1. It details a trip to Mexico with lots of marijuana and child prostitutes. For 10 points each:
[10] Name this Beat novel that was originally compiled in a 120 -foot long scroll and which tells of the cross-country automobile trips of Sal Paradise and Dean Moriarty.
ANSWER: On the Road
[10] On the Road was written by this Beat poet who also penned The Dharma Blues, The Subterraneans, and Visions of Cody.
ANSWER: Jack Kerouac
[10] Jack Kerouac's character Carlo Marx was inspired by this author of Junkie, who wrote about a drug-addicted exterminator named Bill Lee in The Naked Lunch.
ANSWER: William Seward Burroughs III
2. About 600 years after the construction of Herod's Temple, another religious structure was erected on that site. For 10 points each:
[10] This was that second structure, completed in 691 and initially known as the Blue Mosque.
ANSWER: Dome of the Rock
[10] This only remaining area of the Temple Mount holds theological and historical significance for Jews, who often insert prayers on paper into its cracks.
ANSWER: Western Wall [or Kotel haMa'aravi; or Wailing Wall]
[10] The Dome of the Rock was completed during this Caliphate, whose capital was located at Damascus.
ANSWER: Umayyad dynasty
3. This work opens with Meg Boles, a landlady, making breakfast for her husband Petey. For 10 points each: [10] Name this play in which Nat Goldberg and Dermot McCann murder Stanley Webber at the title event. ANSWER: The Birtbday Party
[10] The Birtbday Party is a work by this British playwright of The Dumb Waiter who won the 2005 Nobel prize in literature.
ANSWER: Harold Pinter
[10] This American playwright featured a birthday party for Hickey in a bar owned by Harry Hope in his work The Iceman Cometh.
ANSWER: Eugene O'Neill
4. A cap-and-trade, or emissions trading, system can be used to control pollution by forcing excessive polluters to pay companies that decrease emissions.
[10] For 10 points: the Clean Air Act of 1990 had an acid rain program that regulated the emission of this compound.
ANSWER: sulfur dioxide [ $\operatorname{or} \underline{S O}_{2}$ ]
[10] For 10 points: this new cap-and-trade bill to control greenhouse gases was passed by the House of Representatives in 2009 but has stalled in the Senate. Name this bill using its full name or acronym, but not the names of the sponsors.
ANSWER: $\underline{A}$ merican $\underline{C l e a n} \underline{E n e r g y ~ a n d ~ S e c u r i t y ~ A c t ~}$
[5+5] In both the House and Senate, ACES was sponsored by two Congressmen representing the same pair of states. For 5 points each, name the two states represented by Henry Waxman and Edward Markey in the House and by Barabara Boxer and John Kerry in the Senate.
ANSWER: California and Massachusetts [either order]
5. They were passed to punish New York for failing to comply with the Quartering Act. For 10 points each: [10] Name this 1767 series of acts, named for a certain Chancellor of the Exchequer, which increased duties on paper and tea, among other things.
ANSWER: Townshend Acts
[10] The Townshend Acts sparked colonial resistance, like this 1770 incident in which British troops opened fire and killed five colonial Americans, including Crispus Attucks, in the namesake Massachusetts city.
ANSWER: The Boston Massacre
[10] The Boston Massacre was a problem for this man, the British Commander-in-Chief of North American forces, who also put down Pontiac's Rebellion and was replaced by William Howe after failing to stop the Siege of Boston. ANSWER: Thomas Gage
6. Initially identified in 1958, it states that information flows from DNA to RNA to protein. For 10 points each: [10] Name this important principle of molecular biology, first stated by Francis Crick.
ANSWER: central dogma of molecular biology
[10] While the central dogma often holds true, it is violated by this process most notably used by certain viruses, in which an RNA template is copied into DNA.
ANSWER: reverse transcription [do not accept or prompt on partial answers]
[10] Reverse transcription is employed by this lentivirus which destroys CD4+ helper T cells in the human body, irreversibly weakening the immune system and leading to AIDS.
ANSWER: $\underline{H}$ uman Immunodeficiency Virus
7. The epithet Nilakantha describes this god swallowing halahala, a deadly poison generated by the oceans. For 10 points each:
[10] Name this Indian deity, the destroyer in the Indian pantheon.
ANSWER: Shiva
[10] This rat-riding child of Shiva had a tusk cut off by the axe Parashu after refusing Parashurama entrance to Shiva's temple.
