

1. Graphs where any vertex can be taken to any other by an automorphism; groups where every conjugacy class is the entire group; and relations where "a related to b" and "b related to c" implies "a related to c," share a common name. FTP, what is this mathematical term?

ANSWER: TRANSITIVE (TRANSITIVITY)

2. Like his close friend G. K. Chesterton, who illustrated many of his books, he was a prominent British Roman Catholic. Disapproving of modern industrial society, he advocated a return to the system of medieval guilds in his 1912 book "The Servile State." FTP, identify this author of travel books such as "The Path to Rome," who is probably best remembered for his nonsensical children's verse published in books such as "The Bad Child's Book of Beasts" and "Cautionary Tales."

ANSWER: Hilaire BELLOC

3. His given names were Albert Frederick Arthur George. He attended naval colleges at Osborne and Dartmouth and served in World War I, and eventually in the RAF as well. Created Duke of York in 1920, he had two well-known daughters. FTP, name this second son of George V.

Answer: GEORGE VI

4. There are at least four persons of this name in Greek mythology. One is a daughter of Adrastus and wife of Ilus, king of Troy. Another is the mother of Danae. A third is the wife of Creon who curses her husband and then kills herself in Sophocles' "Antigone." FTP, identify this name belonging most famously to the Thracian Dryad loved by Orpheus.

ANSWER: EURYDICE

5. Simone de Beauvoir described her affair with this American writer in her novel "The Mandarins." A leading member of the Chicago school of realism, his works include "Somebody in Boots," "Never Come Morning," and a famous novel about drug addiction. FTP, identify this author of 1949's "The Man With the Golden Arm."

ANSWER: Nelson ALGREN

6. A theory of eukaryotic cell evolution called the endosymbiotic theory postulates that since they contain their own DNA sequence, they were once separate prokaryotes that became engulfed within other prokaryotes. Instead of being digested, they remained within the engulfing cells, performing its energy-releasing function. FTP, name this cell organelle which contain enzymes necessary for the oxidation of food into energy.

ANSWER: MITOCHONDRIA

7. It was named for a Norse fire demon. In 1963, at the edge of a billowing black cloud 12,000 feet high coupled with spectacular lightning displays, waves began to break on the summit cone of a new mountain. Two years later there was a quiet, 550-foot high island. FTP, what name was given to this new island off the southern coast Iceland.

Answer: SURTSEY

8. It was written in the 3rd century A.D. but is best known in English through an 1883 translation by F.F. Arbuthnot and Sir Richard Francis Burton. Its author was Mallanage Vatsyayana. FTP, identify this Sanskrit classic which deals with such matters as elegant deportment and how to court the unmarried, as well as providing detailed advice on sexual and erotic technique.

ANSWER: KAMA SUTRA

9. The uitlanders, or foreigners, at work in the South African gold mines sought equal citizenship with the Boers, while the Boers were rightfully suspicious of the British. This was borne out when Cecil Rhodes connived at a conspiracy of uitlanders to raid Johannesburg. The raid was a complete failure, and led ultimately to the Boer War. FTP, what was this 1895 raid, named after its leader?

ANSWER: JAMESON RAID

10. He began his career in vaudeville, which may be where he picked up a sympathy for the freakish and oddball. He directed many films starring Lon Chaney, such as The Unknown and The Unholy Three, which emphasized the macabre and gruesome. FTP, identify this subject of the biography, Dark Carnival, who directed the classic Bela Lugosi version of Dracula and the 1933 film, Freaks.

ANSWER: Tod BROWNING

11. In art, this term applies to the Virgin Mary sorrowing for her crucified son, and she is sometimes depicted as having one, or even seven, swords in her breast. FTP, what is this Latin phrase which means "Mother of Sorrows"?

ANSWER: MATER DOLOROSA (ask for more specific on "Mother of Sorrows")

12. It was developed in the 13th century, and was originally written for 2, 3 or 4 voices. These would sing several texts simultaneously. It developed into an exclusively liturgical unaccompanied vocal, using a Latin text. J.S. Bach wrote six of them, using German texts. FTP, what is this polyphonic form?

