

DMainMan Enterprises/Consult

www.dmainmanconsult.com

<http://www.facebook.com/dmainmanfoundation>

NNPC PAST TEST AND INTERVIEW QUESTIONS

The **first part** of this document contains **NNPC traditional test questions** divided into General questions and skill tests. All candidates will take the General questions which can be retrieved from *Pages 2 to 6*. You are only obliged to answer one skill test questions segment that fits your area of expertise. Finance and Social Science skill test can be accessed from *Pages 7- 11*. General Engineering skill test from *Pages 12-15*. Information Technology skill test from *Pages 16 to 19*. Medical skill test from *Pages 20 to 24* and General Science skill test from *Pages 25 to 28*.

The **second segment** contains **NNPC test questions** provided by ‘ibrahimzy’ on nairaland. It can be seen from *Pages 29 to 92*.

The **last section** contains **NNPC interview questions** accessed from *Pages 93 to 96*. Credit to ‘Jimngam and Syenite’ from nairaland.

DMainMan wishes you all success in your tests and interviews InshaAllah.

From DMainMan

PTDF Scholar

CEO DMainMan and Zeltney Enterprises/Consult,

<https://www.facebook.com/dmainmanfoundation/>

<https://www.dmainmanconsult.com/>

PART 1 - APTITUDE TEST

Option C

There are 60 questions in this section. Select your answer from the options provided for each question.

Verbal Comprehension

Read the passages below carefully and answer the questions that follow.

Passage 1

Recent changes to the postal voting system are considered by election officials to significantly increase the risk of electoral fraud. If it were to be widespread such fraud could discredit the whole electoral process. Greatest concerns centre around the very limited time the new system allows electoral administrators to check that requests for ballots are genuine. The government are keen to increase the number of people who cast a vote and believe that people should not be denied a vote simply because they do not apply in good time. Fraud is currently rare and there is far no evidence of postal votes leading to widespread fraud.

- The government was warned by electoral administrators that the risk of fraud is now much higher.
A. True B. False C. Can't tell
- The government was warned by electoral administrators that the risk of fraud is now much higher.
A. True B. False C. Can't tell
- The previous system of postal voting was considered by election administrators to be less open to fraud.
A. True B. False C. Can't tell
- There is a process for checking the validity of applications for postal votes.
 A. True B. False C. Can't tell

Passage 2

Asia is the world's largest continent and stretches from the Bering Sea in the east to Turkey and Europe in the west. Its southern border comprises many islands including those that make up Indonesia. Since independence of colonial powers Asian economies have boomed. First were Japan, Singapore, Taiwan and South Korea and later Malaysia, Thailand and Indonesia. More recently, China and India have enjoyed rapid economic growth. The southwest and central parts of the continent are deserts. The Himalayan mountains divide the cold north from the tropical south. The people of Asia make up over two

thirds of the world's population and they live in the birthplace of the world's earliest civilizations.

- Civilization began in the continent of Asia.
 A. True B. False C. Can't tell
- The colonial era was a disaster for Asia.
A. True B. False C. Can't tell
- More of the world's population live in Asia than in any other continent.
 A. True B. False C. Can't tell
- Post colonial growth first occurred in Asia.
A. True B. False C. Can't tell

Passage 3

Traditional medicine was the science of curing illness with treatments. For thousands of years people would have used plants and would have turned to priests for cures. In more recent times illness has been attributed less to the intervention of gods or magic and instead to natural causes. Medicine today is as much concerned with prevention as cure. Doctors use treatments of many types, including radiation and vaccination, both of which were unknown until very recent times. Other treatments have been known about and practiced for centuries. Muslim doctors were skilled surgeons and treated pain with opium. When Europeans first reached the Americas they found healers who used many plants to cure illnesses. The Europeans adopted many of these treatments and some are still effective and in use today.

- Modern medicine is the science of curing illness.
A. True B. False C. Can't tell
- Medicine is a science that owes its success to modern treatments.
A. True B. False C. Can't tell
- Vaccination is a relatively recent discovery.
 A. True B. False C. Can't tell

Passage 4

Credit card fraud has reached N500 million despite the introduction of new controls. Figures show that losses to fraud rose by 20% last year. Most frauds result from cards intercepted in the post. One hundred thousand cards were posted to customers everyday last year. This represents rich pickings for fraudsters. The banks knew the year would be difficult because it was thought that fraudsters would try to commit as many crimes as possible before new controls were introduced. It is hoped that this time next year the effect of the new measures will be known and that the level of fraud will have fallen considerably.

- X 12. Top of the table of types of frauds are those committed with credit cards stolen from people's post.
 - A. True
 - B. False
 - C. Can't tell
- 13. The new measures are sophisticated anti-fraud strategies.
 - A. True
 - B. False
 - C. Can't tell
- 14. The new measures are already in place.
 - A. True
 - B. False
 - C. Can't tell

Analogy

For each **capitalized word pair** below, select from the paired options **lettered A-D**, the most appropriate pair of words that connote the same relationship as what you have in the capitalized pair.

- 15. RESOLUTE: WAIVER
 - A. Frank: lie
 - B. Guilty: flee
 - C. Voracious: Consume
 - D. Relevant: obscure
- 16. PHOTOGRAPH: IMAGE
 - A. Review: evaluation
 - B. Translate: text
 - C. Record: sound
 - D. Perform: music
- 17. HOSPITAL: HEALING
 - A. Closet: clothes
 - B. Court: justice
 - C. Mill: machinery
 - D. Symphony: instruments

Sentence Sequencing

Reorganise these sentences into a logical order. Choose from the options (A to C) provided.

Question 18

- I. It is produced by vibrations that travel by moving molecules which bump into one another

- II. In air sound travels at over 300 metres per second
 - III. Sound is a form of energy
 - IV. These vibrations are called sound waves.
- A. III, I, IV, II B. IV, II, I, III C. III, II, I, IV

Question 19

- I. There are thought to be billions of them
 - II. Perhaps the most common objects in the universe are stars
 - III. It includes everything visible, invisible, known and not yet known.
 - IV. The universe is made up of everything that exists
- A. IV, III, II, I B. I, III, IV, II C. II, I, III, IV

Question 20

- I. This is pollution.
 - II. It can be small-scale or global and most plants and animals suffer its effects
 - III. Harmful by-products of industry and agriculture enter the environment
- A. I, III, II B. III, I, II C. III, II, I

Question 21

- I. But most of the population lives in the much milder south.
 - II. It occupies the Scandinavian peninsula with Norway
 - III. Twenty five per cent of the country lies within the bitterly cold arctic circle
 - IV. Sweden is the largest country in Europe.
- A. I, II, IV, III B. I, IV, I, III C. IV, II, III, I

Sentence Completion

For each of the questions below, select from the options lettered A-D, the word or pair of words that most appropriately fills the blanks in the statement.

- 22. The congressman _____ the weaknesses of the trade bill only because it was _____ by his party, instead of the opposition.
 - A. Overlooked... Examined
 - B. Denounced... Created
 - C. Ignored... Promulgated
 - D. Denied... Deciphered
- 23. A recent poll shows that, while 81% of college students are eligible for some form of financial aid, only 63% of these students are _____ such aid.
 - A. Complaining about
 - B. Recipients of
 - C. Dissatisfied with
 - D. Faying for

24. Dr. Aliu's lack of confidence _____ the respect with which he was regarded by most of the astronomical community.
- A. Focused
B. Vindicated
C. Aggrandized
D. Bellied
25. Because the senator is known for his public posturing, many people are surprised to discover that he is _____ man in private
- A. An articulate
B. A hopeful
C. A diffident
D. A mendacious
26. Although in dry seasons mosses may appear to be dead, they can _____ through periods of extended drought, and will quickly _____ with the first rain
- A. Endure... Recover
B. Thrive... Flourish
C. Decline... Recuperate
D. Survive... Deteriorate

Antonyms

For each of the questions below, select from the options numbered A-D, the most appropriate antonym for the capitalized word.

27. IMMINENT
- A. Terse
B. Tacit
C. Presumptuous
D. Distant
28. MOLLIFY
- A. Ebb
B. Belabour
C. Embrace
D. Antagonize
29. DISPARAGE
- A. Repair
B. Rarefy
C. Hope
D. Divulge
30. CONTRITE
- A. Unrepentant
B. Unique
C. Dull
D. Emollient

Quantitative Aptitude Test

Basic Arithmetic and Word Problems

Perform the following arithmetic operations and select from the options lettered A-D, the answer that corresponds to your answer.

31. An employment agency paid its staff N43,200 and charged the client N72,000. What percentage of the charge rate is received by the staff?
- A. 57%
B. 58%
C. 59%
D. 60%
32. If 50 pencils cost N180, how much would 70 cost?
- A. N252
B. N253
C. N254
D. N255
33. A train is scheduled to take 3 hours, but it is delayed by 15%; how late will the train be?
- A. 27 minutes
B. 26 minutes
C. 27 minutes
D. 28 minutes
34. A 100 foot rope is cut so that the shorter piece is $\frac{2}{3}$ the length of the longer piece. How many feet long is the shorter piece?
- A. 75
B. 66.67
C. 50
D. 40
35. In a certain hardware store, 3% of the lawn mowers needed new labels. If the price per label was N40 and the total cost for new lawn mowers labels was N960, how many lawn mowers are in the hardware store?
- A. 1,600
B. 800
C. 240
D. 120
36. A pump can lift 2,400 litres an hour and its replacement model can lift 2.5% more; how many litres an hour can the new model lift?
- A. 2,440 lt.
B. 2,450 lt.
C. 2,460 lt.
D. 2,470 lt.
37. A quality control process results in 30 parts in every 500 being rejected as below standard; express this failure rate as a percentage.
- A. 3%
B. 6%
C. 9%
D. 12%
38. A village population has increased by 3% to 3,605 people; what was the original population?
- A. 3,460
B. 3,480
C. 3,500
D. 3,510
39. A machine can stamp 20 envelopes in 4 minutes. How many of these machines, working simultaneously, are needed to stamp 60 envelopes per minute?
- A. 5
B. 10
C. 12
D. 20
40. If your daily newspaper costs N550 during the week and N1,100 on Saturday and Sunday? What is your weekly newspaper bill?
- A. N4,800
B. N4,850
C. N4,900
D. N4,950
41. A quality control process results in 30 parts in every 500 being rejected as below standard; express this failure rate as a percentage.
- A. 3%
B. 6%
C. 9%
D. 12%

42. The time taken to complete an order decreases by 8 seconds to 12 seconds; what is this decrease expressed as an improvement in the efficiency of fulfilling the order?
- A. 16% ~~C. 40%~~
 B. 20% D. 60%

43. Under load a rope stretches 25% and is now 300 metres long; how long was the rope before the load was applied?
- A. 240 m C. 220 m
~~B. 230 m~~ D. 210 m

- * 44. The price of a jacket was reduced by 10%. During a special sale, it was reduced by another 10%. What was the total percentage discount from the original price of the jacket?
- A. 15% ~~C. 20%~~
 B. 19% D. 21%

- * 45. A fair coin is cast 5 times and five times it shows a head. What is the probability that the sixth toss will produce a tail?
- A. $\frac{1}{2}$ ~~C. $\frac{5}{6}$~~
 B. $\frac{3}{4}$ D. 1

General Mathematics and Applications

Perform the following arithmetic operations and select from the options lettered A-D, the answer that corresponds to your answer.

46. A businessman had bought new clothing at a department store for his trip to Europe. He has 6 shirts different dress shirts. If he may only choose 4 of 6 shirts how many different combinations of shirts can he make?
- A. 4 C. 18
 B. 15 D. 24
47. The price of a certain stock increased 8 points, then decreased 13 points and then increased 9 points. If the stock price before the change was x points, which of the following was the stock price, in points after the changes
- A. $x-5$ ~~C. $x+4$~~
 B. $x-4$ D. $x+5$
48. Fifteen marbles are placed in a bowl; some are red and all of the others are blue. If the number of red marbles is one more than the number of blue marbles, what is the probability that a marble taken from the bowl is blue?
- ~~A. $\frac{1}{15}$~~ C. $\frac{7}{15}$
 B. $\frac{2}{15}$ D. $\frac{1}{3}$
49. What is the greatest possible value of integer n if $6n$ is less than 10,000?
- A. 5 B. 6 C. 7 D. 8

50. If a and b are distinct integers and $a+b$ and $y=a-b$, then which of the following is equal to $xy+y$, in terms of a and b ?
- A. $2b^2+2ab$ C. $a-b$
 B. a^2-b^2+a-b D. $-a-b$

51. Which of the following is equivalent to $(3a-5)(a+6)$?
- I. $(3a+5)(a-6)$
 II. $5(a+6) + 3a(a+6)$
 III. $3a^2 - 30$
- A. II only C. I and II only
 B. III only D. II and III only

52. In the set below, if the median is equal to the arithmetic mean, what is the value of x ?
- $S = \{1, 2, 3, 3, 4, 5, 6, 7, 7, x\}$
- ~~A. 7~~ C. 5
 B. 6 D. 5.5

53. If x is a positive whole number, for which of the following must y be a negative whole number?
- A. $x-9$ ~~C. $x+2+16$~~
 B. $x+y-7$ D. $x-y-3$

54. $652(523) + 427(652)$ is equal to which of the following?
- A. $523(652+427)$
~~B. $652(523+427)$~~
 C. $(652+427)(523+652)$
 D. $(652+523)(427+652)$

55. Dupe wants to hang three pictures on her wall. She has six paintings to choose from. How many arrangements of pictures on the wall can she create?
- A. 6 C. 90
 B. 30 D. 120

56. What is the length of the longest distance between any two corners in a rectangular box with dimensions 3 inches by 4 inches by 5 inches?
- A. 5 C. $5\sqrt{2}$
 B. 12 D. $12\sqrt{2}$

57. Obama has a 25% chance of winning each hand of blackjack he plays. If he has \$150,000 and bets \$50,000 a hand, what is the probability that he will still have money after the third hand?
- A. $\frac{1}{64}$ C. $\frac{7}{64}$
 B. $\frac{3}{16}$ D. $\frac{37}{64}$

58. $(0.6+0.6+0.6+0.6+0.6) \div 5$ equals which of the following?
- A. $\frac{2}{5}$ C. $\frac{30}{12}$
~~B. $\frac{3}{5}$~~ D. 4

59. If $w = 6 \times 13$, then which of the following is a multiple of w ?

A. 68

B. 69

C. 130

D. 136

60. A triangle has sides 4, 7, and x . Which of the following could be the perimeter of the triangle?

A. 11

B. 14

C. 18

D. 22

PART 2 - SKILLS TEST

Choose **only one out of these options** that fits your area of expertise. **Answer only those 60 questions that fall under the category you have chosen.**

Code No. 1.	Finance & Social Sciences (60 questions)	pg. 5-9
Code No. 2.	General Engineering (60 questions)	pg. 10-13
Code No. 3.	Information Technology (IT) (60 questions)	pg. 14-17
Code No. 4.	Medical (60 questions)	pg. 18-22
Code No. 5.	Science (60 questions)	pg. 23-26

1. FINANCE & SOCIAL SCIENCES

There are 60 questions in this section. Select your answer from the options provided for each question.

