upon detection of aldehydes, and remains colorless in the presence of ketones.

ANSWER: **Schiff** reagent

18. This model claims that suspension of convertibility is not the best way to prevent a bank run. For 10 points;

[10] Name this mathematical model which shows how banks' mixture of liquid and illiquid assets can lead to runs among depositors. It describes banking as a situation with more than one Nash equilibrium.

ANSWER: the **Diamond-Dybvig** model

[10] This practice refers to banks holding currency reserves that are less than their total deposit liabilities. It allows the bank to act as a lender while providing its creditors with some immediate liquidity.

ANSWER: **fractional-reserve** banking

[10] Central banks often encourage banks to retain a certain proportion of their liabilities in reserves by manipulating this value. The Fed has been keeping this value low to encourage spending over saving.

ANSWER: **interest rates**

19. This man spent several months in a cave near the town of Manresa. For 10 points each:

[10] Name this Superior General, best known for a set of meditations divided into four weeks, called the *Spiritual Exercises*.

ANSWER: **Ignatius of Loyola** [prompt on partial answer]

[10] Ignatius of Loyola was the first leader of this religious order. Francis was the first member of this order to become pope, and this order sent several missions to Asia in the 1500s and 1600s.

ANSWER: **Jesuits** or **Society of Jesus**

[10] This Jesuit is responsible for creating a world map called the “Impossible Black Tulip.” He had a pretty accommodationist policy towards Chinese cultural practices during his missionary work.

ANSWER: Matteo **Ricci**

20. Answer the following about the rulers of pre-Norman England, for 10 points each.

[10] With name meaning “wise elf,” this ruler fought against Ivar the Boneless, won a major victory at the Battle of Edington against Guthrum the Old and issued the Doom Book. He gained his epithet from defeating the Vikings.

ANSWER: **Alfred the Great**

[10] Alfred the Great ruled over this Anglo-Saxon kingdom with capital at Winchester was first ruled by Cerdic, and it was symbolized by the wyvern, a two-legged dragon.

ANSWER: **Wessex**

[10] The son of Alfred the Great was this “King of the Anglo-Saxons,” who conquered other Anglo-Saxon kingdoms like Mercia and East Anglia and feuded with Northumbria, leading to the Battle of Tettenhall.

ANSWER: **Edward the Elder**