ANSWER: MOTETS

13. Reissner-Nordstrom ones have electric charge. Kerr-Newman ones have charge and angular momentum. All have mass. FTP, what are these trappers of geodesics thought to power active galaxies and bad science fiction movies?

ANSWER: BLACK HOLES (PROMPT ON SINGULARITIES)

14. First published in 1932, this trilogy depicts the history of Germany from 1888 to 1918 through the stories of three men: "The Romantic," a military officer; "The Anarchist," a would-be assassin; and "The Realist," an army deserter. FTP, identify this Hermann Broch [BROKE] masterpiece, whose title might also have been translated "The Somnambulists."

ANSWER: The SLEEPWALKERS, or Die SCHLAFWANDLER

15. In the 1720s he became obsessed with a scheme to found a college in Bermuda to promote "the propagation of the gospel among the American savages." He actually sailed for America in 1728 and spent nearly three years in Rhode Island seeking support which never materialized--so he returned home to become Bishop of Cloyne. FTP, name this Irish-born idealist philosopher famous for the claim that "to be is to be perceived."

ANSWER: George BERKELEY (Note: pronounced "Barkley")

16. Chapters 10-14 are titled "Modern Survivals of Prowess," "The Belief in Luck," "Devout Observances," "Survivals of the Non-Invidious Interest," and "The Higher Learning as an Expression of the Pecuniary Culture." Its popular success was sparked by a long favorable review by William Dean Howells. FTP, identify this ironic classic published in 1899, whose fourth chapter is titled "Conspicuous Consumption."

ANSWER: The THEORY OF THE LEISURE CLASS

17. Class A consisted of Iraq, Syria, Lebanon and Palestine. Class B consisted of German Africa, other than Southwest Africa. Class C included Southwest Africa, New Guinea and German Samoa. FTP, what was this system of trusteeships established under Article 22 of the Covenant of the League of Nations?

ANSWER: MANDATES

18. The title character works year round at the silk mills at Asolo in Italy, except for New Year's Day. Despite this plight, she makes a difference in "the spiritual life-history" of this play's leading characters. Her famous first song ends with the oft-quoted line "God's in His heaven---All's right with the world!". FTP, name this poetic drama by Robert Browning.

ANSWER: PIPPA PASSES

19. The elastic variety provides the framework of the external ear, the fibro type comprises the knee joint, the hyaline type the fetal skeleton and the nose. FTP, what is this semisolid substance composed of chondrocytes that imparts marked elastic properties to the tissue?

ANSWER: CARTILAGE

20. The Republican platform of 1908 pledged reduction of the tariff. Taft called Congress into special session, and the House duly passed a bill which reduced tariff rates. However, in the Senate the bill was revised to lower some tariffs, but to raise others. FTP, what was this controversial tariff act, named after its proponents in the House and Senate, respectively?

ANSWER: PAYNE-ALDRICH TARIFF

21. In 1907, William Willett urged its adoption in England. During World War I, many European nations accepted it. Robert Garland of Pittsburgh was a leading proponent of its establishment in the United States. FTP, what is this system, adopted in the US in 1918, disregarded by Arizona, and concocted by Benjamin Franklin?

ANSWER: DAYLIGHT SAVINGS TIME

22. There is a layer of the upper atmosphere responsible for altering the path of certain radio waves, making long distance signal transmission possible. FTP, identify this layer, named for its discoverer, which also serves as the goal of the felines in Andrew Lloyd Webber's "Cats"?

ANSWER: HEAVISIDE LAYER

23. As I write this question, Euro '96 is taking place in England. However, this tournament is noteworthy not only for high calibre play, but also because it is the first major international tournament to implement a new ruling by soccer's governing body FIFA. Even with this rule, however, several semifinal games were decided by penalty kicks. FTP, what is this recent FIFA rule change?