Management & Cost Accounting

- A direct cost is a cost which:
 - is incurred as a direct consequence of a decision
 - can be economically identified with the item being costed
 - cannot be economically identified with the item being costed
 - is immediately controllable
- A domestic appliance retailer with multiple outlets stocks a popular toaster known as the Autocrisp 2000, for which the following information is available:

Average sales	75 per day
Maximum sales	95 per day
Minimum sales	50 per day
Lead time	12-18 days
Re order quantity	1750

Based on the above information, at which level of stocks will a replenishment order be issued?
 - 1050
 - 1330
 - 1710
 - 1750
- Which of the following would be classified as indirect labour?
 - Assembly workers in a company manufacturing televisions
 - A stores assistant in a factory store
 - Plasterers in a construction company
 - An audit clerk in a firm of auditors
- The output of a process consists of two joint products, Jointpro A and Jointpro B, and a by-product. Jointpro A could go through a further process in order to increase its sales value. To assist management in making the decision whether to carry out further processing, which ONE of the following is relevant?
 - The share of the total processing cost which has been allocated to Jointpro B.
 - The sales value of Jointpro A and the by-product.
 - The physical quantities of all three products at separation point.
 - The cost of further processing Jointpro B and the increase in sales value that will result.
- When preparing a production budget, the quantity to be produced equals:
 - Sales quantity + opening stock + closing stock
 - Sales quantity - opening stock + closing stock
 - Sales quantity - opening stock - closing stock
 - Sales quantity + opening stock - closing stock

6. In an interlocking accounting system, the profit shown in the financial accounts was N790,252 but the cost accounts showed N740,294 profit.

The following stock valuations were the only differences between the two sets of accounts (accts).

Stock valuations	Cost Accts.	Financial Accts.
Opening stock	N100,116	N90,217
Closing stock	N240,053	X

What was the value of X?

- A. N180,196
 B. N230,154
 C. N240,952
 D. N280,112
7. Which of the following statements are correct with regard to marginal costing?
- (i) Period of costs are costs treated as expenses in the period incurred.
 (ii) Product costs can be identified with goods produced.
 (iii) Unavoidable costs are relevant for decision making.
- A. (i), (ii) & (iii)
 B. (i) & (ii) only
 C. (i) & (iii) only
 D. (ii) & (iii) only
8. The effect of using the last in, first out (LIFO) method of stock valuation rather than the first in, first out (FIFO) method in a period of rising prices is:
- A. to report lower profits and a lower value of closing stock.
 B. to report higher profits and a higher value of closing stock.
 C. to report lower profits and a higher value of closing stock.
 D. to report higher profits and a lower value of closing stock.
9. Which of the following costs are likely to be controllable by the head of the production department?
- (i) Raw materials
 (ii) Electricity used for machinery
 (iii) Share of cost of industrial relations department
 (iv) Direct labour
- A. (i), (ii) & (iii)
 B. (i), (ii) & (iv)
 C. (i), (iii) & (iv)
 D. (ii), (iii) & (iv)

10. At the end of a period, in an integrated cost and financial accounting system, the accounting entries for overhead over absorbed would be:

- A. DR Profit and loss account, CR Work in progress control account
 B. DR Profit and loss account, CR Overhead control account
 C. DR Work-in-progress control account, CR Overhead control account
 D. DR Overhead control account, CR Profit and loss account

11. An engineering firm has surplus capacity and wishes to secure a short term contract to supply components. It has decided to bid for a contract at a cost which will just cover all relevant costs.

Which ONE of the following costs should be included in the calculation of the minimum price it can bid?

- A. The cost of a research project undertaken last year which has resulted in an improved method of manufacturing the components.
 B. The cost of hiring a supervisor to oversee the contract's progress.
 C. The cost of labour which will be transferred to the contract from another production line where it is currently idle.
 D. The depreciating charge on existing machinery owned by the firm which will be used to manufacture the components.

12. Which of the following would be classified as indirect labour?

- A. Assembly workers in a company manufacturing televisions.
 B. A store assistant in a factory store
 C. Plasterers in a construction company
 D. An audit clerk in a firm of auditors.

13. Prime cost is:

- A. All costs incurred in manufacturing a product
 B. The total of direct costs
 C. The material cost of a product
 D. The cost of operating a department.

Economics

14. Above full employment level, an expansionary monetary policy will lead to a:

- A. Fall in aggregated demand
 B. Decrease in aggregate supply
 C. Fall in inflationary rate
 D. Rise in inflationary rate

15. Loans from World Bank to developing countries are mainly to support:
- Capital-intensive technology
 - Development of tertiary education
 - Investment in infrastructure
 - Level of consumption
16. One of the assumptions of ordinal utility in consumer behaviour is that:
- Consumers are irrational
 - Ordinal utility rises continuously
 - Utility is measurable
 - Utility can only be ranked
17. A necessary condition for specialization in an economy is the existence of:
- A regulated market
 - A competitive market
 - A medium of exchange
 - Adequate capital
18. External diseconomies of scale result from excessive growth of:
- The whole market
 - Some sectors of the industry
 - External factors
 - Internal sectors
19. Questions (i) to (iv) below are basic resource allocation questions.
- What and how much will be produced?
 - How will it be produced?
 - For what will it be produced?
 - How much will be exported and consumed?
- Identify the correct combination of questions used in the economic analysis of basic resource allocation.
- | | |
|----------------------|-----------------------|
| A. (i), (ii) & (iii) | C. (i), (iii) & (iv) |
| B. (i), (ii) & (iv) | D. (ii), (iii) & (iv) |
20. Which of the following does NOT represent the behaviour of a monopoly?
- Manipulating the market price of goods.
 - Manipulating both the price and quantity of goods simultaneously.
 - Raising the price at one market, lowering the price at another market.
 - Manipulating only quantity, price being a given factor.
21. When the demand curve shifts to the right, it indicates that a larger quantity is demanded at each price. This is caused by one of the following:
- A fall in income.
 - A raise in the price of complement.
 - A fall in the price of a substitute
 - None of the above
22. When marginal cost equals marginal revenue for a product:
- The firm is producing at a loss.
 - The firm is at break-even point.
 - The firm is making minimum profit
 - The firm is making maximum profit.
23. Which of the following is NOT true of Economics as a discipline
- It is a social science
 - It is analytical
 - It is concerned with human demands
 - It assumes limited human wants
24. Which of the following is NOT a visible item on international trade payments.
- Payment for imported cars
 - Receipts from cocoa exports
 - Payments to foreign shipping companies
 - Payments for steel imports
25. Functions of a commercial bank do NOT include:
- Lending with interest charges
 - Carrying out transactions on behalf of customers
 - Expansion of money supply
 - Printing of currency
26. Foreign exchange rate in a free market economy is determined by:
- The Government
 - The Central Bank
 - Demand and supply
 - Commercial banks
27. One of the objectives of Nigeria's current population policy is to:
- Reduce birth rate
 - Reduce emigration rate
 - Increase birth rate
 - Enhance longevity
- General**
28. A literary work containing information on all branches of knowledge is:
- An encyclopaedia
 - A dictionary
 - A thesaurus
 - The Guinness book of records
29. The ability to freely copy a part of a copyright work for research and private study is known as:
- Free copying
 - Fair copying
 - Legal copying
 - Bonded copying

30. How many Local Government Areas are in Nigeria
 A. 1072 C. 774
 B. 952 D. 251
31. Which of the following is NOT a Nigerian writer
 A. Helon Habila
 B. John Pepper Clark
 C. Ben Okri
 D. None of the above
32. ATM stands for:
 A. Automated teller machine
 B. Automatic transmission machine
 C. Auto tele machine
 D. Automated transmission medium
33. The Nobel Prize for literature is awarded:
 A. Quarterly
 B. Every 2 years
 C. Bi-annually
 D. Annually
34. The Library of Congress call mark is mixed because it uses:
 A. Letters of the alphabet
 B. Figures
 C. Letters and figures
 D. Roman numerals
38. According to Fiedler, the effectiveness of a work group depended on the situation made up of some key variables
 A. leader-member relations
 B. task structure
 C. leader's position power
 D. a, b, and c
39. The most valuable attribute of a leader is
 A. enterprise
 B. exuberance
 C. integrity
 D. Ambition
40. 360° performance appraisal means
 A. appraisal by superiors
 B. appraisal by subordinates
 C. appraisal by peers
 D. all of the above
41. Of all the resources available to the management of an organization which is unpredictable and uncontrollable
 A. Materials
 B. Man
 C. Machine
 D. Money

Humanities

35. Content theories of motivation explain
 A. what factors give employees feelings of contentment at work
 B. what factors motivate employees towards better performance
 C. what factors dictate the content of jobs to be performed by employees
 D. how employees are motivated at work
36. Theory X and Theory Y assumptions about human nature were propounded by
 A. David McClelland
 B. Hersey and Blanchard
 C. Charles Handy
 D. Douglas McGregor
37. The term 'valence' used in the expectancy theory refers to
 A. the strength of an individual's motivation to do something
 B. the strength of an individual's willingness to take risks
 C. the strength of an individual's preference for a particular outcome
 D. the strength of an individual's expectation that effort will lead to success
42. The ERG theory was the idea of
 A. J.S. Adams
 B. Abraham Maslow
 C. Peters and Waterman
 D. Clayton Alderfer
43. The Ashridge model of leadership identified the following styles except
 A. tells
 B. sells
 C. consults
 D. Exploits
44. Job Satisfaction is
 A. salary and fringe benefits
 B. being promoted every year
 C. having good rapport with one's boss
 D. how content one is in a job
45. The following are performance appraisal techniques except
 A. graphic rating scale method
 B. rank order method
 C. paired comparison method
 D. choice rating method

46. Which of the following describes a Theory Y manager?
- employees dislike work
 - employees prefer to be directed
 - employees want job security above all
 - employees are motivated by work
47. The following according to Herzberg, are all motivational except
- Working conditions
 - Responsibility
 - Achievement
 - Recognition
48. Discipline is a condition in which:
- There is orderliness
 - Employees behave sensibly
 - Employees conduct themselves according to standards of acceptable behavior
 - All of the above
49. The number of subordinates a manager can effectively supervise and control is called
- unity of command
 - span of control
 - centralization
 - Decentralization
50. Order and predictability are examples of which needs according to Abraham Maslow
- physiological
 - security/safety
 - social
 - self-actualization

Marketing

51. The marketing mix elements for services does not include
- service
 - product
 - processes
 - physical evidence
52. The process of facilitating exchanges beneficially is
- Selling
 - marketing
 - personal selling
 - promotional selling
53. Which marketing mix elements deals with product distribution?
- price
 - product
 - promotion
 - place
54. The following except one are "new product" qualities
- adequate demand
 - long-run profitability to the firm
 - reasonable cost of production
 - bias
55. Which is an element of the promotion mix
- sales promotion
 - channeling
 - skimming
 - price penetration
56. The sales of a product begins to rise steadily at which stage
- maturity
 - growth
 - growing
 - advertising
57. The chain of distribution is not complete until it get to the
- final consumer
 - retailer
 - agent
 - producer
58. The task of grouping consumers according to their buying habits is known as market
- diversification
 - development
 - expansion
 - segmentation
59. New products fail because of all, except one of the following
- fierce competition
 - poor research
 - poor planning
 - personal
60. B-O-G-O-F (i.e. Buy One, Get One Free) is termed
- sales promotion
 - raffle
 - advertisement
 - GSM Coinage

END
OF
FINANCE & SOCIAL SCIENCES
SKILLS TEST

2. GENERAL ENGINEERING

There are 60 questions in this section. Select your answer from the options provided for each question.

General Knowledge

- Which of the following substances is a polymer of isoprene?
A. Bakelite C. Thiokol
 B. Natural rubber D. Melamine
- Which of the following natural directions of energy transformation are correct?
 - Heat energy to mechanical energy
 - Mechanical energy to heat energy
 - Heat energy to electrical energy
 - Electrical energy to heat energyA. 1 and 2 C. 1 and 4
B. 1 and 3 D. 2 and 4
- Uranium is a naturally occurring radioactive element which emits alpha particles and is converted into
A. Radium C. Actinium
B. Thorium D. Plutonium
- In the visible spectrum, the colour having the shortest wavelength is
A. Red C. Blue
B. Yellow D. Violet
- Which of the following components of solar radiation cause sunburn?
A. Infra – red C. Visible radiation
 B. Ultraviolet D. Both (a) & (b)
- Which mirror is used as rear view mirror in vehicles?
A. Inverted
B. Plane
C. Concave
 D. Convex
- Optical fiber works on the principle of
A. Refraction
B. Scattering
C. Interference
D. Total internal reflection
- In a car, radiator and fan are used to cool the engine. The heat transfer modes involved are
 A. Conduction and convection
B. Convection and radiation
C. Conduction and radiation
D. Conduction, convection and radiation

- If the length of the filament in an electric bulb is reduced, the latter will glow with intensity that is
A. Low C. More
B. Medium D. Normal as in original
- Which of the following groups contains only natural fuels?
 A. Petrol, diesel, natural gas
B. Petroleum, wood, coke
C. Coal, charcoal, wood
D. Coal, wood, petroleum

Physics

- A body of mass m moving with velocity u collides with a stationary body of mass $2m$. The speed of the system after collision, is
A. $3u$ B. $u/3$ C. $2u$ D. $u/4$
- An earth satellites S has an orbit radius which is 4 times that of communication satellite C. The period of revolution of S will be:
A. 32 days B. 18 days C. 8 days D. 9 days
- An object of mass 40 kg and having a velocity 4 m/s collides with another object ($m=60$ kg) having velocity 2 m/s. The collision is perfectly inelastic. The loss in energy is
A. 110 J B. 48 J C. 392 J D. 440 J
- Dimensions of surface tension are:
A. $[M^2L^2T^2]$ C. $[Mt^2]$ *MT⁻²*
B. $[M^2LT^2]$ D. $[MLT^2]$
- 16 cm³ of water flows per second through a capillary tube of radius a cm and of length l and when connected a pressure head of H cm of water. If a tube of same length and radius $a/2$ cm is connected to the same pressure head the quantity of water flowing through the tube per second is
A. 8cm³
B. 1cm³
C. 16 cm³
D. 4 cm³
- Pressure inside two soap bubbles are 1.01 and 1.03 atm. Ratio between their volumes is:
A. 27:1
B. 3:1
C. 127:101
 D. None of these

