VCU Open '15 - Packet 13

Questions by Cody Voight, Will Nediger, Evan Adams, Kenji Golimlim, and Matt Bollinger

1. A paper by Suk and Tamargo argues that hidden anatomical images were created as part of this process. The speaker of a poem written about this process complains that he has grown a goiter, like a cat living around the stagnant waters of Lombardy. This process was temporarily arrested by the growth of mold, until one of the **people involved with it developed a moisture-resistant (*)** plaster. Twenty nude males, known as the *ignudi*, were created as part of this process. This process was aided by a specially created scaffold, but contrary to popular belief, it was done standing up, not lying supine. It was done at the behest of Julius II. For 10 points, name this process, in which Michelangelo created scenes like *The Creation of Adam* for a building in the Vatican.

ANSWER: Michelangelo painting the Sistine Chapel ceiling

2. This man allowed photographer Frank Hurley to dive underwater to rescue his negatives, including depictions of a spot called "The Ritz" where his men dined. One of his best advisers was his appointed dog-handler Tom Crean, who took a bigger role in the expedition after this man ordered all the dogs killed. During his most famous expedition, this man's captain trekked 32 miles across South (*) Georgia in 36 hours with his captain Frank Worsley, who did most of the work covering this man's mistakes. On that expedition, his crew had to camp out on a moving ice floe for a year after their ship was frozen into it. For 10 points, name this Antarctic explorer who salvaged the 1914 Endurance expedition.

ANSWER: Ernest Shackleton

- 3. This character, who curses and later ties up the goatherd Melanthius, is the only character apostrophized by the narrator of the poem in which he appears. This man was originally a prince from the island of Syria, before his seduced Phoenician nurse sold him to pirates. A guest at this man's house tests him by claiming to be a Cretan son of Castor, which this man disbelieves, and offering to leave in the morning, which this man forbids. This character explains that an animal lying on a (*) manure heap is the dog Argos, who dies after seeing the beggar this man is hosting. This character weeps while presenting his master's bow to the suitors, but happily assists his master in killing them. For 10 points, name this Ithacan swineherd who stays loyal to Odysseus in the Odyssey. ANSWER: Eumaeus
- 4. The protagonist of this play has an affair with a woman who calls penises "weenies" and thinks that war exists because the world is run by men with small penises. This play ends with the two main characters symbolically switching roles and one of them committing seppuku in prison while the other stands over him smoking a cigarette. The protagonist of this play has a wife named Helga in France, and is (*) transferred back there by Monsieur Toulon because his predictions about the Vietnam War are wrong. In this play, Song Liling is a man who disguises himself as a woman to get state secrets from the diplomat René Gallimard, who is charmed by Song's performance of a Puccini opera. For 10 points, name this Tony-winning play by David Henry Hwang. ANSWER: M. Butterfly

5. In the Drude model, the reflectivity of metals drops sharply slightly above this value, which is what allows thin-film TCOs to be window layers. On the right-hand side of the Bohm-Gross relation, the ratio of specific heats times electron thermal velocity times wave number is added to the square of this quantity. For electrons, its square is equal to electron number density times fundamental charge squared, over epsilon-nought times electron mass. A metal's plasmon energy is equal to (*) h-bar times this value. It characterizes the response of a plasma to small departures from charge neutrality and sets an upper bound on the wavelength of electromagnetic radiation that can pass through a plasma. For 10 points, name this value that is the rate at which electrons oscillate in a plasma and which is symbolized by omega-sub-p.

ANSWER: electron plasma **frequency** [until it is read, accept: **omega**-sub-p]

- 6. Many soldiers who fled a battle known by this adjective carried bundles of grass to pave a marshy road. After beheading a magistrate in revenge for her son's execution, Mother Lü led a group described by this adjective.

 During a battle known by this adjective, one side feigned surrender but sent burning ships toward a fleet that was chained together. A group known by this adjective was defeated by Emperor (*) Guangwu and overthrew Wang Mang. Before taking power, the Hongwu Emperor led a sect of the White Lotus movement described by this adjective. A battle described by this adjective is a candidate for the largest naval battle in history and was a victory for Liu Bei and Sun Quan's united forces against Cao Cao. For 10 points, give this adjective that describes a "Guard" during the Cultural Revolution and a "Little" Book that contains Mao Zedong's quotations.