ANSWER: Ganesha
[10] This bull is the steed of Shiva, and is considered to be the gatekeeper at all of Shiva's temples.
ANSWER: Nandi
8. Name this about the life and times of France's Henry IV, for 10 points each:
[10] After struggling with religion, Henry finally decided on Catholicism in 1593, and uttered this famous phrase.
ANSWER: "Paris is well worth a mass" [or "Paris vaut bien une messe"; accept close translations]
[10] Despite renouncing Protestantism, in 1598 Henry issued this decree, which gave rights to Huguenots.
ANSWER: Edict of Nantes
[10] When Francois Ravaillac murdered Henry in 1610, this 9 year old son of Henry's became king.
ANSWER: Louis XIII
9. For 10 points each, identify the following anthropologists:
[10] Derek Freeman famously criticized this woman's first anthropological work, Coming of Age in Samoa.
ANSWER: Margaret Mead
[10] This author of Coral Gardens and their Magic studied the kula exchange of the Trobriand islanders in Argonauts of the Western Pacific.
ANSWER: Bronislaw Malinowski
[10] This man used the term "deep play" to explain the importance of Balinese cockfighting in an essay that appears in his The Interpretation of Cultures.
ANSWER: Clifford Geertz
10. This treaty was named for the then-Secretary of State of the US and the British ambassador to America. For 10 points each:
[10] Name this 1901 treaty between the US and Britain that nullified the Clayton-Bulwer Treaty.
ANSWER: Hay-Pauncefort treaty
[10] The Hay-Pauncefort treaty gave the United States the right to commence this engineering project in Central America, provided that it would be a free waterway.
ANSWER: building the Panama canal
[10] After Panama gained independence with American support, Hay signed a treaty with this man, who just happened to own a large amount of land in the canal area-to-be.
ANSWER: Phillipe-Jean Bunau-Varilla
11. This building was originally commissioned by Justinian to be a church. For 10 points each:
[10] Name this building with a notably colossal dome, to which minarets were later added when it was converted to a mosque under the Ottomans.
ANSWER: Hagia Sophia [or Ayasofya; accept answers involving the phrase Holy Wisdom; accept Sancta Sophia or Sancta Sapienza]
[10] Found in the same city as the Hagia Sophia is this other mosque known for its colorful tiles, built by Sultan Ahmed I.
ANSWER: Blue Mosque [prompt on Sultanahmet Camii]
[10] Formerly known as Byzantium and then as Constantinople, this city contains both the Hagia Sophia and the Blue Mosque.
ANSWER: Istanbul, Turkey
12. Answer the following about forces between molecules, for 10 points each:
[10] Molecules which have a net positive charge at one end and a net negative charge at another end have a nonzero value for this, measured in DeBye units.
ANSWER: dipole moment [or permanent dipole]
[10] This intermolecular force is seen between complementary base pairs in DNA, in which it is responsible for maintaining the double helix structure. It also gives water properties like high density and strong surface tension. ANSWER: hydrogen bonds [accept obvious equivalents for "bonds"]
[10] This type of van der Waals force arises from instantaneous dipole formation in otherwise nonpolar molecules and atoms, and increases with size and number of electrons.
ANSWER: London dispersion forces [or London interactions, etc.]
13. He was a successful industrial chemist and medical doctor before he turned to farming and an interest in geology. For 10 points each:
[10] Name this "Father of Modern Geology", a Scotsman who championed the idea of uniformitarianism.
ANSWER: James Hutton
[10] In supporting the work of Hutton, and in an attempt to clarify many of his positions, this British man wrote Principles of Geology, which discussed much of geologic change as being the product of small changes over time. ANSWER: Sir Charles Lyell
[10] Lyell sent Captain Robert FitzRoy on the HMS Beagle to find particular rock formations to support his claims. FitzRoy was also joined by this man, who ultimately rejected Lyell's disbelief in the evolution of organisms. ANSWER: Charles Robert Darwin
14. He was good at other things besides guiding boat tours through Hell. For 10 points each, answer some questions about Virgil.
[10] Virgil produced this work, a collection of conversations and songs between and by farmhands and shepherds.
ANSWER: Ecologues [accept Bucolics]
[10] Virgil also produced this national epic of Italy, which begins "I sing of arms and of the man" and tells of a Trojan who woos Dido and travels to Italy, where he basically founds the Roman civilization.