17. The root mean square velocity of the molecules in a sample of helium is $\frac{5}{7}$ th that of the molecules in a sample of hydrogen at 0°C . Then, the temperature of the helium sample is about:
A. 100°C B. 273°C C. OK D. 0°C
18. The heat generated in a circuit is dependent upon the resistance, current and time for which the current is flown. If the error in measuring the above are 1%, 2% and 1% respectively. The maximum error in measuring the heat is
A. 8% C. 18%
B. 6% D. 12%
19. A refracting angle of a prism is A and the refractive index of the prism is $\cot(A/2)$. Then, angle of minimum deviation is:
(a) $180^\circ - 2A$
(b) $90^\circ - A$
(c) $180^\circ + 2A$
(d) $180^\circ - 3A$
20. In an atom bomb the reaction which occurs is:
A. Thermo nuclear C. Controlled fission
B. Uncontrolled fission D. Fusion

General Engineering

21. Which one of the following physical quantities, is not defined in the terms of force per unit area:
A. pressure C. Stress
B. Strain D. Young's modulus
22. The distance moved by a moving body is equal to:
A. Area between the distance-time graph and distance axis
B. area between the speed-time graph and time axis
C. area between the distance-time graph and time axis
D. area between the speed-time graph and distance axis.
23. A near sighted person cannot see distinctly beyond 50 cm. from his eye. The power in diopter of spectacle lenses which will enable him to see distant objects clearly is:
A. +50 B. - 50 C. +2 D. - 2
24. For the same kinetic energy, the momentum shall be maximum for:
A. Electron B. Proton
C. Deuteron D. alpha particle
25. The common balance works on the principle of equality of:
A. Forces C. masses
B. moments of forces D. masses of pans
26. Size of a nucleus is of the order of?
A. 10-18m C. 10-10m
B. 10-14m D. 10-6m
27. A fixed volume of gas at 27°C exerts a pressure of 750 mm. If the gas is heated to a pressure of 1500mm., temperature must be:
A. 600°C B. 327°C
C. 54°C D. 13.5°C
28. A jet engine works on the principle of:
A. conservation of energy
B. conservation of momentum
C. conservation of mass
D. conservation of temperature
29. A man carries a heavy box on his head on a horizontal plane from one place to another. In this he does?
A. maximum work C. negative work
B. no work D. Minimum work
30. A device for measuring temperatures at a distance is
A. gas thermometer
B. mercury thermometer
C. Radiation
D. maximum-minimum thermometer
31. A radioactive source has a half-life of 30 days. During a period of 90 days the fraction of atoms that have decayed would be
A. 100% C. 64%
B. 87.5% D. 50%
32. A black body emits:
A. radiations of all wavelengths
B. no radiations
C. radiations of only one wavelength
D. radiations of selected wavelengths
33. In isothermal expansion of an ideal gas:
A. heat content remains constant
B. temperature remains constant
C. both heat content and temperature remain constant
D. Pressure and temperature of the gas remain constant
34. A man standing between two cliffs hears the first echo of a sound after 2 sec. and the second echo 3 sec. after the initial sound. If the speed of sound be 330 m/sec. the distance between the two cliffs should be
A. 1650 m. B. 990 m.
C. 825 m D. 660 m.

35. In a resonance tube experiment the first resonance is obtained for 10 cm. of air column and the second for 32 cm. The end correction for this apparatus is equal to?
A. 0.5 cm B. 1.0 cm C. 1.5 cm D. 2 cm
36. The ratio of the specific heat of air at constant pressure to its specific heat at constant volume is?
A. zero C. less than one
B. greater than one D. equal to one
37. A convex lens has a focal length of 10 cm. When it is immersed in water it will behave as?
A. a convex lens of 10 cm. focal length
B. a concave lens of 10 cm. focal length
C. a convex lens of focal length greater than 10cm.
D. A convex lens of focal length less than 10 cm.
38. Two particles having charges q_1 and q_2 when kept at a certain distance exert a force F on each other. If the distance between the two particles is reduced to half and the charge on each particle is doubled the force between the particles would be?
A. $2F$ B. $4F$ C. $8F$ D. $16F$
39. A hollow metallic sphere is charged. Inside the sphere?
A. the potential is zero but the electric field is finite
B. the electric field is zero but the potential is finite
C. both the electric field and the potential are finite
D. both the electric field and the potential are zero
40. Two electric lamps each of 100 watts 220V are connected in series to a supply of 220 volts. The power consumed would be:
A. 100 Watts B. 200 Watts
C. 25 Watts D. 50 Watts
41. A transformer is:
A. a device for stepping up D.C.
B. a generator of current
C. device for converting direct current into alternating current
D. A device for stepping up or down the voltage of A.C. Supply
42. Transistor act as a?
A. Conductor C. Insulator
B. Semi-conductor D. thermionic valve
43. The electric field inside a hollow conducting sphere will ?
A. increases towards the centre
B. decreases towards the centre
C. is finite and constant throughout
D. is zero
44. Imperfect gases are those:
A. which contain impurities
B. which do not obey Charle's and Boyle's laws
C. whose molecules are not spherical
D. whose molecules cannot be regarded as point masses
45. Cyclotron is a device to produce:
A. atomic energy
B. high energy electrons
C. high energy photons
D. High energy protons
46. Which one of the following is not a vector?
A. Velocity C. Force
B. Acceleration D. Energy
47. Two steel balls of mass 1 kg and 2kg and a lead ball of 10kg are released together from the top of tower 30 metres high. Assuming the path to be in vacuum
A. the lead ball reaches the ground earlier
B. the 1 kg steel ball reaches the ground earlier
C. all the balls reach the ground simultaneously
D. the 2 kg steel ball reaches the ground earlier
48. After a watch has been wound, it?
A. has great energy stored in it
B. possesses mechanical potential energy stored in it
C. has electrical energy stored in it
D. has no energy in it
49. When white light passes through a glass prism, we get a spectrum on the other side of the prism. In the emergent beam the ray which is deviated least is:
A. the violet ray C. the green ray
B. the red ray D. the yellow ray
50. Find the total current supplied to the lamp rated 100W, when supply voltage is 200V.
A. 1.75A B. 2A C. 0.5A D. 1A
51. The power factor of a inductive circuit is
A. Lagging C. Zero lagging
B. Leading D. Unity

**END
OF
GENERAL ENGINEERING
SKILLS TEST**

52. For dynamo which one of the following statements is correct ?
- A. It converts the electrical energy into light energy
 - B. It converts the kinetic energy into heat energy
 - C. It converts the mechanical energy into electrical energy
 - D. It converts the electrical energy into mechanical energy.
53. In a transformer the immediate cause of the induced A. C. in the secondary coil is?
- A. a varying electric field
 - B. a varying magnetic field
 - C. a motion of the secondary coil
 - D. efficiency of the operator
54. A dynamo actually acts as a?
- A. converter of energy
 - B. source of electric charge
 - C. source of magnetic charge
 - D. source of energy
55. Find the total resistance when two 3 Ohm resistances are connected in parallel.
- A. 1.11 ohms
 - B. 1.5 ohms
 - C. 0.707 ohms
 - D. 1.23 ohms
56. The amplitude of current of full wave rectified sinusoidal wave is 80 A, its average value will be:
- A. 25.44A
 - B. 80A
 - C. 40A
 - D. 56.56A
57. In a parallel resistance circuit
- A. Power is same in all resistance
 - B. Current is same in all resistance
 - C. Voltage is same in all resistance
 - D. Resistances are same
58. Ohm's law for electric circuit will be
- A. $emf = \text{current} / \text{resistance}$
 - B. $emf = \text{current} \times \text{resistance}$
 - C. $emf = \text{resistance} / \text{current}$
 - D. $emf = 1 / (\text{resistance} \times \text{current})$
59. Two plane mirrors are set at right angles and a flower is placed in any position in between the mirrors. The number of images of the flower which will be seen is?
- A. One
 - B. Two
 - C. Three
 - D. four
60. In which of the following cases total internal reflection cannot be obtained?
- A. ray going from water to glass
 - B. a ray going from glass to water
 - C. a ray going from glass to air
 - D. a ray going from water to air

3. INFORMATION TECHNOLOGY (IT)

There are 60 questions in this section. Select your answer from the options provided for each question.

- Who in 1946 pioneered computer programming?
 - Blaise Pascal
 - Charles Babbage
 - George Boole
 - John von Newman
- A typical machine language is
 - Set A to B
 - 0000010000010111
 - A=B
 - 2222212222212111
- The on and off states of a solid state electronic switch enable computer to use?
 - Terminal
 - Print
 - Pascaline
 - Boolean Algebra
- Assembly and Machine languages are what level languages
 - High-level languages
 - Mid high-level languages
 - Low-level languages
 - Mid low-level languages
- The maximum number of nodes per segment depends on what?
 - Bandwidth
 - Desired throughput
 - Regeneration ability
 - Attenuation
- Information can be transmitted via how much signaling method(s?)
 - One
 - Two
 - Four
 - Five
- IEEE designates Thicknet as what kind of Ethernet?
 - 10Base5
 - 10BaseT
 - 10Base10
 - 10Base2
- Vertical connectors between floors are known as what?
 - Spans
 - Riser
 - Lift
 - Variance
- Which of the following is NOT a type of motherboard expansion slot?
 - ISA
 - PCI
 - AGP
 - ATX
- Which of the following retains the information it's storing when the power to the system is turned off?
 - CPU
 - ROM
 - RAM
 - DRAM
- The acronym BIOS means?
 - Bootstrap initial operating system
 - Basic input output startup
 - Boot initial operating startup
 - Basic input output system
- Which of the following is NOT a type of RAM?
 - SIMM
 - DIMM
 - ROM
 - SLIPP
- What does FDISK do?
 - Performs low-level formatting of the hard drive
 - Fixes bad sectors on the hard drive
 - Recovers lost clusters on the hard drive
 - Creates partitions on the hard drive
- Computers today are very different to first-generation computers. Which of these statements is true of computers as they evolve?
 - They become more robust
 - They become less powerful
 - They become more expensive
 - They become more proprietary
- To compute means?
 - Input data into computer
 - Export data from computer
 - Generate data for consumers
 - Process data into information
- Computer systems consist of
 - Networking
 - Servers
 - Hardware and software
 - Visual Basic and Java
- The following are the most common software packages used today except one.
 - Word processors
 - Spreadsheets
 - Database managers
 - Keyboard

18. Which of these is true about a central processing unit?
- Controls memory
 - Executes data
 - Performs illogical operations
 - Stops arithmetic operations
19. An example of a 4GLs used in computer programming is?
- Pascal
 - C
 - Basic
 - SQL
20. "MOV A,3" is a code example to set the value of a variable called "A" equal to "3". What language type is it?
- Machine language
 - Assembly language
 - 3GLs
 - High-level language
21. What are the four key functions of a computer system?
- input, processing, output, and storage
 - keyboard, display, memory, and disk drive
 - word processing, spreadsheets, database, and contact management
 - read, write, calculate, and display
22. A problem with parity error indicates a problem with what?
- hard drive
 - I/O Controller
 - power supply
 - memory
23. WAN stands for?
- Wide Area Network
 - World Area Network
 - Wide Artificial Network
 - Wide Access Network
24. CD-ROMs typically hold how many megabytes?
- 500
 - 1000
 - 300
 - 750
25. The maximum segment length on a 10BaseT network is?
- 10 meters
 - 50 meters
 - 100 - meters
 - 1000 meters
26. Which of the following cannot support full-duplexing?
- 100BaseT4
 - 10BaseT
 - 100BaseTX
 - 10BaseTX
27. Which of these is not an example of transmission media?
- Wire
 - Coaxial cable
 - Radio wave
 - None of the above
28. Mail services require a significant commitment of technical support and administration and resources due to one of the following reasons.
- Instability
 - Access ability
 - Routing capability
 - Heavy use
29. Fourth generation languages are mostly used for what purposes?
- Procedural development
 - Accessing databases
 - Development of step by step instructions
 - Modular design
30. Which of these is not an example of object oriented programming language?
- Smalltalk
 - Java
 - C++
 - C
31. At what phase of the software life cycle is the program is run and checked.
- Coding
 - Design
 - Testing
 - Maintenance
32. Which of these options do you think a programmer can use to make a program more maintainable?
- Codes
 - Comments within code
 - Code bookmarks
 - Numerical code
33. Which of these options is true about a terminal?
- It is a screen with a keyboard
 - It has processing power
 - It is a screen with a mouse and mouse pad only
 - It is the screen only
34. A computer that is optimized to provide services to other computers over a network is known as a.....?
- Local Area Network
 - Personal Computer
 - Workstation
 - Server
35. Which of the following statements about mainframe computers are true?
- They are inexpensive
 - They are small and robust
 - They support many users at the same time
 - They run only one program at a time
36. An organization that share devices, saves what?
- Money
 - Time
 - Space
 - All of the above