 ANSWER: red
- 7. This molecule, leucine, and phenylalanine constitute a popular chemotactic peptide. The fragment reaction tests for a radioactively labeled form of this molecule bound to puromycin, in order to determine peptidyl transferase activity. A C-A base pair at the top of the acceptor stem and three consecutive GC base pairs in the anticodon stem occur in tRNA that carry this molecule. A reaction that produces tetrahydrofolate creates this molecule after its precursor has been attached to tRNA. (*) EF-Tu does not recognize tRNA with this aminoacyl, preventing it from being delivered to the A site; instead, it's delivered to the P site by IF2. In prokaryotes, this molecule is corresponds to the AUG codon. For 10 points, name this modified amino acid that is used for the initiation of protein synthesis in prokaryotes.

ANSWER: **fMet** [or: N-formyl-methionine]

8. One ritual practiced by this tradition involved setting an elaborate banquet and clearing it away without eating a bite. Candidates for admission into this sect were required to observe five years of silence. An early adherent of this tradition was the slave Zalmoxis, who went on to become the chief god of the Getae. Its founder was known for miracles like predicting the number of fish to be caught in a net and appearing in two cities at the same time. Maxims such as "Eat not the heart" and "Do not stir fire with a sword" were known as "symbols" and were followed by this sect. Its members practiced vegetarianism because of their belief in (*) metempsychosis, or the transmigration of souls into other animals. Other attributes of this Croton-based tradition include communal property and a prohibition against eating beans. For 10 points, name this Ancient Greek sect which taught the mathematical nature of reality.

ANSWER: **Pythagorean**ism [or: answers that include **Pythagoras** and a word indicating a cult, sect or religion]

- 9. During a performance of a work of this type, the conductor Frederick Bridge mistimed it so that it ended too early, forcing the organist Walter Adcock to improvise. Another work of this type opens with stately violin arpeggios over string and woodwind chords, before a triumphant entrance by the choir accompanied by trumpets and drums. William Walton's setting of the *Te Deum* is this type of work. These works often set the text (*) *Laetatus sum*, or *I was glad*. A set of four of these works includes *My Heart Is Inditing* and *Let Thy Hand Be Strengthened*. The most famous of these works includes the line "And all the people rejoiced." For 10 points, name this type of work which includes Handel's *Zadok the Priest*, which was written for the coronation of George III. ANSWER: coronation anthems
- 10. In one work, this man is compared to one of the "four and twenty Blackbirds in a pye" who fails in his ambition to become the only blackbird in the pie. In that work, he is called "my Epic Renegade" and "representative of all the race." This man, who was the first person to write down the Goldilocks story, attacked the so-called "Satanic School" of poets in the preface to one of his poems. He wrote a poem in which (*) Old Kaspar weakly tries to justify the carnage of a battle by repeatedly calling it a "famous victory." This target of the preface to The Vision of Judgment was also the ironic dedicatee of Don Juan. Lord Byron hated, for 10 points, what Lake Poet who wrote "After Blenheim"?

ANSWER: Robert Southey

11. In a novel set in this city, Joseph Schwartz offers to give two tickets to New York to a refugee in exchange for listening to his story. In another novel, the classicist Raimund Gregorius travels to this city to investigate the life of a doctor from this city. Those novels are by Erich Maria Remarque and Pascal Mercier, respectively. In another novel, the proofreader (*) Raimundo Silva adds the word "not" to a book he is working on to rewrite the history of an event in this city. The protagonist of another novel is flogged and sees his teacher hanged in this city, which they reach after surviving a shipwreck only to immediately witness a disaster which kills thousands. For 10 points, José de Saramago wrote about "the history of the siege of" what city, also the site of a 1755 earthquake which inspired Voltaire's Candide?

ANSWER: Lisbon [or: Lisboa]

- 12. After the first few notes of the overture from *The Marriage* of Figaro are played on a musical lock in this place, a woman remarks "Rachmaninoff." A film depiction of this place includes geese that literally lay golden eggs, which replaced the squirrels sorting "good nuts" and "bad nuts" in the original version. A visitor of this place is obsessed with (*) TV shows, which ultimately causes him to shrink in size. Violet Beauregarde is taken to this place's Juicing Room. This place's owner sings "Come with me and you'll be in a world of pure imagination." A glass elevator flies out of this place, which employs orange-skinned dwarves called Oompa-Loompas. For 10 points, name this location that Charlie Bucket visits after finding a golden ticket in a candy bar package.