ANSWER: The Aeneid
[10] In the Aeneid, Aeneas lands upon the shores of Italy, meets Rutuli, and then goes on to kill this man and steal his betrothed, Lavinia.
ANSWER: Turnus
15. Answer these questions about a 1995 British drama film.
[10] This film, an adaptation of a Jane Austen novel about the Dashwood sisters, starred Kate Winslet in her first Oscar-nominated role.
ANSWER: Sense and Sensibility
[10] This director of Crouching Tiger, Hidden Dragon; Brokeback Mountain; and Lust, Caution directed Sense and Sensibility.
ANSWER: Ang Lee [or Ľ̌ Ān]
[10] This actress, who played the part of Elinor Dashwood, wrote the Oscar-winning screenplay for Sense and Sensibility. She also played Professor Trelawney in Harry Potter and the Prisoner of Azkaban and Karen Eiffel in Stranger than Fiction.
ANSWER: Emma Thompson
16. This piece opens with fortissimo half and whole notes in the trumpets and trombones, adding the woodwinds when the key shifts to A-flat. For 10 points each:
[10] Name this symphonic poem written in response to Russian censorship of the press in its composer's homeland. ANSWER: Finlandia, Opus 26 for orchestra [accept either underlined part]
[10] Finlandia is a work by this-you guessed it, Finnish-composer who also wrote the Karelia Suite and seven surviving symphonies.
ANSWER: Jean Sibelius [or Johan Julius Christian Sibelius]
[10] The second movement of Finlandia opens with a trio between the bassoons, tuba, and these large tunable drums. ANSWER: timpani [or timpano; accept kettle drums]
17. Assuming spherical symmetry, this law can be derived from Gauss's law by using the formula for the surface area of a Gaussian sphere and multiplying by a term for a test charge. For 10 points each:
[10] Name this law of electrostatics often stated as "force equals $k q$-one $q$-two over $r$-squared".
ANSWER: Coulomb's law
[10] According to Coulomb's law, if the distance between two charges is tripled, the electric force between them is multiplied by this number.
ANSWER: one ninth [do not accept or prompt on "nine"; accept $0 . \underline{1}$ repeating or equivalents]
[10] The constant $k$ used in Coulomb's law can be written as the reciprocal of this product of one integer and two constants.
ANSWER: four times pi times the permittivity of free space [accept mathematical equivalents; accept epsilonnaught in place of "permittivity"; accept "vacuum" in place of "free space"]
18. This work is set to the poem of the same name by Cardinal Newman. For 10 points each:
[10] The title character dies, meets his Guardian Angel, and is judged by God in one moment where each instrument "must exert its fullest force", according to the composer's footnote to this oratorio.
ANSWER: The Dream of Gerontius, Opus 38 [accept either underlined part]
[10] The composer of The Dream of Gerontius, Sir Edward Elgar, also wrote this set of variations on an unknown theme, which may or may not be Auld Lang Syne, including movements titled "C.A.E.", "Dorabell", and "Nimrod". ANSWER: Enigma Variations, Opus 36 [accept either underlined part]
[10] Elgar is most famous for this set of military marches. The first march in D Minor is the traditional processional for graduation ceremonies.
ANSWER: Pomp and Circumstance Marches, Opus 39, No. 1 in D Minor [accept either underlined part]
19. His 1643 tract The Doctrine and Discipline of Divorce argues for divorce on theological bases. He might have written it because his wife Marie Powell left him in 1642. For 10 points each:
[10] Name this author of the anti-censorship tract Areopagitica.
ANSWER: John Milton
[10] This is Milton's epic poem based on the Genesis story. It begins "Of Man's first disobedience..." ANSWER: "Paradise Lost"
[10] The main character in this dramatic poem by Milton is a prisoner of the Philistines in Gaza.
ANSWER: "Samson Agonistes"
20. This faith was founded by Vardhamana, and has no creator god. For 10 points each:
[10] Name this religion that originated in India, where its adherents comprise less than 1 percent of the population. Adherents do not revere the Lingam of Shiva, but follow a path of strict vegetarianism and non-violence, or ahimsa. ANSWER: Jainism
[10] In 2006, the Indian Supreme Court ruled that Jainism is not part of this religion that it has significantly influenced.
ANSWER: Hinduism
[10] In Jainism, this term refers to the release of one's soul from the cycle of life, death, and reincarnation, where one has attained infinite bliss, knowledge, and perception.
ANSWER: Moksa [or Moksha; or Mukti]