37. Why has no computer passed the Turing test to date?
- Computers cannot answer questions grammatically
 - Computers cannot perform unpredictable tasks as well as humans
 - Computers do not have enough processing power
 - Computers cannot retrieve information quickly enough
38. When programs contain hundreds or more lines of code, which of the following will significantly affect readability.
- Codes
 - Code bookmarks
 - Numerical codes
 - Indentation
39. A good program should possess the following features except for one
- Efficiency
 - Maintainability
 - Robustness
 - Small size
40. Your system continuously reboots itself. Which of the following could be the problem?
- Bad system board
 - Bad Power Supply
 - Faulty Adapter Card
 - All of the above
41. Your system boots up but you don't hear a beep, which part of the computer should you check first?
- RAM
 - System Board
 - CPU
 - Speaker
42. What type of interface has the fastest data transfer?
- Parallel
 - Serial
 - DirectCPU Bus
 - SCSI
43. Your system continuously reboots itself. Which of the following could be the problem?
- Bad system board
 - Bad Power Supply
 - Faulty Adapter Card
 - All of the above
44. The following are input devices except:
- Keyboard
 - Scanner
 - Printer
 - Light pen
45. Who codes the design of a program?
- System analysts
 - Programmers
 - Programmer analyst
 - Managers
46. To simplify software development, what series of logical steps are followed?
- Language
 - Machine language
 - Software life cycle
 - Code
47. How many steps are involved in writing a program?
- 7
 - 8
 - 6
 - 2
48. How many layers are in the OSI model?
- 5
 - 7
 - 6
 - 8
49. Which device act as a traffic cop?
- Router
 - Hub
 - Switch
 - Modem
50. What is SMTP?
- Simple Mailer transport protocol
 - Simple mail transport protocol
 - Single Mail transport protocol
 - Simple mailer transport protocol
51. What is a computer you are controlling or working on via a network called?
- remote computer
 - local computer
 - standalone computer
 - host computer
52. Software applications that allow programmers to type the text for programs into a computer is known as?
- Excel
 - Editors
 - Database applications
 - Processes
53. Which of the following formats do you think should be used to save code created in a word processor?
- Word
 - Rich text
 - Text only (ASCII)
 - Excel
54. What allows only one line of code to be edited at a time?
- Word
 - PDF
 - Line editors
 - Full-Screen editors

END
OF
INFORMATION
TECHNOLOGY (IT)
SKILLS TEST

55. What does a compiler do?
- A. It creates executable binary code
 - B. It enables you to write source code
 - C. It links object modules
 - D. It translates source code into object code
56. In writing a program, how many types of errors are there in a source code?
- A. 3 B. 2 C. 5 D. 6
57. A network of computers and other devices that is confined to a relatively small space is called?
- A. Global network
 - B. Local area network
 - C. Peer-to-Peer network
 - D. Metropolitan network
58. What layer of OSI does the encryption/decryption?
- A. Network layer
 - B. Presentation layer
 - C. Application layer
 - D. Data Link layer
59. E-mail use communication protocol.
- A. SMTP B. HTTP C. ICMP D. TCP/IP
60. For whose benefit are comments written into the program code?
- A. The programmer
 - B. The system analyst
 - C. The vendor of the program
 - D. The end-use of the program

4. MEDICAL

There are 60 questions in this section. Select your answer from the options provided for each question.

General Science

- All living things contain which element?
A. Helium C. Copper
B. Sodium D. Carbon
- Which of the following is matched with its correct function?
A. Ovulen - Production of pollen
B. Vascular Cambium - Formation of apical meristem
C. Xylem - Transport of sugars
D. Guard cell - Regulation of transpiration rate
- The following are excretory materials except
A. Sweat C. Carbon dioxide
B. Faeces D. Urine
- Which of the following gases do plants use in photosynthesis?
A. Hydrogen C. carbon dioxide
B. Oxygen D. carbon monoxide
- Which best describes the role of the esophagus in digestion?
A. It releases acid and mixes food.
B. It aids in absorption of nutrients from food.
C. It carries food from the mouth to the stomach.
D. It carries food from the stomach to the intestines.
- Which of the following elements is a metal?
A. S B. Se C. I D. Ga
- How many moles of HCl must be added to sufficient water to form 3 litres of a 2M HCl solution?
A. 1 mol B. 2 mol C. 3 mol D. 6 mol
- When a gas turns into liquid, the process is called
A. Condensation C. Deposition
B. Evaporation D. Sublimation
- What is most suitable for separating brine into its constituents
A. Magnet C. Hot Plate
B. Funnel D. Chamberlain's Filter
- Which of the following organelles use Carbon dioxide to produce sugars?
A. Mitochondria

- Chloroplasts
- Endoplasmic Reticulum
- Chlorophyll

General Biological Science

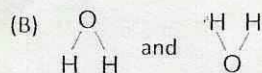
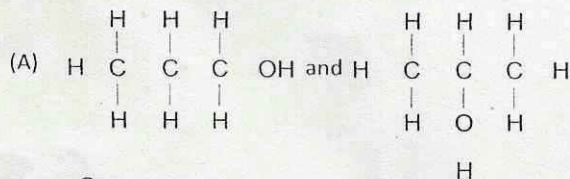
- Which of the following is a true statement about the flow of energy in an ecosystem?
A. Smaller organisms need less energy per gram of body weight than do larger organisms.
B. Energy transfer between organisms normally involves conservation of heat energy.
C. Energy transfer between trophic levels is inefficient.
D. Chemical energy is converted into radiant energy which is then converted to chemical energy at the next trophic level.
- Which of the following cell types is formed by Meiosis?
A. Sperm cells
B. Rhabdomyocytes
C. Endothelia
D. Osteocytes
- When contracted, the left ventricle pumps oxygenated blood to the body. What is the purpose of the aortic valve that separates the left ventricle from the aorta?
A. to prevent blood from flowing back into the left ventricle
B. to prevent blood from flowing into the aorta
C. to push blood into the left ventricle
D. to push blood into the aorta
- All veins carry de-oxygenated blood EXCEPT
A. Pudendal vein
B. Coccygeal vein
C. Hypothalamo-hypophyseal vein
D. Pulmonary vein
- Which of the following structures is present in the roots of vascular plants but NOT in stems?
A. Cambium C. Xylem
B. Pericycle D. Cortex
- Which of the following structures is not found in bacteria?
A. Ribosome
B. cytoplasm
C. Cell membrane
D. nuclear membrane

17. Which of the following best describes the pathway of a protein from its manufacture to its release from the cell?
- Endoplasmic reticulum Golgi complex secretory vesicle
 - Secretory vesicle endoplasmic reticulum Golgi complex
 - Secretory vesicle Golgi complex endoplasmic reticulum
 - Golgi complex endoplasmic reticulum Secretory vesicle
18. How do nutrients, absorbed by the small intestine, travel to the individual cells of the human body?
- The nutrients are absorbed from the small intestine into the blood and move through the circulatory system to the body cells.
 - The nutrients move from the small intestine directly to the liver and then move through the lymphatic system to the body cells.
 - The small intestine forces the nutrients into the kidneys, where the nutrients are then dissolved in fluids used by the body cells.
 - The body cells send nerve impulses indicating a lack of nutrients to the small intestine, and the small intestine sends the nutrients back to the cells.
19. Which of the following cellular processes normally produces ATP from glucose in the absence of oxygen?
- Krebs cycle
 - Glycolysis
 - Chemiosmosis
 - Calvin cycle
20. Which of the following mechanisms can best account for the higher concentrations of mineral nutrients in the root cells of vascular plants than in the surrounding soil environment?
- Osmosis
 - Diffusion
 - Facilitated diffusion
 - Active transport
21. A person touches a hot object and immediately moves her finger away from it. Which of the following structures is the first to receive an impulse triggered by the stimulus?
- Synapse
 - Ventral root ganglion
 - Motor neuron
 - Sensory neuron
22. The plasma membrane of a cell consists of
- protein molecules arranged in two layers with polar areas forming the outside of the membrane.
 - Two layers of lipids organized with the non-polar tails forming the interior of the membrane.
 - lipid molecules positioned between two carbohydrate layers.
 - protein molecules with polar and non-polar tails
23. The movement of water upward in xylem vessels of trees is most directly related to which of the following:
- Wall pressure
 - Turgor pressure
 - Transpiration
 - Cytoplasmic streaming

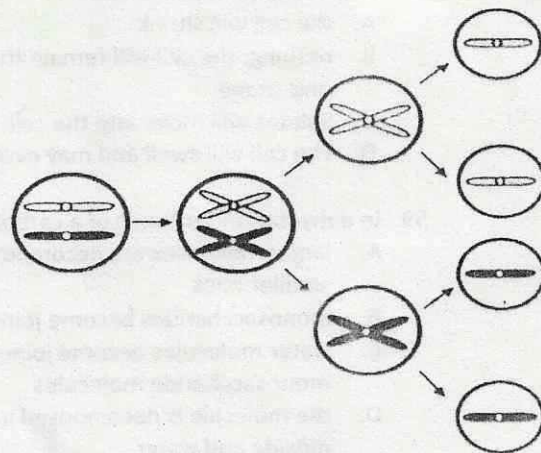
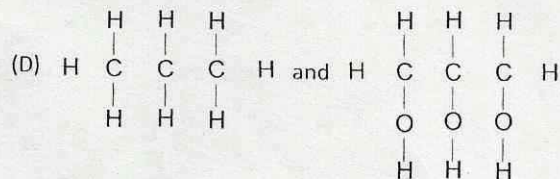
Anatomy And Physiology

24. Which of the following best illustrates the idea of increasing levels of complexity?
- organelles, cells, tissues, organs, systems
 - tissues, cells, organs, organelles, systems
 - organs, organelles, systems, cells, tissues
 - cells, tissues, organelles, organs, systems
25. Which of the following organs is located in the abdominopelvic cavity?
- the heart
 - the trachea
 - the thyroid gland
 - the large intestine
26. Which of the following is the appropriate description for the membrane covering an abdominal organ?
- parietal peritoneum
 - visceral pericardium
 - visceral peritoneum
 - Parietal pleura
27. Homeostasis is regulated primarily by:
- Negative feedback
 - Positive feedback
 - No feedback loop
 - Negative pressure
28. Which TWO cavities are included in the dorsal cavity?
- spinal and cranial
 - abdominal and pelvic
 - abdominopelvic and thoracic
 - Pelvic and mediastinum
29. The abdominopelvic cavity lies where in relationship to the thoracic cavity?
- Dorsal (posterior)
 - Ventral (anterior)
 - Superior
 - Inferior

30. Which pertains to antibiotics?
- Chemicals produced by one microorganism that inhibits other microorganisms
 - Can only interfere with cell wall synthesis of the pathogen
 - Completely synthesized in the laboratory
 - Always has toxic side-effects for the patient
31. Which does not pertain to broad-spectrum drugs?
- Often used when the pathogen has not been identified
 - Can also kill or inhibit the patient's normal flora
 - Include oral penicillin and tetracycline
 - Can only kill Gram+ bacteria
32. Which of the following is not true of both natural penicillins and first generation cephalosporins?
- Contain a beta-lactam ring
 - Come from molds
 - Damage bacterial cytoplasmic membranes
 - Easily modified
33. Sulfonamides can best be described as:
- Antimetabolites
 - Antiviral agents
 - Containing a beta-lactam ring
 - Aminoglycosides
34. If you were asked to sterilize a heat sensitive item which of the following would be most suitable?
- Steam autoclave
 - Pasteurization
 - Ethylene oxide
 - Ethyl alcohol
35. A useful method or compound for sterilizing foods such as fresh vegetables:
- Ionizing radiation
 - Ultraviolet light
 - Steam autoclave
 - Phenols
36. Which of the following is commonly used to prepare incision sites for surgery and as a surgical scrub?
- Ethyl alcohol
 - Hydrogen peroxide
 - Iodophor
 - Glutaraldehyde
37. The chemical in bleach responsible for antimicrobial activity:
- Iodine
 - Phenol
 - Chlorine
 - Zinc
38. What was one of the first and most useful microscopic tests for classifying bacteria that is still important today?
- Gram stain
 - Flagella stains
 - Simple stains
 - Negative stain for capsule
39. Which of the following epithelial tissue types is matched with its correct location?
- simple columnar epithelium : air sacs of lungs
 - transitional epithelium : epidermis of skin
 - pseudostratified columnar epithelium : walls of capillaries
 - none of the above
40. Which of the following is classified as connective tissue?
- Bone
 - Blood
 - Adipose
 - All of the above
41. Which of the following is not a characteristic of most enzymes?
- They speed up the rate of chemical reactions
 - They are all proteins
 - They are most active at temperatures about 53°C
 - Their activity depends on pH
42. Tendons and ligaments are likely to be slow in healing following an injury because:
- The fibroblast cells in tendons and ligaments cannot reproduce
 - There are few blood vessels due to the dense nature of the collagen
 - The fibroblast cells are surrounded by an intercellular matrix
 - Elastic fibers are made very slowly
43. Connective tissue fibers are produced by:
- fibroblasts
 - macrophages
 - mast cells
 - all of the above
44. A carcinoma is a cancer arising from the
- Epithelium
 - connective tissue
 - muscle tissue
 - nervous tissue
45. A fibroblast would be found in:
- Epithelial tissue
 - Connective tissue
 - Muscular tissue
 - Nervous tissue
46. The enzyme catalase acts on the substrate:
- Oxygen
 - Hydrogen
 - hydrogen peroxide
 - peroxidase



(C) NaCl and KCl



48. The chemical in bleach responsible for antimicrobial activity:
- A. Iodine C. Chlorine
B. Phenol D. Zinc
49. Which of the following is not a catabolic process?
- A. The formation of glycerol and fatty acids from triglycerides
B. The formation of glucose from glycogen
C. The formation of proteins from amino acids
D. The formation of monosaccharides (simple sugars) from complex carbohydrates
50. Dehydration synthesis reactions involve _____, whereas hydrolysis reactions involve _____.
- A. loss of H₂O to form bonds; influx of H₂O to break bonds
B. breaking large molecules into smaller ones; building large molecules from smaller ones
C. forming H₂O by joining H and O atoms; breaking H₂O molecules apart
D. loss of energy; gain of energy
51. The cells that form the inner lining of the respiratory passages are:
- A. ciliated
B. mucus-secreting
C. Pseudostratified
D. all of the above
52. Connective tissue fibers are produced by:
- A. Fibroblasts
B. Macrophages
C. mast cells
D. all of the above
53. The above diagram represents a process which occurs in mammalian cells. This process is called:
- A. Mitosis
B. Phagocytosis
C. Meiosis
D. Endocytosis
54. Which of the following is not a characteristic of nervous tissue?
- A. It is found in the brain, spinal cord, and peripheral nerves
B. Its intercellular space is filled with collagen.
C. It functions to gather, integrate, and transmit information.
D. The cells of nervous tissue can be extremely long.
55. Tendons and ligaments are likely to be slow in healing following an injury because:
- A. The fibroblast cells in tendons and ligaments cannot reproduce
B. There are few blood vessels due to the dense nature of the collagen
C. The fibroblast cells are surrounded by an intercellular matrix
D. Elastic fibers are made very slowly
56. A carcinoma is a cancer arising from the:
- A. Epithelium
B. connective tissue
C. muscle tissue
D. nervous tissue
57. The maximum magnification that we can achieve with our light microscopes in lab is:
- A. 10x
B. 100x
C. 45x
D. 450x