 ANSWER: Willy Wonka's chocolate factory
- 13. Tony Silva was convicted of smuggling several species of these animals from the Canary Islands. A type of this animal with the species name "notabilis" was suspected of attacking sheep farms on South Island. The kea and the flightless kakapo are species of this bird native to New Zealand. A population of these animals that descended from captivity now reside on San Francisco's (*) Telegraph Hill. Imports of these birds were regulated after a 1929 outbreak of psittacosis. The sisserou, a type of this bird, appears on the flag of Dominica. The budgerigar is a popular domesticated type of this bird. Other common types of this bird include macaws, cockatoos and roseringed parakeets. For 10 points, name these birds that can mimic human speech.

ANSWER: <u>parrot</u>s [until "psittacosis" is read, accept: <u>Psittacines</u>; until they are read, accept: specific types such as <u>parakeet</u>s or <u>macaw</u>s; prompt on: "<u>bird</u>s" or "<u>Aves</u>"]

14. This substance's complex formation patterns at minus fifteen Celsius can be understood by applying the Mullins-Sekerka instability. The growth of this substance in the presence of surface melting was modeled by the Lacmann, Stranski, and Kuroda. Temperature gradient metamorphism in this substance can cause it to be underlain by a depth hoar. Ukichiro Nakaya developed a namesake morphology diagram for this substance, with axes of ambient temperature and supersaturation, showing that it switches between (*) plate and columnar forms. Above the equilibrium line, this substance's accumulation outpaces its loss due to ablation. The movement of a cold air mass over warm water can create a lot of this substance due to the lake effect. For 10 points, name this form of precipitation created by deposition of water vapor in the atmosphere and which consists of flakes of crystalline ice.

ANSWER: **snow** crystals [or: **snow** flakes, **firn**, **névé**, **ice crystal**s; prompt on: "**crystal**s"]

15. Shortly before this battle, a previous failure at Gumbinnen and an ill-advised suggestion to retreat led to the dismissal of Maximilian von Prittwitz from his command post. In a repeat of the Battle of Mukden, Paul von Rennenkampf failed to assist the losing commander at this battle. This battle's name was coined by Max Hoffmann, who was responsible for the winning strategy of (*) encirclement during it. This battle was followed by a clash at the Masurian Lakes. Unencrypted radio signals enabled this battle's winning side to track the troop movements of Alexander Samsonov, who shot himself instead of reporting his casualties to Nicholas II. For 10 points, name this massive 1914 victory for Erich Ludendorff and Paul von Hindenburg at the site of the 1410 Battle of Grunwald.

ANSWER: Second Battle of **Tannenberg** [do not accept: "First Battle of Tannenberg" or "Battle of Grunwald"]

16. This author's writing on film includes an essay on the Keaton/Chaplin debate called "On First Looking into Chaplin's Humour" and a history of cinema in 100 film stills called *Flickers*. He wrote a novel about Matthew's encounter with some cinema-obsessed incestuous siblings during the events of May 1968. Bertolucci's movie *The Dreamers* is based on this man's novel *The Holy Innocents*. Evadne Mount is the hero of his three detective novels with Agatha Christie-inspired titles: *The Act of* (*) Roger Murgatroyd, A Mysterious Affair of Style, and And Then There Was No One. For 10 points, name this Scottish novelist who translated Georges Perec's La Disparition into English as A Void.

ANSWER: Gilbert Adair

17. This philosopher's theology was the basis for that of Michael Baius. One of his books contains a lengthy polemic against Marcus Terentius Varro's Antiquitates rerum divinarum. Cornelius Jansen's posthumously-published magnum opus was a treatise on this philosopher. The hypothesis that Matthew, not Mark, was the first Gospel written is named for him. He pioneered the argument that God created the world in an (*) instant, not in six days. He wrote a four-book work on how to teach the Scriptures called De doctrina christiana. He wrote of world history as a conflict between God and the Devil, and between the Earthly City and the title place, in a book written as a response to Alaric's sack of Rome. For 10 points, name this Christian philosopher who wrote The City of God and Confessions.