ANSWER: SUDDEN DEATH OVERTIME or "the GOLDEN GOAL"

24. She was the daughter of Henry I, and was recognized as Henry's heir in 1127. However, on Henry's death, the barons gave their support instead to her cousin, Stephen of Blois. (BLWAH) FTP, identify this queen of England who captured Stephen, and was mother of Henry II.

ANSWER: MATILDA or MAUD

25. It was known as Pressburg when the treaty which acknowledged Napoleon's defeat of Holy Roman Emperor Francis II at Austerlitz was signed there. FTP, what is this city, now capital of Slovakia.

ANSWER: BRATISLAVA

26. It is the third best conductor of electricity. Its chemical symbol is derived from the Latin for "Shining Dawn." FTP, what is this most malleable of metals, with an atomic number of 79?

ANSWER: GOLD

BONI: The Snopes Clan rom Yoktana--Yokanapa--Yokopanapata--aw, Mississippi.

1. Aristophanes wrote the play "The Birds", but he has nothing to do with the rest of this bonus. For 10 points apiece, identify the authors of the following:

- A. The 1966 novel "The Birds Fall Down" ANSWER: Rebecca WEST  
B. The 1972 novel "Birds of America" ANSWER: Mary MCCARTHY  
C. The 1939 novel "At Swim Two-Birds" ANSWER: Flann O'BRIEN

2. When you were ten, you may have wondered who was tougher: the DC superheroes or the Marvel superheroes. This spring, the questions were answered in a massive inter-company comic book crossover. For 5 points each, who was the victor in the battle between:

- A. Namor vs. Aquaman ANSWER: AQUAMAN  
B. Silver Surfer vs. Green Lantern ANSWER: SILVER SURFER  
C. Spider-Man vs. Superboy ANSWER: SPIDER-MAN  
D. Storm vs. Wonder Woman ANSWER: STORM  
E. The Incredible Hulk vs. Superman ANSWER: SUPERMAN  
F. Captain America vs. Batman ANSWER: BATMAN

3. For 10 points each, give the first name of the notable Davis:

- A. The first African-American graduate of West Point, he was a distinguished combat pilot and an air force general. ANSWER: BENJAMIN Oliver Davis  
B. British clarinetist and conductor of the Bavarian Radio Symphony Orchestra from 1983 to 1992. ANSWER: COLIN  
C. American cubist painter who was influenced by jazz music in such works as Visa, Colonial Cubism, and Midi. ANSWER: STUART

4. A 6 volt battery is connected in series with a 1 ohm and a 2 ohm resistor. Answer the following questions for ten points apiece.

- A. An ammeter is connected in series between the resistors; what does it read?  
ANSWER: 2 AMPERES  
B. A voltmeter is connected in series between the resistors; what does it read?  
ANSWER: 6 VOLTS  
C. An ammeter is connected in parallel around the 2 ohm resistor. What does it read?  
ANSWER: 6 AMPERES

5. Identify the German-speaking theologian from a brief description, for 10 pt each.

- A. He was raised in the Moravian church, but became a Reformed pastor in Berlin in the 1790s. His writings had an enormous impact on Protestant theology, especially such works as "Religion: Speeches to Its Cultured Despisers," and "The Christian Faith."

ANSWER: Friedrich David Ernst SCHLEIERMACHER

- B. The major figure of Protestant "neo-orthodoxy," in 1934 he took the lead in drawing up the Barmen Declaration against the pseudoreligious claims of Nazism. His massive "Church Dogmatics" was still unfinished at his death in 1968.

ANSWER: Karl BARTH

- C. A professor of theology at the University of Tübingen [the u has an umlaut], he rejected the doctrine of papal infallibility in his 1970 book "Infallible? An Enquiry," and in 1979 he was stripped of his license to teach as a Roman Catholic theologian.

ANSWER: Hans KUNG {this U has an umlaut too}



6. For the stated number of points, answer the following regarding the ballets of Igor Stravinsky.

a. For 5 pts., name the dancer who took the role of the title character of Petrouchka in its 1911 premiere.