58. What occurs if a red blood cell is placed in a hypotonic solution?
- A. the cell will shrink
 - B. nothing; the cell will remain the same size and shape
 - C. Solutes will move into the cell.
 - D. The cell will swell and may eventually burst.
59. In dehydration synthesis of a carbohydrate,
- A. larger molecules are decomposed into smaller ones
 - B. monosaccharides become joined together
 - C. water molecules become joined into monosaccharide molecules
 - D. the molecule is decomposed into carbon dioxide and water.
60. Anabolism is important in the body for:
- A. release of energy
 - B. digestion of food products
 - C. growth of body parts
 - D. Neutralization of acids by buffers

END
OF
MEDICAL
SKILLS TEST

General Sciences

- Sugar syrup is used for the preservation of fruits because it
 - mixes well with the fruits
 - kills the micro-organisms present in them
 - drains moisture to inhibit growth of micro-organisms
 - helps to improve their taste and flavor
- Without burning paper, water can be boiled in a paper cup because
 - water is a good conductor of heat with high specific heat
 - paper is a bad conductor of heat
 - ignition temperature of paper is more than boiling point of water.
 - heat capacity of paper is less than that of water.
- If you float on your back, on water, your weight will be
 - less than the weight of water displaced by you
 - Zero
 - half of your normal weight
 - equal to your normal weight)
- The ozone layer in the upper part of the atmosphere protects us from
 - visible radiations
 - infra- red rays
 - ultraviolet radiations
 - cosmic rays
- Which of the following contains cobalt?
 - Vitamin B12
 - Vitamin K
 - Chlorophyll
 - Hemoglobin
- A person feels difficulty in breathing on entering into an underground storage of wheat grains. This is likely due to the increased concentration of
 - Moisture
 - N₂
 - Co₂
 - floating dust particles
- Which of the following is source of a non-conventional energy?
 - Coal
 - Oil
 - Biogas
 - None of these
- Which of the following is a correct description of the use of Tetracycline?
 - It is a pest killer.
 - It is a preservative.
 - It is used for air purification.
 - It is known as anti-plague drug
- White coal is
 - Uranium
 - Ice
 - Hydro-electricity
 - diamond
- Sun's heat reaches earth by which of the following modes of heat transmission?
 - Conduction
 - Convection
 - Radiation
 - Heat exchange
- A healthy man consumes maximum calories while playing
 - Golf
 - table tennis
 - Football
 - billiards
- A substance which can act both as an acid and a base is known as
 - Amorphous
 - Allotropic
 - Amphoteric
 - None of these
- Under similar conditions of pressure and temperature, the density of humid air is
 - less than that of dry air
 - more than that of dry air
 - equal to that of dry air
 - more than or less than that of dry air depending on temperature
- Which of the following statements regarding cellulose are correct?
 - It is a naturally occurring organic substance found in plants.
 - It is used for making rayon.
 - It consists of long unbranched chain of glucose units.
 - 1 and 2
 - 2 and 3
 - 1 and 3
 - 1, 2 and 3
- The minimum possible temperature beyond which matter cannot be cooled is
 - 98-5
 - 100°C
 - 273 °C
 - 4695°C
- Rennin and lactase, the enzymes required to digest milk, disappear in the human body by the age of
 - Two
 - Three
 - Five
 - eight

EGOC

RECRUITMENT ASSESSMENT TEST

17. Which of the following is a correct description of 'tissue culture'?
- Conservation of forests and plantation
 - Growth and propagation of horticultural crops
 - Science of cultivating animal tissue in artificial medium
 - Protection of wild animals
18. The chief ingredient of the mosquito repellent cream is derived from
- Lemon
 - Tulsi
 - Neem
 - Rice bran
18. Fertility of soil can be improved by
- adding dead earthworms
 - removing dead earthworms
 - adding living earthworms
 - removing living earthworms and adding dead earthworms
19. Ozone attacks
- Glass
 - mercury and silver
 - copper
 - None of these silver and iron
20. Which of the following are pollutants that a traffic constable is likely to inhale?
- Carbon monoxide
 - Lead
 - Sulphur dioxide
 - Oxides of nitrogen
- 1,2 and 3
 - 1,2 and 4
 - 1,3 and 4
 - 2,3 and 4
21. Which of the following chemicals is most suitable to control insects on small scale?
- E.D.B.
 - B.H.C
 - Celphos
 - Sevidol
22. Which of the following is most poisonous?
- Acetic acid
 - Methyl alcohol
 - Ethyl alcohol
 - Potassium chloride
23. Which of the following when taken by pregnant women, is found to be the cause of deformed children?
- Glycerol
 - Xylidine
 - Thalidomide
 - None of these
25. Duodenum is situated
- at the uppermost part of the small intestine
 - near the lungs
 - in the brain
 - at the tail end of the intestine
26. The heart is covered by a membrane called
- Epidermis
 - Dermis
 - Epicardium
 - Pericardium
27. Element that is not found in blood is
- Iron
 - Copper
 - Chromium
 - magnesium
28. The gland, which in relation to body size is largest at birth and then gradually shrinks after puberty, is?
- Thyroid
 - Pituitary
 - Thymus
 - Adrenal
29. Which of the following is not a bone in the legs of human body?
- Radius
 - Tibia
 - Femur
 - Fibula
30. Bleeding from artery is characterised by which of the following?
- Blood is red.
 - Blood is purple.
 - Bleeding is continuous.
 - Bleeding is intermittent.
- 1 and 3
 - 2 and 3
 - 1 and 4
 - 2 and 4
31. Which of the following bone articulations forms the gliding joint?
- Humeral head and radius
 - Carpals
 - Hip girdle and femur
 - Skull & neck vertebrae
32. Pancreas secretes hormones which help in
- blood clotting
 - production of antibodies
 - growth of body
 - keeping sugar balance in body
33. Oxygen is transported to every cell of the human body by?
- red blood cells
 - blood platelets
 - white blood cells
 - hormones
34. If a person can see an object clearly when it is placed at distance of about 25 cm away from him, he is suffering from
- Myopia
 - Hypermetropia
 - astigmatism
 - None of these

Life Sciences

24. Which of the following is not a bone in the human body?
- Sternum
 - Humerus
 - Pericardium
 - Tibia

35. Consider the following statements regarding blood pressure:

1. It is the pressure exerted by the blood on the walls of any vessel.
2. It decreases in the arteries as the distance from the heart increases,
3. It is lower in the capillaries than in the arteries.
4. It is usually lower in women than in men.

Of these, the correct ones are:

- A. 1 and 4 C. 2,3 and 4
B. 1, 2 and 3 D. 1,2,3 and 4

36. What is the correct sequence of the following in heart attack?

1. Narrowing of the inner orifice of the vessel
2. 'Plaque' from fibrous tissue and high cholesterol
3. Inadequate supply of blood and oxygen
4. Clots of blood carried into the coronary arteries

- A. 1,2,3,4 C. 2, 3, 1, 4
B. 2,4, 1,3 D. 4, 2, 1,3

37. Bile juice is secreted by

- A. Pancreas C. Spleen
B. Liver D. Gall bladder

38. Veins differ from arteries in having

- A. thinner walls
B. strong walls
C. narrower lumen
D. valves to control direction of flow

39. What is the main function of insulin in the human body?

- A. To maintain blood pressure
B. To help in digestion of food
C. To control the level of sugar in the body
D. To check the level of iodine in the body

40. An enzyme that works in an acidic medium is

- A. Pepsin C. Ptyalin
B. Trypsin D. maltose

41. The blood pressure is the pressure of blood in

- A. Arteries C. Auricles
B. Veins D. ventricles

42. Which of the following components of blood protects human beings from infection?

- A. Plasma
B. Blood Platelets
C. Haemoglobin
D. White Blood Corpuscles

43. The normal temperature of the human body is
A. 90 F B. 98 F C. 98.4 F D. 96.4 F

44. In the case of a 'Test-tube baby'?

- A. fertilisation takes place inside the test tube.
B. development of the baby takes place inside the test tube.
C. fertilisation takes place outside the mother body.
D. Unfertilised egg develops inside the test tube.

Physics

45. An earth satellites S has an orbit radius which is 4 times that of communication satellite C. The period of revolution of S will be:

- A. 32 day B. 18 days C. 8 days D. 9 days

46. An object of mass 40 kg and having a velocity 4 m/s collides with another object ($m = 60$ kg) having velocity 2 m/s. The collision is perfectly inelastic. The loss in energy is

- A. 110 J B. 48 J C. 392 J D. 440 J

47. An iron rod of length 2 m and area of cross-section 50 mm^2 stretches by 0.5 mm, when a mass of 250 kg is hung from its lower end. The Young's modulus of iron rod is:

- A. $19.6 \times 10^{20} \text{ N/m}^2$
B. $19.6 \times 10^{18} \text{ N/m}^2$
C. $19.6 \times 10^{15} \text{ N/m}^2$
D. $19.6 \times 10^{10} \text{ N/m}^2$

48. 16 cm^3 of water flows per second through a capillary tube of radius a cm and of length l and when connected a pressure head of H cm of water. If a tube of same length and radius $a/2$ cm is connected to the same pressure head the quantity of water flowing through the tube per second is:

- A. 8 cm^3 B. 1 cm^3 C. 16 cm^3 D. 4 cm^3

49. An ideal gas at 27° C is compressed adiabatically to $8/27$ of its original volume if $\gamma = 5/3$, then rise in temperature is:

- A. 405 K B. 225 K C. 375 K D. 450 K

50. Light of frequency $8 \times 10^{15} \text{ Hz}$ is incident on a substance of photoelectric work function 6.125 eV. The maximum kinetic energy of the emitted photoelectrons will be:

- A. 39 eV B. 27 eV C. 54 eV D. 13.5 eV

51. A refracting angle of a prism is A and the refractive index of the prism is $\cot(A/2)$ Then, angle of minimum deviation is:

- A. $180^\circ - 2A$ C. $180^\circ + 2A$
B. $90^\circ - A$ D. $180^\circ - 3A$

END
OF
SCIENCE
SKILLS TEST

52. If the critical angle for total internal reflection from medium to vacuum is 30° . The velocity in the medium will be:
A. $\sqrt{3} \times 10^8$ m/s C. 1.5×10^8 m/s
B. 6×10^8 m/s D. 3×10^8 m/s
53. In a transformer, the number of turns of primary coil and secondary coil are 5 and 4 respectively. If 220 V is applied on the primary coil, then the ratio of primary current to the secondary current will be:
A. 9:5 B. 5:9 C. 5:4 D. 4:5
54. If the distance between parallel plates of a capacitor is halved and dielectric constant is doubled then the capacitance will:
A. Remain the same
B. Increase 4 times
C. Increase 2 times
D. Decrease 2 times
55. The heat generated in a circuit is dependent upon the resistance, current and time for which the current is flown. If the error in measuring the above are 1%, 2% and 1% respectively. The maximum error in measuring the heat is
A. 8% B. 6% C. 18% D. 12%
56. A particle having charge 100 times that of an electron is revolving in a circular path of radius 0.8 m with one rotation per second. The magnetic field produced at the centre will be
A. $10^{-17} \mu_0$ C. $10^{-7} \mu_0$
B. $10^{-11} \mu_0$ D. $10^{-3} \mu_0$
57. In a nuclear fission, 0.1% mass is converted into energy. The energy released by the fission of 1 kg mass will be:
A. 9×10^{19} J C. 9×10^{16} J
B. 9×10^{17} J D. 9×10^{13} J
58. Pressure inside two soap bubbles are 1.01 and 1.03 atm. Ratio between their volumes is:
A. 27:1 C. 127:101
B. 3:1 D. None of these
59. The distance between two points difference in phase by 60° on a wave having a wave velocity 360 m/s and frequency 500 Hz is:
A. 0.36m B. 0.12m C. 0.18m D. 0.72m
60. Doubly ionised helium atoms and hydrogen ions are accelerated from rest through the same potential drop. The ratio of the final velocities of helium and the hydrogen ions are:
A. $\frac{1}{2}$ B. $1/\sqrt{2}$ C. $\sqrt{2}$ D. 2



**NAIRA
BOOKSTORE
LIMITED**



NNPC RECRUITMENT PAST QUESTIONS & ANSWERS

**Mathematics
English Language
General Knowledge**



+2348141171945



Nairabookstore



Info@nairabookstore.com



Nairabookstore.com



Nairabookstore



Nairabookstore



Content

Introduction	2
Mathematics	3
English Language.....	25
General Knowledge.....	37



INTRODUCTION

This e-book is a compilation of the Nigerian National Petroleum Corporation (NNPC) recruitment past questions and answers.

NNPC Past Questions has been compiled to help those sitting for NNPC aptitude test in Nigeria. This ebook will give you an insight on how NNPC set their questions and the format they use.

Using this ebook would give you an edge over others. NNPC aptitude test questions comprise of Mathematics, English questions and specialized fields like Finance/Social Sciences, General Engineering, General Sciences, Information Technology and Medical Questions. These are past questions gathered from a reliable source. It will give you an insight into past exams conducted by NNPC.

Knowing what to expect and practising over and over would help you develop an effective test strategy; improve your speed, accuracy and confidence.

This Past Question material has over 200 questions and comprise of Mathematics, English and General Knowledge.

Preparing with these past questions will give you an insight into the past exams conducted by NNPC and also give an edge over your competitors, also there is a possibility you might come across the some of these past questions in the exam.

The general knowledge part of this e-book contains past questions from Chemistry, Physics, ICT, medicine and finance.



Mathematics Past Questions And Answers

1) A rectangle is twice as long as it is wide. If the width is a , what is the length of a diagonal?

A. $a\sqrt{2}$

Solution

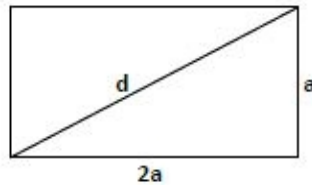
B. $a\sqrt{3}$

Draw a diagram and label it. Use the Pythagorean theorem to find d , the length of the diagonal: $a^2 + (2a)^2 = d^2 \Rightarrow a^2 + 4a^2 = d^2 \Rightarrow 5a^2 = d^2 \Rightarrow d = a\sqrt{5}$.

C. $a\sqrt{5}$

The answer is (C).

D. $3a$



E. $5a$

2) Last year Jose sold a painting for \$2000. If he made 25% profit on the sale, how much had he paid for the painting?

A. \$1200

C. \$1500

C. \$1600

D. \$2400

E. \$2500

Jose made 25% profit, so if he bought the painting for x , he sold it for: $x + 0.25x = 1.25x = 2000 \Rightarrow x = 2000 \div 1.25 = 1600$.