ANSWER: Saint Augustine of Hippo

18. Mitchell and Plotkin established the link between these things and existential types. John Guttag introduced the algebraic specification of these things. These things were proposed in an influential paper by Stephen Zilles and Barbara Liskov. These things can be considered as meeting the criteria of encapsulation and information hiding. Many data structures are realizations of them, the classic example being a (*) stack with the push and pop operations. These things consist of a set of values and a set of operations, sometimes called the "public interface", which are both independent of implementation. In many object-oriented languages, such as Java, they are implemented by using a class as a type. For 10 points, name these things that are the opposite of concrete data types.

ANSWER: **abstract** data types [or: **ADT**s]

19. This character worries that the flames will consume him if he is not granted his love in the aria "Ein Madchen oder Weibchen." This character ponders a hypothetical situation in which he trades for some sugar to give to the girl he loves best in the aria "Der Vogelfanger bin ich ja." In many stagings, this character finds increasingly ridiculous ways to stall after promising to hang himself after blowing the pan pipes three times. This character was originated by (*) Emanuel Schikaneder, the librettist for the opera he appears in. This character, whose trademark bells are depicted by a glockenspiel, lies about killing a serpent in his opening scene after entering dressed as a bird. For 10 points, name this baritone birdcatcher, a comic foil to Tamino in Wolfgang Mozart's *The Magic Flute*.

ANSWER: Papageno

20. Edmund Creffield claimed to have caused this event, an account accepted by the Oregon cult he led known as the "Holy Rollers." In As I Remember, Arnold Genthe described his recollection of this event and the famous photographs he took during it. The political boss Abe Ruef and his puppet mayor Eugene Schmitz were investigated for corruption and jailed in the year after this event. Many of the casualties of this event were caused by (*) Frederick Funston, whose controlled demolitions and orders to shoot looters on sight led to much collateral damage. In A Crack at the Edge of the World, Simon Winchester discusses the plans hatched during this event to move Chinatown to a less desirable part of the city where it occurred. For 10 points, name this 1906 disaster caused by the San Andreas fault.

ANSWER: 1906 San Francisco Earthquake

- 1. This president's advisors included Frances Perkins, who became the first woman appointed to the United States Cabinet. For 10 points each:
- [10] Name this president who attempted to expand the Supreme Court with his "court packing plan."

ANSWER: **F**ranklin Delano **Roosevelt** [or: **FDR**]

[10] This FDR advisor ran the Works Progress Administration. Before American entrance into World War II, he coordinated unofficial negotiations with Winston Churchill.

ANSWER: Harry Hopkins

[10] During World War II, Roosevelt offered to let this man replace Donald Nelson has head of the War Production Board. This member of the Brain Trust held a similar role with the War Industries Board during World War I.

ANSWER: Bernard Baruch

- 2. As a boy, this character's only friend is Ripton Thompson, with whom he sets a neighbor's haystacks on fire. For 10 points each:
- [10] Name this title character of an 1859 novel, who is raised by his father Sir Austin under a strict system of education, which forbids him from meeting girls his own age until he is married at the age of 25.

ANSWER: **Richard Feverel** [accept either name]

[10] The Ordeal of Richard Feverel is by this author of The Egoist, who wrote the poem which inspired Vaughan Williams' The Lark Ascending.

ANSWER: George Meredith

[10] Meredith was the model for Henry Wallis's painting of the death of this poet, who pretended to be a medieval poet named Thomas Rowley and committed suicide at the age of 17.

ANSWER: Thomas Chatterton

- 3. A god who took this form owned magic jewels he used to control the waves. For 10 points each:
- [10] Name this form taken by Ryujin, *kami* of the sea. In Christian legend, another of these creatures was killed by Saint George.

ANSWER: **dragon**s [prompt on: **snake**s]

[10] This god's son, Hoori, spent three years in Ryujin's palace with the princess Otohime. This *kami*, the ancestor of Japan's royal house, descended into Kyushu with a sword, mirror, and jewel from his grandmother Amaterasu.