ANS. Vaslav NIIJINSKY

b. The first part of the Rite of Spring is entitled The Adoration of the Earth. For 10 pts., what is the title of the second and final part?

ANS. The SACRIFICE or Le SACRIFICE

c. One of the highpoints of The Firebird is the thrilling infernal dance. For 15 pt., what is the name of the demon king whose minions dance the infernal dance.

ANS. King KASTCHEI or KOSTCHEI

7. Identify the following places and things from World War II for 10 points each:

A. The name of the Japanese puppet state in Manchuria.

ANSWER: MANCHUKUO

B. The German ship driven into Montevideo by the British, and scuttled in the Rio de la Plata

ANSWER: GRAF SPEE

C. In retaliation for the assassination of Reinhard Heydrich, the Nazis burned this Czech village in Bohemia on June 6, 1942.

ANSWER: LIDICE

8. Identify the African flag from a description, for 10 points each.

A. Five horizontal bars of green and yellow alternating, with a red field in the upper left, bearing a white star

ANSWER: TOGO

B. Four horizontal bars of red, blue, green and yellow

ANSWER: MAURITIUS

C. Five horizontal bars of blue, white, black, white and blue

ANSWER: BOTSWANA

9. Identify the poet from a line of 20th century poetry, for 10 points, or from the title of the poem, for 5 points.

A. (10) "You do not do, you do not do Any more, black shoe"

(5) The poem is "Daddy"

ANSWER: Sylvia PLATH

B. (10) "And as the smart ship grew In stature, grace, and hue, In shadowy silent distance grew the Iceberg too"

(5) The poem is "The Convergence of the Twain"

ANSWER: Thomas HARDY

C. (10) "Row after row with strict impunity The headstones yield their names to the element, The wind whirrs without recollection"

(5) The poem is "Ode to the Confederate Dead"

ANSWER: Allen TATE

10. A quantum mechanical system has two eigenstates for observable X, A and B. It is currently in a superposition given by  $0.6A + 0.8B$ .

A. If X were observed, what is the probability that the system is observed to be in state A?

ANSWER: 0.36 (36 percent)

B. X is observed twice in a row; what is the probability that A is observed both times?

ANSWER: 0.36 (36 percent)

C. What is the probability of observing the state  $0.96A + 0.28B$ ?

ANSWER: 0.00 (0 percent)

11. For 15 points each, identify the artist's master, given the name of an artist who apprenticed under him.

A. Paolo Uccello (Pow-lo Oo-chel-lo)

ANSWER: Lorenzo GHIRBERTI

B. Raphael Sanzio

ANSWER: PINTURICCHIO or PERUGINO

(not the same guy; he apprenticed to two masters)

12. For ten points each, identify the following characters from mythology, each of whose names begin with the same letter.

A. Father of Aeneas, he was carried from Troy on Aeneas' shoulders.

ANSWER: ANCHISES

B. Sister of Atalanta, she killed her son Meleager, then killed herself in remorse.

ANSWER: ALTHEA

C. He accidentally came upon Diana in her bath, and was turned into a stag and was killed by his own dogs for his troubles.

ANSWER: ACTAEON

13. For 10 points apiece, identify the Moliere play in which appears:

A. Harpagon, his son Cleante, and Marianne, who is in love with the son, but courted by the father

ANSWER: L'AVARE, or The MISER

B. Mr. and Mrs. Jourdain, their daughter Lucile, and Lucile's admirer, Cleonte

ANS: Le BOURGEOIS GENTILHOMME, or The WOULD-BE GENTLEMAN, or The BOURGEOIS GENTLEMAN

C. The comic hypochondriac Argan -- the role being played by Moliere himself when he was stricken on stage and died shortly thereafter.