The answer is (C).

3) In the figure below what is the value of b ?

A. 30

B. 36

C. 45

D. 60

E. 72



Since vertical angles have the same measure, $c = d$, $d = a$, and $b = a - b$ $a = 2b$.
Therefore, $c = d = a = 2b$. Also, the sum of the measures of all six angles is 3600,
so $a + b + c + d + a - b + d = 2a + c + 2d = 360$. Replacing c , d , and a by $2b$ yields
 $10b = 360 \Rightarrow b = 36$.
The answer is (B).

4) A lacrosse team raised some money. The members used 74% of the money to buy uniform, 18% for equipment, and the remaining \$216 for a team party. How much money did they raise?

- A. 2400
- B. 2450
- C. 2500
- D. 2600
- E. 2700

SINCE $74\% + 18\% = 92\%$, THE \$216 spent on the party presents the other 8 % Of the money raised. Then: $0.08m = 216 \Rightarrow m = 216 \div 0.08 = 2700$. The answer is (E).

5) In the figure below, what is the sum of the degree measures of all of the marked angles?

- A. 600
- B. 620
- C. 700
- D. 720
- E. 750

Each of the 10 marked angles is an exterior angle of the pentagon. If you take one angle at each vertex, the sum of the degree measures of those five angles is 360; the sum of the degree measures of the other five also is 360: $360 + 360 = 720$.
The answer is (720).



6) In the figure below, ABCD is a parallelogram. What is the value of $y - z$?

- A. 50
- B. 55
- C. 60
- D. 65
- E. 70

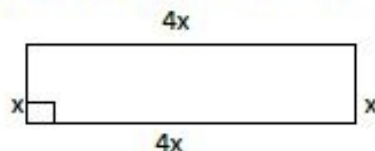
The sum of the degree measures of two consecutive angles of a parallelogram is 180, so $180 = (3x - 5) + (2x - 15) = 5x - 20 \Rightarrow 5x = 200 \Rightarrow x = 40$. Since opposite angles of a parallelogram are equal, $y = 3x - 5 = 115$ and $z = 2x - 15 = 65$. Then $y - z = 50$. The answer is (50).

7) If the length of a rectangle is 4 times its width, and if its area is 144, what is its perimeter?

- A. 6
- B. 24
- C. 30
- D. 60
- E. 96

Solution

Draw a diagram and label it.



Since the area is 144, then: $144 = 4x^2 \Rightarrow x^2 = 36 \Rightarrow x = 6$. The width is 6, the length is 24, the perimeter is 60. The answer is (D).



8) If the measures of the angles of a triangle are in the ratio of 1:2:3, and if the perimeter of the triangle is $30 + 10(3)^{\frac{1}{2}}$, what is the length of the smallest side?

A. 20

Solution

B. 18

C. 15

D. 12

E. 10

If the measures of the angles are in the ratio of 1:2:3, then, $x + 2x + 3x = 180 \Rightarrow 6x = 180 \Rightarrow x = 30$. The triangle is a 30-60-90 right triangle, and the sides are a , $2a$, and $a\sqrt{3}$. The perimeter therefore is $3a + a\sqrt{3} = a(3 + \sqrt{3})$, so $a(3 + \sqrt{3}) = 30 + 10\sqrt{3} = 10(3 + \sqrt{3}) \Rightarrow a = 10$. The answer is (10).

9) What is the area of Triangle ABC?

A. 350

B. 360

C. 370

D. 375

E. 390

The area of Triangle CDE = $0.5(8)(15) = 60$. Since the ratio of similitude for the two triangles (as calculated in solution C15) is 2.5, the area of Triangle ABC is $(2.5)^2$ times the area of CDE: $(2.5)^2 \times 60 = 6.25 \times 60 = 375$. The answer is (375).

10) What is the perimeter of Triangle ABC?

A. 80

B. 85

C. 95

D. 100

E. 105

Solution

By the Pythagorean theorem, $8^2 + 15^2 = (CE)^2$ $(CE)^2 = 64 + 225 = 289$ $CE = 17$. Then the perimeter of $CDE = 8 + 15 + 17 = 40$. Triangles ABC and CDE are similar (each has a 90° angle, and the vertical angle at C are congruent). The ratio of similitude is $= 2.5$, so the perimeter of ABC is $2.5 \times 40 = 100$. The answer is (100).

11) If the difference between the measures of the two smaller angles of a right triangle is 20° , what is the measure, in degrees, of the smallest angle?

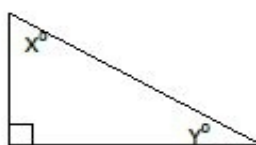
A. 30 **Solution**

B. 35

C. 40

D. 45

E. 50



. Draw a diagram and label it. Write the equations, letting $x =$ larger angle and $Y =$ smaller angle:

$$x + y = 90$$

$$+ x - y = 20$$

$$\hline 2x = 110$$

. Add the equations:

Then $x = 55$, and $y = 90 - 55 = 35$. The answer is (35).

12. What is the perimeter of Triangle ABC

A. 48

B. $48 + 12\sqrt{2}$

C. $48 + 12\sqrt{3}$

D. 72

E. It cannot be determined from the information given

Solution

Triangle ADB is a right angle triangle whose hypotenuse is 15 and one whose leg is 9, so this is a $3x-4x-5x$ triangle with $x = 3$, and $AD = 12$. Now ADC is a $30-60-90$ triangle, whose shorter leg is 12. Hypotenuse AC is 24, and leg CD is $12\sqrt{3}$, so the perimeter is $24 + 15 + 9 + 12\sqrt{3} = 48 + 12\sqrt{3}$. The answer is C.



13) What is the area of Triangle BED in the figure below were ABCD is a triangle?

- A. 12
- B. 24
- C. 36
- D. 48
- E. 60

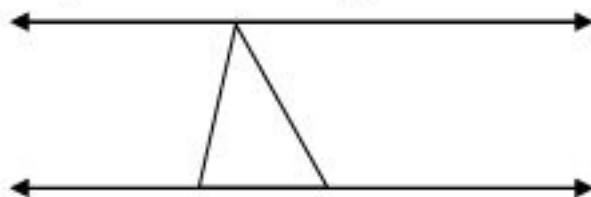
You can calculate the area of the rectangle and subtract the area of the two white right triangles, but don't. The shaded area is a triangle whose base is 4 and whose height is 12. The area is $(4)(12) = 24$. The answer is (B).

14) What is the value of PS in the triangle below?

- A. $5\sqrt{2}$
- B. 10
- C. 11
- D. 13
- E. $12\sqrt{2}$

Use the Pythagorean Theorem twice, unless you recognize the common right triangle in the figure. Since $PR = 20$ and $QR = 16$, PQR is a $3x-4x-5x$ right triangle with $x = 4$. Then $PQ = 12$, and PQS is a right angle triangle whose legs are 5 and 12. The hypotenuse, PS , therefore is 13. The answer is (D).

15) In the figure below, lines k and l are parallel. What is the value of $y - x$?





- A. 40
- B. 45
- C. 50
- D. 55
- E. 57

Solution

Since lines l and k are parallel, the angle marked y in the given diagram and the sum of the angles marked x and 45 are equal:

$$Y = x + 45 \quad y - x = 45. \text{the answer is (45).}$$

16) In an office there was a small cash box. One day Ann took half of the money plus \$1 more. Then Dan took half of the money plus \$1 more. Stan then took the remaining \$11. How many dollars were originally in the box?

- A. \$50
- B. \$45
- C. \$42
- D. \$40
- E. \$38

Solution

You can avoid some massy algebra by working backwards. Put back the \$11 Stan took; then put back the extra \$1 that Dan took. There is now \$12, which means that, when Dan took his half, he took \$12. Put that back. Now there is \$24 in the box. Put back the extra \$1 that Ann took. The box now has \$25, so before Ann took her half, there was \$50. The answer is (\$50).

17) Each of the 10 players on the basketball team shot 100 free throws, and the average number of baskets made was 75. When the highest and lowest scores were eliminated the average number of baskets for the remaining 8 players was 79. What is the smallest number of baskets anyone could have made?

- A. 22
- B. 20



- C. 18
- D. 16
- E. 14

Since the average of all 10 players was 75, the total number of baskets made was $10 \times 75 = 750$. Also, since 8 of the player had an average of 79, they made a total of $8 \times 79 = 632$ points. The other 2 players, therefore, made $750 - 632 = 118$ baskets. The most baskets that the player with the highest number could have made was 100, so the player with the lowest number had to have made at least 18. The answer is 18.

18) Karen played a game several times. She received \$5 every time she won and had to pay \$2 every time she lost. If the ratio of the number of times she won to the number of times she lost was 3:2, and if she won a total of \$66, how many times did she play the game?

- A. 30
- B. 35
- C. 40
- D. 45
- E. 48

Karen won $3x$ times and lost $2x$ times, and thus played a total of $5x$ games. Since she got \$5 every time she won, she received $\$5(3x) = \$15x$. Also, since she paid \$2 for each loss, she paid out $\$2(2x) = \$4x$. Therefore, her net winning were $\$15x - 4x = \$11x$, which you are told was \$66. Then, $11x = 66 \Rightarrow x = 6$, and so $5x = 30$.

The answer is 30

19) Since 1950, when martin graduated from high school, he has gained 2 pounds every year. In 1980 he was 40% heavier than in 1950. What percent of his 1995 weight was his 1980 weight?

- A. 80
- B. 85
- C. 87.5
- D. 90
- E. 95



Solution

Let x = Martin's weight in 1950. By 1980, he had gained 60 pounds (2 pounds per year for 30 years) and was 40% heavier:

$60 = 0.40x \Rightarrow x = 60 \div 0.4 = 150$. In 1980, he weighed 210 pounds, 15 years later, in 1995, he weighed 240:

$210/240 = 7/8 = 87.5\%$. The answer is C.

20) Henry drove 100 mile to visit a friend. If he had driven 8 mile per hour faster than he did, he would have arrived in of the time he actually toke. How many minute did the trip take?

A. 100

Solution

B. 120

Let t = time, in hours, and r = rate, in miles per hour, that Henry drove. Then: $t = \frac{100}{r}$ and $\frac{5}{6}t = \frac{100}{r+8}$. Multiply the second equation by $\frac{6}{5}$:

C. 125

$\frac{6}{5} \left[\frac{5}{6}t \right] = \frac{6}{5} \left[\frac{100}{r+8} \right] \Rightarrow t = \frac{600}{5r+40}$, so Cross multiply: $500r + 4000 = 600r \Rightarrow 100r =$

D. 144

$4000 \Rightarrow r = 40$.

E. 150

Henry drove at 40 miles per hour, and the trip took $100 \div 40 = 2.5$ hours = 150 minutes. (Had he driven at 48 miles per hour, the trip would have taken 125 minutes.). The answer is E.

21) Two printing presses working together can complete a job in 2.5 hours. Working alone, press A can do the job in 10 hours. How many hours will press B take to do the job by itself?

A. 10/3

Solution

B. 4

Let x = number of hours press B would take working alone.

C. 5

	Press A Alone	Press B Alone	Together
Part of job that can be Completed in 1 hour	$\frac{1}{10}$	$\frac{1}{x}$	$\frac{1}{2.5}$
Part of the job can be Completed in 2.5 hours	$\frac{2.5}{10}$	$\frac{2.5}{x}$	1

C. 25/4

E. 15/12

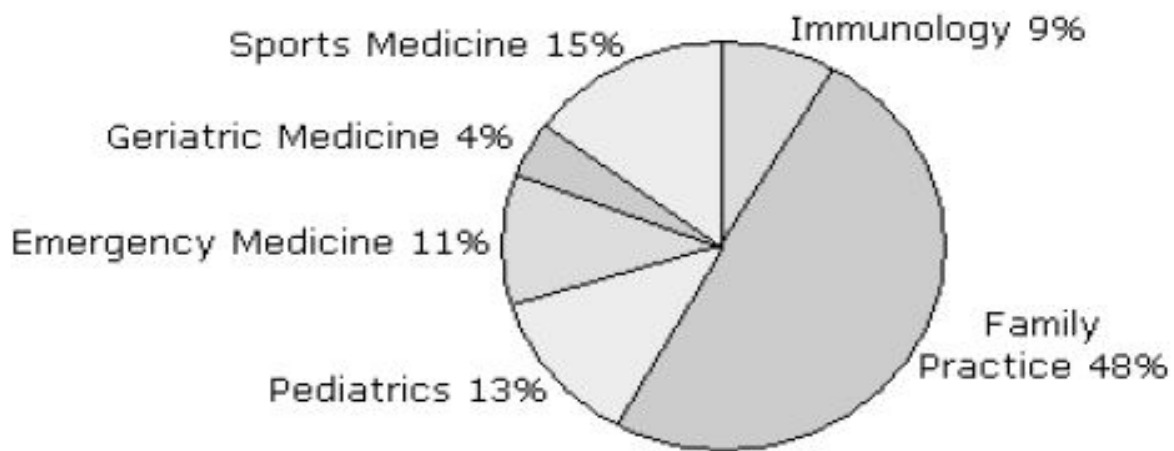
• Write the equation: $\frac{2.5}{10} + \frac{2.5}{x} = 1$

Multiply each term by 10x: $2.5x + 25 = 10x$

.Subtract 2.4x from each other: $25 = 7.5x$

. Divide each side by 7.5: $x = 3$ hours. The answer is A.

North West Medical School Graduates 2005



The table above shows the specializations of North West Medical School graduates in 2005. Percentages have been rounded to the nearest whole number. One hundred and nineteen students graduated that year. Use this information to answer the following.

22) If seven students changed their specialization from family practice to paediatrics, approximately what fraction of students would then be specializing in paediatrics?

- A. $\frac{1}{7}$
- B. $\frac{1}{4}$
- C. $\frac{1}{7}$
- D. $\frac{1}{5}$
- E. $\frac{1}{15}$

Answer: D

Explanation: Thirteen percent of 119 students $(\frac{119}{100}) * 13 = 15$ specialized in paediatrics. If 7 students joined them then there would be 22 students studying it. This equates to $\frac{22}{119} = 0.18$ which is approximately $\frac{1}{5}$.

23) What is the approximate ratio of students specializing in sports medicine, emergency medicine and family practice?

- A. 6:4:10
- B. 1:4:5
- C. 2:8:10
- D. 3:2:10
- E. 3:2:5

Answer: D

Explanation: The ratio of students specializing in each is (15:11:48) which approximates to 3:2:10.