ANSWER: Ninigi

[10] In another myth, a tortoise took this fisherman to Ryujin's palace as a reward for saving his life. This man died after looking into a magic box that Otohime forbade him from opening.

ANSWER: Urashima Taro

- 4. Name some female painters whose work can be found at the Detroit Institute of Arts, for 10 points each.
- [10] This wife of Diego Rivera is known for her self-portraits, including one with a thorn necklace.

ANSWER: Frida **Kahlo** de Rivera [or Magdalena Carmen Frieda **Kahlo** y Calderón]

[10] This painter was the foremost flower painter in the Netherlands of her time, except perhaps for Jan van Huysum. You can see her painting *Flowers in a Glass Vase* at the DIA.

ANSWER: Rachel Ruysch

[10] One of this painter's several depictions of Judith beheading Holofernes is at the DIA. Her first painting was of Susanna and the elders.

ANSWER: Artemisia Gentileschi

- 5. These fish used to be unique among the bony fish for their *rete mirabile* system of thermoregulation, until the 2015 discovery that the opah is fully endothermic. For 10 points each:
- [10] Name this group of bony fish that uses countercurrent exchange to keep it muscles warm, allowing them to forage in cooler waters.

ANSWER: **tuna** [or: **Thunnini**, any answer that has the required part of **tuna** in it]

[10] Many species of tuna are compelled by biology to live our their lives in fish social groups, which are known by this term when they feature periodic and coordinated motion. Herring is a well-known example of a fish that congregates in these fish social groups.

ANSWER: **school** [prompt on: **shoal**ing]

[10] The *Syngnathidae* family of bony fish, which includes the pipefish, is unique for this breeding strategy.

ANSWER: the **male gets pregnant** [or obvious equivalents of: the **male incubates the eggs**, the **male** gives **birth**, the

 \underline{male} fertilizes the egg, puts it in his brood pocket and then $\underline{explodes\ babies}$]

6. The 2015 installment of this event was held in Phoenix, Arizona. For 10 points each:

[10] Name this convention organized by readers and writers for The Daily Kos. Crowds booed Martin O'Malley after he said "Black lives matter, white lives matter, all lives matter" during a Q&A at this event.

ANSWER: Netroots Nation

[10] This prospective presidential candidate, currently a Senator from Vermont, was also present at Netroots Nation in Phoenix.

ANSWER: Bernie Sanders

[10] Sanders called for "real police reform" after this African-American woman hanged herself in her Texas jail cell. Witnesses state that her head was slammed into the ground during her arrest for a traffic violation.

ANSWER: Sandra **Bland**

7. Answer the following about differential equations, for 10 points each.

[10] A differential equation is of this type if it does not explicitly contain the independent variable. When the independent variable is time, this type of differential equation models a time-invariant system.

ANSWER: **autonomous** differential equation [or: **autonomous** system]

[10] Only one curve passes through any given point in this thing for autonomous systems. It's the set of all possible states of a differential equation.

ANSWER: **phase space** [or: **state space**]

[10] A maximal phase curve for an autonomous system either has no self-intersections, reduces to a single point, or is closed, in which case it is diffeomorphic to this shape, which is represented as S super 1 because it is a 1-sphere.

ANSWER: circle

8. This novel ends with a Latin phrase meaning "we possess naked names." For 10 points each:

[10] Name this Umberto Eco novel in which William of Baskerville and Adso of Melk investigate some mysterious deaths in a monastery.

ANSWER: The **Name of the Rose** [or: Il **nome della rosa**]

[10] In *The Name of the Rose*, the labyrinthine building called the Aedificium includes a room known by this two-word Latin name, which contains the library's forbidden books.

ANSWER: finis Africae

[10] This most recent novel by Eco is about Simone Simonini, whose exploits include spying on the Expedition of the Thousand and blowing up Ippolito Nievo's ship.

ANSWER: The **Prague Cemetery** [or: Il cimitero di Praga]

- 9. These were initially led by appointed "oikists," who lit their hearths with sacred fire taken from their "mother cities," or "metropoleis." For 10 points each:
- [10] Name these cities, including Emporiae in Spain, Cyrene in Libya, and Tarentum in Italy, with which Greek sailors dotted the Mediterranean coast during the Archaic Age.