ANSWER: Le MALADE IMAGINAIRE, or The IMAGINARY INVALID

14. Identify these personages from the history of Hungary, for ten points each.

A. The unpopular son of Maria Theresa, who tried to make German the official language--no wonder they didn't like him.

ANSWER: JOSEPH II

B. The king who extended Christianity to the Hungarians, and named Apostolic King by the Pope in the year 1000.

ANSWER: STEPHEN I

C. The soviet administrator of Hungary for a few months beginning in March 1919.

ANSWER: Bela KUN

15. Identify the following image formats for ten points apiece. [DO NOT GIVE ANSWERS UNTIL THE END--which you shouldn't be doing anyway!]

A. The 89a standard of this format allows animation; all versions are limited to 256 colors.

ANSWER: GRAPHICAL IMAGE FORMAT (GIF)

B. This format uses a linked list of image rows and is frequently used with LZW encoding. It is known for having different byte orders on Macintoshes and PCs.

ANSWER: TAGGED IMAGE FILE FORMAT (TIFF, orTIF)

C. This format uses Fourier transforms to reduce the size of images. Full color is allowed but storage is always lossy.

ANSWER: JPEG (JPG)

16. 30-20-10-5. Identify the book.

30: It begins, "They order, said I, these matters better in France." It ends, "So that when I stretch'd out my hand, I caught hold of the Fille de Chambre's--"

20: The character Smelfungus is a caricature of Tobias Smollett

10: Other characters include the narrator Parson Yorick, and his faithful servant La Fleur

5: It was the last work published by Laurence Sterne before his death in 1768

ANSWER: A SENTIMENTAL JOURNEY through France and Italy

17. Identify the ancient capital, FTP each.

A. The ancient capital of the Greek kings of Syria, built about 300 BC by Seleucus Nicator.

ANSWER: ANTIOCH

B. One of the capitals of Assyria, it was made important by Sennacherib and was destroyed by the Babylonians in 606 BC.

ANSWER: NINEVEH

C. Capital of ancient Egypt from the 16th to the 12th century BC, and again in the 7th century BC, it was annihilated by an earthquake in 27 BC.

ANSWER: THEBES

18. Given the interrogative from a foreign language, give the equivalent modern English word or words for five points each.

A. Woher [VOH-hair]

ANSWER: WHENCE (FROM WHERE)

B. Gde [geh-DYEH]

ANSWER: WHERE

C. Kiel [KEE-ell]

ANSWER: HOW

D. Combien [COMB-bee-on]

ANSWER: HOW MANY (HOW MUCH)

E. Quem [kwem]

ANSWER: WHOM

F. Poio [pyoh]

ANSWER: WHO (masculine)

19. The random variable  $X$  has a normal distribution. Identify the probability distributions of each of the following variables derived from  $X$  for ten points each.

A. The mean of six observations of  $X$ .

ANSWER: Student's T-distribution

B. The mean of 6,000 observations of  $X$ .

ANSWER: NORMAL distribution

C. The mean of 6,000 observations of  $X$  squared.

ANSWER: CHI-SQUARE distribution

20. Identify the following terms from classical architecture, for ten points each:

A. The triangular portion of wall above the entablature, forming a gable at the end of a building.

ANSWER: PEDIMENT

B. The lowest division of the entablature, it rests upon the capitals of the columns; it can also be applied to the moldings around a rectangular doorway.

ANSWER: ARCHITRAVE

C. The part of the entablature above the cornice, which serves to hide the roof.

ANSWER: ATTIC

21. Identify the year the following occurred for the stated number of points:

A. (5) Jan Hus is burned at the stake, the Battle of Agincourt

ANSWER: 1415

B. (10) Nicholas Breakspear becomes Pope Adrian IV, Henry II becomes king of England

ANSWER: 1154

C. (15) Avicenna is born, Vladimir the Great becomes king of Russia

ANSWER: 980

22. Intro, blah, blah, blah--Stuff about the recent elections in Bangladesh; 10 each.

A) What party won the June parliamentary elections?

ANSWER: AWAMI LEAGUE

B) The victory by the Awami League caused a number of former coup conspirators to flee the country as the daughter of what slain founding father of Bangladesh was swept into power?

ANSWER: Sheikh Mujibur RAHMAN

C) In what year was Rahman assassinated?

ANSWER: 1975