24) One twelfth of the students who chose to specialize in family practice plan to work abroad. How many is this?

- A. 7
- B. 8
- C. 5
- D. 9
- E. 3

Answer: C

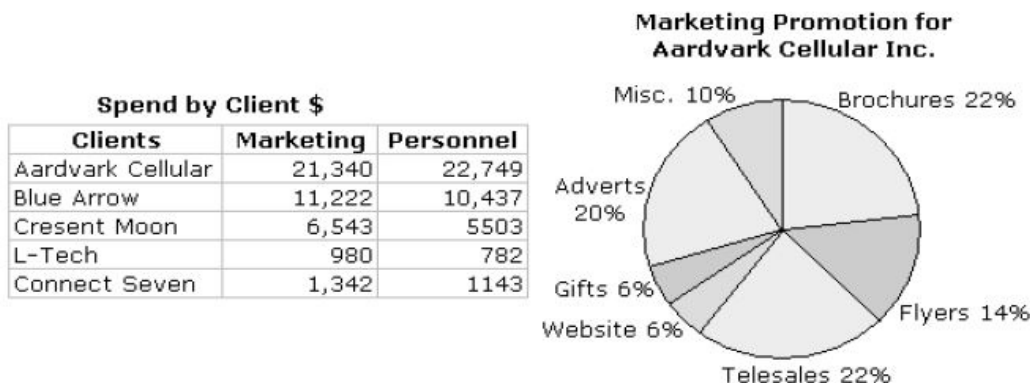
Explanation: Forty eight percent of 119 students $(119/100) * 48 = 57$ specialized in family practice. One twelfth of these equates to $57/12 = 5$ who planned to work abroad.

25) How many students decided to specialize in immunology?

- A. 9
- B. 11
- C. 14
- D. 7
- E. 15

Answer: B

Explanation: Nine percent of 119 students decided to specialize in immunology. This equates to $(119/100) * 9 = 11$ students



The table above shows the amount spent by Ace Marketing Consultancy to promote their clients. 'Marketing' spend does not include the time of any Ace employees, this is billed separately as 'Personnel'. Use this information to answer the following questions.



26) Approximately what percentage of Ace Marketing's total business is accounted for by their three smallest clients?

- A. 18%
- B. 17%
- C. 20%
- D. 16%
- E. 22%

Answer: C

Explanation: The total value of Ace's business is \$41,427 (marketing) plus \$40,614 (personnel) which gives \$82,041. Since we know that Aardvark account for 54% of the business, the quickest way to work out how much the three smallest clients account for is to calculate how much Blue Arrow accounts for (\$21,659 which is 26%), add this to the 54% to give 80%, which leaves 20% to be accounted for by the smallest three

27) Approximately what percentage of Ace Marketing's total business is for Aardvark Cellular?

- A. 49%
- B. 57%
- C. 50%
- D. 54%
- E. 56%

Answer: D

Explanation: The total value of Ace's business is \$41,427 (marketing) plus \$40,614 (personnel) which gives \$82,041. Aardvark Cellular account for $(21,340 + 22,749 =) \$44,089$.

This equates to $(44,089 / 82,041) * 100 = 54\%$.

28) If flyers for Aardvark Cellular cost \$150 per thousand. Approximately, how many thousand have been produced?

- A. 23
- B. 20
- C. 17
- D. 14
- E. 18

Answer: B

Explanation: Fourteen percent of \$21,340 was spent on flyers for Aardvark Cellular. This equates to $(21340/100) * 14 = \$2,987$. If flyers cost \$150 per thousand then approximately $(2987/150 =)$ 20,000 have been produced.

29) If Ace charges their clients cost price plus 20%, how much will they bill Aardvark Cellular for their website?

- A. \$1,536
- B. \$1,174
- C. \$1,744
- D. \$1,280
- E. \$1,474

Answer: A

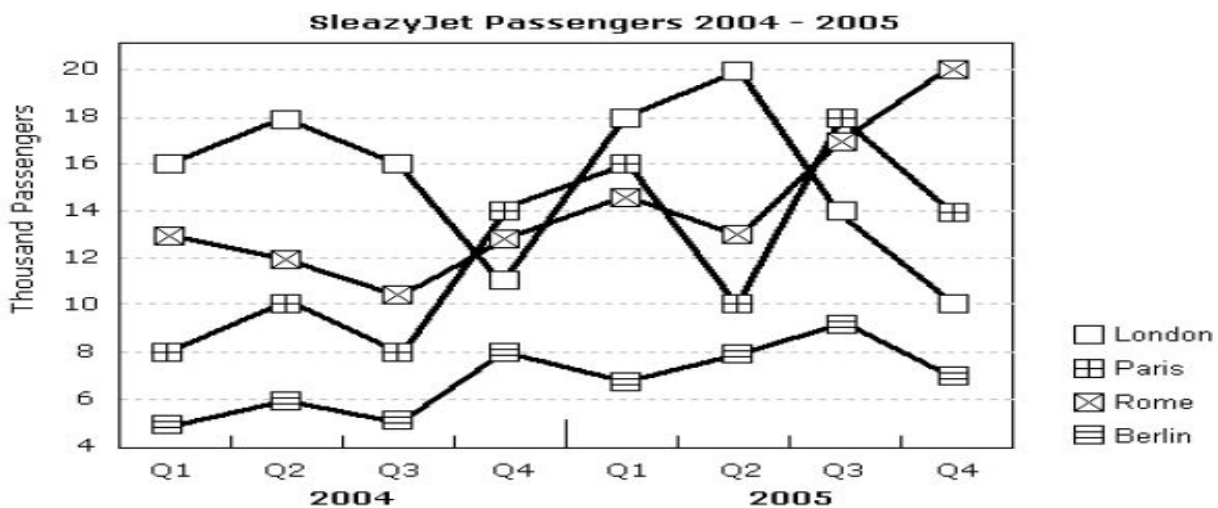
Explanation: Six percent of \$21,340 was spent on the website for Aardvark Cellular. This equates to $(21340/100) * 6 = \$1,280$. If Ace add 20% then they will bill Aardvark for $\$1,280 * 1.2 = \$1,536$.

30) Approximately how much was spent by on brochures for Aardvark Cellular?

- A. \$4,994
- B. \$4,774
- C. \$4,632
- D. \$4,694
- E. \$4,624

Answer: D

Explanation: Twenty two percent of \$21,340 was spent on brochures for Aardvark Cellular. This equates to $(21340/100) * 22 = \$4,694$.





The table above shows the numbers of passengers flying from New York to four European capital cities by low cost airline SleazyJet. These numbers have been rounded to the nearest thousand. Use this information to answer the following questions.

31) Approximately, what fraction of passengers who travelled in Q4 2005 flew to Berlin?

- A. $\frac{1}{8}$
- B. $\frac{1}{4}$
- C. $\frac{1}{7}$
- D. $\frac{1}{5}$
- E. $\frac{1}{15}$

Answer: C

Explanation: The number of passengers travelling in Q4 2005 was:

London 10,000

Paris 14,000

Rome 20,000

Berlin 7,000

This gives a total of 51,000 of whom 7,000 were travelling to Berlin.

This equates to $(\frac{7,000}{51,000} = \frac{1}{7})$.

32) How many more passengers travelled to Rome in Q2 2005 than in the same quarter the previous year?

- A. 5,000
- B. 4,000
- C. 3,000
- D. 2,000
- E. 1,000

Answer: E

Explanation: The number of passengers travelling in to Rome Q2 2004 was 12,000.

The number of passengers travelling in to Rome Q2 2005 was 13,000.

Therefore 1,000 more passengers travelled in Q2 2005.

33) What was the ratio of passengers travelling to London and Paris in Q2 2004?

- A. 2.2:1
- B. 1.8:1
- C. 2:1

- D. 0.75:1
- E. 1:2

Answer: B

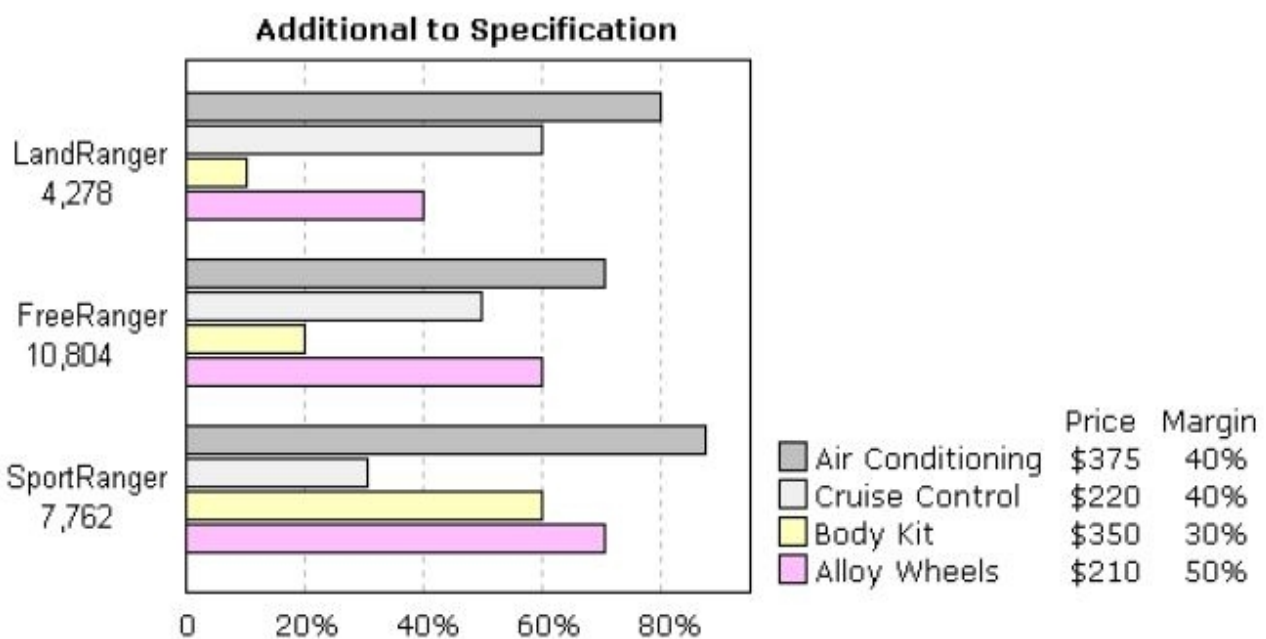
Explanation: The number of passengers travelling in to London Q2 2004 was 18,000.
 The number of passengers travelling in to Paris Q2 2004 was 10,000.
 This equates to a ratio of 1.8:1

34) How many passengers travelled in Quarter 4 2004?

- A. 46,000
- B. 44,000
- C. 43,000
- D. 45,000
- E. 42,000

Answer: A

Explanation: The number of passengers travelling in Q4 2004 was:
 London 11,000
 Paris 14,000
 Rome 13,000
 Berlin 8,000
 This gives a total of 46,000.



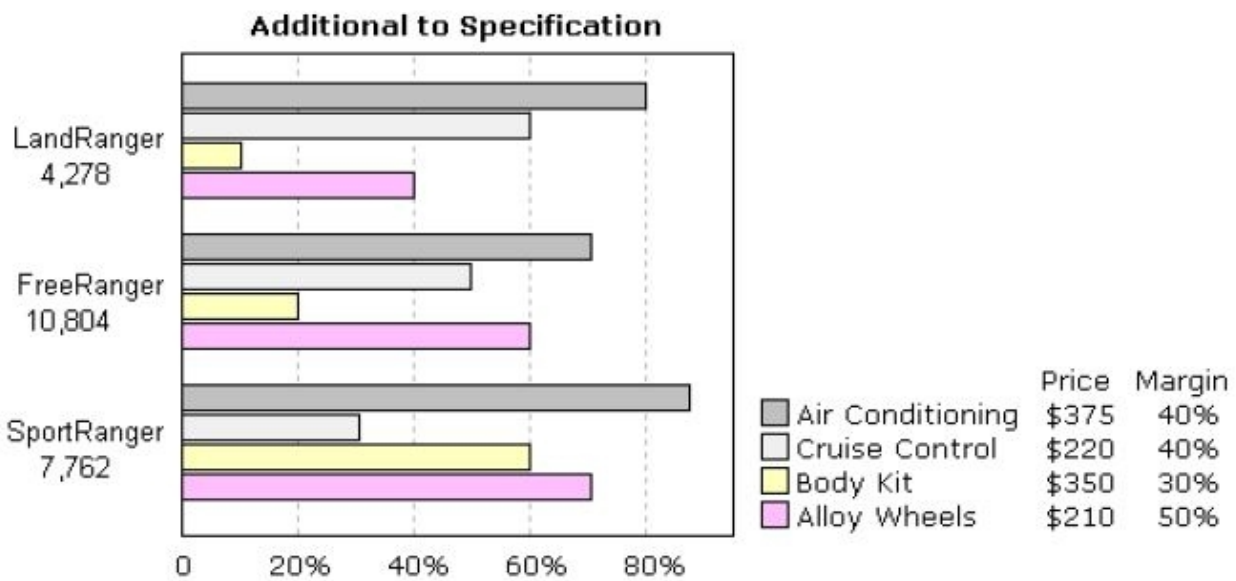
The table above shows the total sales figures for three models of SUV. It also shows the percentage of customers who specified additional equipment when buying from the dealer network. Use this information to answer the following questions.

35) How much extra profit would be generated if dealers doubled the number of Body Kits fitted when they sold a FreeRanger?

- A. \$2,268
- B. \$4,534
- C. \$1,130
- D. \$1,238
- E. \$226

Answer: A

Eplanation: Twenty percent of the 10,804 FreeRangers sold (2,161) were fitted with body kits. The total revenue generated was $2,161 * \$350 = \$756,000$. The profit margin on this is 30%, therefore $(756,000/100) * 30 =) \$2,268$. If dealers doubled the number sold then the additional profit would be \$2,268.



The table above shows the total sales figures for three models of SUV. It also shows the percentage of customers who specified additional equipment when buying from the dealer network. Use this information to answer the following questions.

36) How much profit (margin), in millions of dollars, can be attributed to Cruise Control fitted to the FreeRanger?



- A. 0.61
- B. 0.48
- C. 0.21
- D. 4.80
- E. 3.60

Answer: B

Explanation: Fifty percent of the 10,804 FreeRanger customers (5,402) specified cruise control. The total revenue generated was $5,402 * \$220 = \1.19 million. The profit margin on this is 40%, therefore $(1.19/100) * 40 =)$ \$0.48 million.