ANSWER: Greek **colonies** [or: **apoikiai**; prompt on: "**trading centers**," other general answers]

[10] This Greek colony, home to the followers of Pythagoras, consolidated its power in southern Italy by razing its rival Sybaris. It was famous for its Olympic athletes, such as a wrestler who got fatally stuck in a tree.

ANSWER: Croton [or: Crotone]

[10] Flinders Petrie discovered this Greek *emporion* in Egypt, founded in the 7th century. It flourished as the only Greek outpost in Egypt until the arrival of Alexander the Great.

ANSWER: Naucratis

10. Carlo Grossi was the first person to use this musical term. For 10 points each:

[10] Identify this term for an informal or light musical piece, often for a small ensemble, which lends its name to Mozart's E-flat string trio.

ANSWER: divertimento [or: divertimenti]

[10] Malcolm Arnold's *Divertimento for Wind Trio* is written for flute, clarinet, and this woodwind. Orchestras typically tune to this double-reed instrument.

ANSWER: <u>oboe</u> [or: <u>hautbois</u>, <u>hoboy</u>, <u>French hoboy</u>]

[10] This note is the highest in Mozart's Oboe Quartet, as well as the highest note in two arias for the Queen of the Night: Der Hölle Rache kocht in meinem Herzen and O zittre nicht, mein lieber Sohn. The major key that starts with this note has one flat.

ANSWER: **F**

11. Using a "linked" version of this method, based on finding connected, irreducible graphs, allows one to find the perturbation energy up to an arbitrarily large order. For 10 points each:

[10] Name this method developed by Mayer and his colleagues, using the Mayer f-function, that is often applied to the partition function.

ANSWER: <u>cluster expansion</u> method [prompt on: "<u>cluster</u> methods"]

[10] A principle application of the cluster expansion is calculating higher-order examples of these coefficients. The right-hand side of their namesake equation of state is an infinite sum of these quantities over powers of molar volume.

ANSWER: virial coefficients

[10] The left-hand-side of the virial equation of state is actually this quantity, though it's often written out as pressure times molar volume over R T.

ANSWER: compressibility factor [or: compression factor, Z]

12. The traditional religion of these people included evil spirits called Ogbanje. For 10 points each:

[10] Name this people whose religion, sometimes called Odinani, involved worship of a high god named Chukwu. ANSWER: **Igbo**

[10] Another Nigerian ethnic group, the Hausa, primarily follows this religion. Mansa Musa I of Mali was an adherent of this faith.

ANSWER: Sunni Islam

[10] In 2012, Tawadros II succeeded Shenouda III as leader of a religion headquartered in this African country.

ANSWER: **Egypt**

13. The Manga de Clavo is an hacienda located in this city's metropolitan area. For 10 points each:

[10] Name this port city that was occupied by U.S. forces during the Tampico Affair. It was also where Santa Anna lost his leg during the Pastry War.

ANSWER: Veracruz

[10] During the Tampico Affair, the U.S. seized a German ship with this name full of munitions. This name is also given to Pedro I's 1822 speech, which ends "Independence or death!"

ANSWER: **Ipiranga** [or: **Ypiranga**]

[10] Veracruz was earlier used as a point of entry for French forces under this emperor. He was captured and executed by firing squad in 1867.

ANSWER: **Maximilian** I [or: Ferdinand **Maximilian** Joseph]

14. This poet wrote about pogrom victims in his epic poem *In the City of Slaughter*. For 10 points each:

[10] Name this compiler of The Book of Legends, who gives his name to a major Israeli literary award.

ANSWER: Hayim (Nahman) Bialik

[10] Another literary award from Israel is the Jerusalem Prize, which was won in 1977 by this poet of "Sunstone," who analyzed his home country of Mexico in *The Labyrinth of Solitude*.

ANSWER: Octavio Paz (Lozano)

[10] Another Jerusalem Prize winner, J. M. Coetzee, created this character, who writes a James Joyce adaptation called *The House on Eccles Street* in her namesake novel, and also appears in *The Lives of Animals* and *Slow Man*.

ANSWER: **Elizabeth Costello** [accept either name]

15. Name some musicians from New Jersey, for 10 points each.

[10] This dude nicknamed "The Boss" is backed by the E Street Band.

ANSWER: Bruce (Frederick Joseph) **Springsteen**

[10] This punk band referenced Springsteen with the line "Tramps like us, baby we were born to die!" on their Civil War-inspired album *The Monitor*, which quotes the Lyceum address and the first issue of *The Liberator*.

ANSWER: Titus Andronicus

[10] Glenn Danzig founded this punk band, whose albums include American Psycho and Famous Monsters. Their creatively-titled singles include "Land of the Dead," "Twilight of the Dead," and "Night of the Living Dead."

ANSWER: The Misfits

16. He wrote "statistic: the US bureau of missing persons re-ports that in 1978 over 100,000 people disappeared leaving no solid clues nor trace only a space in the lives of their friends" in his "Beware: Do Not Read This Poem." For 10 points each:

[10] Name this poet who wrote "I bedded down with Isis, Lady of the Boogaloo" in his "I Am a Cowboy in the Boat of Ra."

ANSWER: Ishmael Reed

[10] This Ishmael Reed novel concerns the struggle between the voodoo folk magician Papa LaBas and a conspiracy called the Wallflower Order.

ANSWER: Mumbo Jumbo

[10] This poet of "General William Booth Enters into Heaven" wrote "Mumbo-Jumbo will hoo-doo you" in his "The Congo."

ANSWER: Vachel Lindsay

17. An "Authorized Version" of this object was produced after the Hampton Court Conference. For 10 points each: [10] Name this text. A version of it was nicknamed "Wicked" after shocking readers with the misprinted sentence "Thou shalt commit adultery."

ANSWER: **bible**s [or: **K**ing **I**ames **V**ersion, other versions of the Bible]

[10] The opening of Gutenberg's printing press in this city was a boon for the production of books, especially Bibles, in the Western world.

ANSWER: Mainz [or: Mentz]

[10] The Codex Gigas, which contains the entire Vulgate Bible and is the largest medieval manuscript in the world, was nearly destroyed in a fire at this city's Royal Library. Tre Kronor Castle once stood where this city's Royal Palace now stands.

ANSWER: Stockholm

18. By the expansion postulate, a complete basis set is formed by the eigenfunctions of an operator that's linear and has this property. For 10 points each:

[10] Identify this type of operator that can be switched to the other side of an inner product when its conjugate is taken.

ANSWER: **Hermitian** operator [or: **self-adjoint** operator]

[10] The eigenvalues of Hermitian operators are guaranteed to have this property, meaning the number *i* does not appear. It's this property of their eigenvalues that allows Hermitian operators to represent observable quantities. ANSWER: they are **real**

[10] A theorem due to Marshall Stone puts Hermitian operators on a Hilbert space in one-to-one correspondence with groups of unitary operators that have this property. Thus, Hermitian operators are the generators of unitary groups described by this term.

ANSWER: strongly continuous [prompt on: continuous]

19. Answer the following about Tsai Ming-liang's film What Time Is It There?, for 10 points each.

[10] The protagonist of What Time Is It There? watches this Truffaut film about the exploits of the young Antoine Doinel. This film's star, Jean-Pierre Léaud, has a cameo in What Time Is It There?

ANSWER: The 400 Blows [or: Les Quatre Cents Coups]

[10] A poster for What Time Is It There? can be seen in the background in this director's film Century of Birthing. His obscenely long films include the 10-hour Evolution of a Filipino Family and the 7.5-hour Melancholia.

ANSWER: Lav <u>Diaz</u> [or: Lavrente Indico <u>Diaz</u>]

[10] At the very end, the protagonist's dead father appears to be resurrected and walks toward one of these objects. In *The Third Man*, Orson Welles delivers a famous monologue from one of these objects.

ANSWER: Ferris wheels

20. Answer the following about psychological tests, for 10 points each.

[10] The Exner scoring system is used to interpret the results of this test, in which subjects interpret inkblots.

ANSWER: Rorschach test

[10] This test for cognitive impairment consists of 30 questions, including ones about orientation to time and place. Some versions of this test include a question asking the subject to spell "WORLD" backwards.

ANSWER: mini-mental state examination [or: MMSE, Folstein test]

[10] An alternative to the backwards spelling questions is to ask subjects to count backward from 100 in intervals of this number.

ANSWER: seven