37) How much profit (margin), in millions of dollars, can be attributed to Body Kits fitted to the SportRanger?

- A. 0.49
- B. 1.48
- C. 4.80
- D. 0.36
- E. 0.21

Answer: A

Explanation: Sixty percent of the 7,762 SportRangers sold (4,657) were fitted with body kits. The total revenue generated was $4,657 * \$350 = \1.63 million. The profit margin on this is 30%, therefore $(1.63/100) * 30 =)$ \$0.49 million

38) How much total revenue, in millions of dollars, did Alloy Wheels generate for FreeRanger sales?

- A. 1.41
- B. 1.28
- C. 1.30
- D. 1.36
- E. 11.20

Answer: D

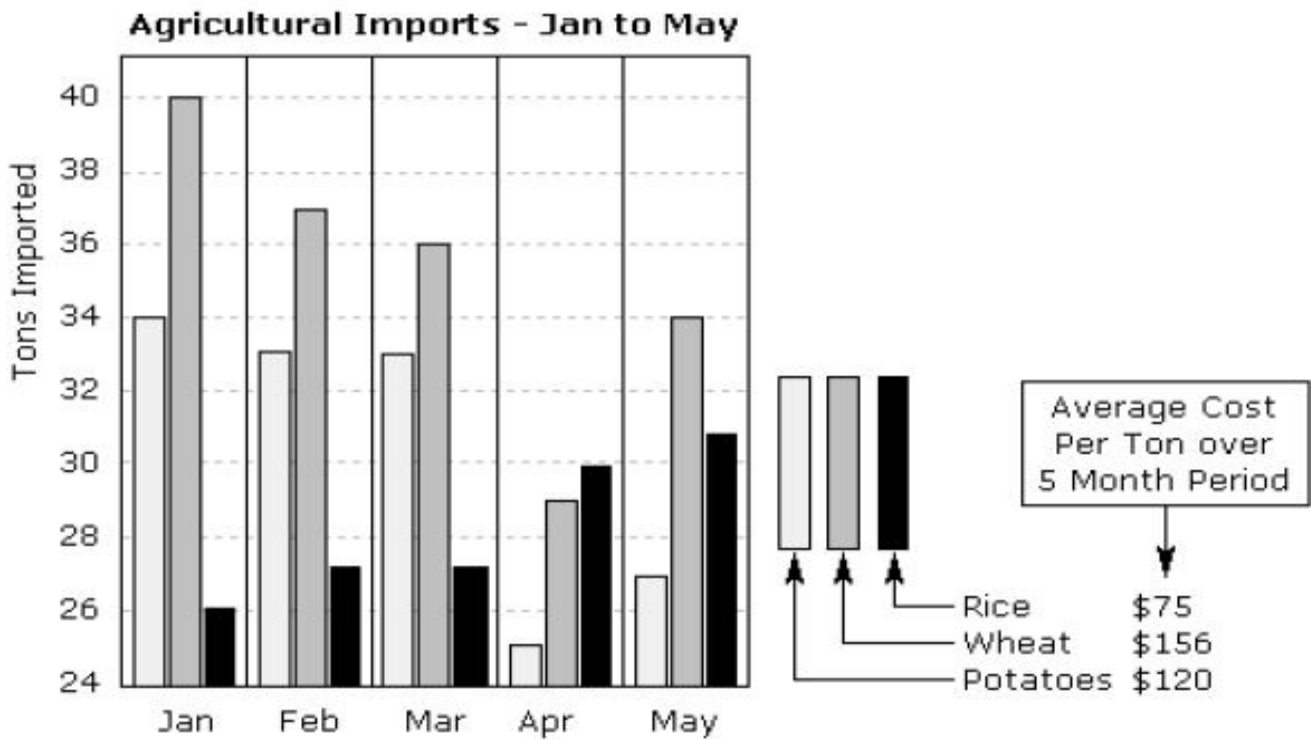
Explanation: Sixty percent of the 10,804 FreeRangers sold (6,482) were fitted with alloy wheels. Therefore the total revenue generated was $6,482 * \$210 = \1.36 million.

39) How many customers specified cruise control when ordering a FreeRanger?

- A. 5,320
- B. 2,566
- C. 4,861
- D. 2,861
- E. 5,402

Answer: E

Explanation: Fifty percent of the 10,804 FreeRanger customers (5,402) specified cruise control.



The table above shows agricultural imports for the island of South Cerney for a period of five months. Use this information to answer the following questions

40) Approximately what fraction of the total tonnage of imports is rice?

- A. 1/5
- B. 1/4
- C. 1/3
- D. 2/5
- E. 3/10

Answer: E



Explanation: Total tonnages imported over the 5 months are as follows:

Rice 141

Wheat 176

Potatoes 152

This means that the total tonnage of imports was 469 tons of which 141 tons were of rice. Therefore $(141/469 = 0.3)$ which is $3/10$

41) Identify the missing number at the end of the series.

100, 96, 91, 85, ?

A. 74

B. 75

C. 77

D. 78

E. 79

Answer: D

Explanation: The difference between the numbers in this series increases by 1 each time: -4, -5, -6, etc. This will produce a difference of -7 between 85 and the next number in the series, which is therefore 78.

42) Identify the missing number at the end of the series.

11, 16, 26, 41, ?

A. 51

B. 56

C. 61

D. 66

E. 46

Answer: C

Explanation: The difference between the numbers in this series increases by 5 each time – 5, 10, 15, etc. This will produce a difference of 25 between 41 and the next number in the series, which is therefore 66.

43) Identify the missing number at the end of the series.

5, 12, 19, 26, ?

A. 31

B. 33

C. 35

D. 34

E. 37



Answer: B

Explanation: The numbers in this series increase by 7 each time. Therefore the next number is 33.

44) Anna bought \$4,000 of company stock. She sold 75% of it when the value doubled, and the remainder at four times the purchase price. What was her total profit?

- A. \$4,000
- B. \$6,750
- C. \$6,000
- D. \$6,500
- E. \$5,000

Answer: C

Explanation: Anna sold 75% of her stock when it was worth \$8000. So she took \$6000 cash, leaving her with \$2000 worth of stock, which she had purchased for \$1000. When this stock increased in value to \$4000 she sold it and added this to the first \$6000 giving her \$10,000 in cash. Subtracting the initial \$4000 cost of the stock, Anna has made \$6,000.

45) A total of 1600 copies of a CD were sold. 30% were sold at 55% discount, 10% were sold at 30% discount and the remainder were sold at the full price of \$7.95. What was the approximate total revenue in dollars?

- A. 10,369
- B. 10,569
- C. 10,569
- D. 10,234
- E. 10,669

Answer: D

Explanation: Of the 1600 CDs sold:
60% or 960 were sold at \$7.95 = \$7632
10% or 160 were sold at \$5.56 = \$889
30% or 480 were sold at \$3.57 = \$1713
Therefore the total revenue was \$10,234

46) Anna and John both receive stock as part of their remuneration. Anna receives \$400 worth plus a bonus of 12%. John receives \$300 worth plus a bonus of 20%. What is the difference between the values of the two bonuses?

- A. \$12.00
- B. \$10.00
- C. \$20.00



- D. \$14.00
- E. \$11.50

Answer: A

Explanation: Anna receives a bonus of $(\$400 * 0.12 =)$ \$48. John receives a bonus of $(\$300 * 0.20 =)$ \$60. The difference between their bonuses is therefore \$12.

47) Components X,Y and Z are ordered in the ratio 1:5:4. How many Z components will be in an order for 8000 components?

- A.3,200
- B.1,600
- C. 6,400
- D. 4,600
- E. 1,800

Answer: A

Explanation: The components are ordered in the ratio 1:5:4 and the total order is for 8,000.

To work out the numbers of each add $1+5+4 = 10$.

Divide \$8,000 by 10 = 800. You can then calculate that the number of Z components will be $(800 * 4 =)$ 3,200.

48) A bank offers 10% per annum interest which is calculated and added at the end of the year. Another bank offers 10% per annum which is calculated and added every six months. What is the difference on a deposit of \$800 after one year?

- A. \$2.00
- B. \$2.60
- C. \$2.40
- D. \$2.20
- E. \$4.00

Answer: A

Explanation: At the bank paying 10% interest calculated each year, the amount will be \$880 $(\$800 * 1.10)$ at the end of the first year. At the bank paying 10% per annum added every 6 months, the amount will be \$840 $(\$800 * 1.05)$ at the end of the first six months and \$882 $(\$840 * 1.05)$ at the end of the year. Therefore the difference will be \$2.00.

49) It costs a manufacturer X dollars per component to make the first 500 components. All subsequent components cost $X \div 5$ each. When $X = \$4.50$ How much will it cost to manufacture 4,000 components?



- A. \$5,600
- B. \$4,600
- C. \$5,400
- D. \$5,200
- E. \$5,450

Answer: C

Explanation: The first 500 components are \$4.50 each which gives \$2,250. The 3500 subsequent components cost \$0.90 each which gives \$3,150. Therefore the run of 4000 components will cost \$5,400

50) Identify the missing number.

2	6	44	8	10
15	19	?	21	23

- A. 72
- B. 66
- C. 73
- D. 57
- E. 55

Answer: D

Explanation: The numbers on the bottom row are 13 more than those on the top row. Therefore the missing number is $44 + 13 = 57$.



English Language Past Questions And Answers

Which of the following words can be formed from the words in capital.

1) FINGERPRINTING

- A. Finger
- B. Printings
- C. Fern
- D. Granite

Answer C

2) MADELEINE

- A. Deed
- B. Date
- C. Elder
- D. Line

Answer D

3) ENVANGELISM

- A. manager
- B. Glid
- C. Slim
- D. Ever

Answer C

4) DICTATION

- A. Icon
- B. Tate
- C. lone
- D. Data

Answer A



5) ECONOMICS

- A. Economical
- B. Come
- C. Cooks
- D. Song

Answer B

In law, trespass can be: the criminal act of going into somebody else's land or property without permission of the owner or lessee; it is also a civil law tort that may be a valid cause of action to seek judicial relief and possibly damages through a lawsuit. In some jurisdictions trespassing is an offence or misdemeanour covered by a criminal code. In other jurisdictions, it is not considered a crime or penal in nature, property is protected from trespass under civil law and privacy acts. In England and Wales, despite the prevalence of notices asserting that "trespassers will be prosecuted", unless the trespass is aggravated in some way, it will only be a civil wrong. Although criminal and civil trespass laws vary from jurisdiction to jurisdiction, most have the following facets in common: Property owners and their agents (for example, security guards) may only use reasonable force to protect their property. For example, setting booby traps on a property to hurt trespassers or shooting at trespassers are usually strictly forbidden except in extreme circumstances. Not all persons seeking access to property are trespassers. The law recognizes the rights of persons given express permission to be on the property ("licensees") and persons who have a legal right to be on the property ("invitees") not to be treated as trespassers. For example, a meter reader on the property to read the meter is an invitee, as would be a travelling salesperson, or a police officer seeking to execute a warrant.

6) It is very difficult to successfully prosecute someone for trespass.

- A. True
- B. False
- C. Can't say

Answer : C

7) Property is only ever protected from trespass under civil law and privacy acts.

- A. True
- B. False
- C. Can't say

Answer :B



8) In Texas it is legal to use deadly force against trespassers after dark.

- A. True
- B. False
- C. Can't say

Answer : C

9) Invitees are people who have been specifically invited onto the property by the owner.

- A. True
- B. False
- C. Can't say

Answer : B

10) Aggravated trespass is a civil wrong and offenders cannot be prosecuted

- A. True
- B. False
- C. Can't say

Answer : B

Identify the relationship between the word pair in the question.
Select the answer where the word pair shown has the most similar relationship.

9) deplete : decrease

- A. shun : avoid
- B. overlook : find
- C. danger : evade
- D. like : detest

Answer : A

Explanation : Deplete and decrease are synonyms. Shun and avoid are synonyms.

10) anaesthetic : numb

- A. vaccine : virus
- B. disease : drug
- C. sedative : drowsy
- D. action : lunacy

Answer: C

Explanation : An anaesthetic makes something numb. A sedative makes something drowsy.



11) corrode : acid

- A. shoal : bird
- B. ocean : wave
- C. pack : cat
- D. pod : dolphin

Answer : D

Explanation: Heard is the collective noun for cows. Pod is the collective noun for dolphins.

12) evaporate : vapour

- A. centrifuge : gas
- B. petrify : stone
- C. saturate : fluid
- D. corrode : acid

Answer : B

Explanation : Vapour may be the result of evaporation. Stone may be the result of petrification.

13) welt : blow

- A. fall : height
- B. strike : pain
- C. stain : spill
- D. throw : fly

Answer : C

Explanation : A welt is the result of a blow. A stain is the result of a spill.

14) paltry is to substantial as acute is to -----

- A. angle
- B. redundant
- C. obtuse
- D. sharp

Answer: C

Explanation : Paltry and substantial are opposites. Acute and obtuse are opposites.



15) chapter is to book as color is to -----

- A. hue
- B. artist
- C. palette
- D. spectrum

Answer : D

Explanation : A book is divided into chapters. A spectrum is divided into colors.

16) liability is to asset as expenditure is to -----

- A. income
- B. payments
- C. benefit
- D. costs

Answer : A

Explanation : Liability and asset are opposites. Expenditure and income are opposites.

17) sculptor is to marble as painter is to -----

- A. easel
- B. artist
- C. canvas
- D. brush

Answer : C

Explanation : A sculptor works with marble. A painter works with canvas.

18) hold is to hatch as room is to -----

- A. ship
- B. window
- C. space
- D. door

Answer : D

Explanation : A hatch is the entrance to a hold. A door is the entrance to a room.



Instruction: Identify the relationship between the word group in the question.
Select the answer which fits best with the group.

19) Nile, Amazon, Rhine

- A. Baltic
- B. Michigan
- C. Danube
- D. Victoria

Answer: C

Explanation: These are all rivers.

20) Snake, Lizard, Tortoise

- A. Frog
- B. Crocodile
- C. Newt
- D. Toad

Answer : B

Explanation: These are all reptiles.

21) Capricorn, Aries, Aquarius

- A. Gemini
- B. Zodiac
- C. Andromeda
- D. Astrology

Answer : B

Explanation: These are all signs of the zodiac.

22) Ash, Beech, Elm

- A. Pine
- B. Cactus
- C. Ivy
- D. Oak

Answer : D



Explanation: These are all deciduous trees.

22) diamond, ruby, sapphire

- A. gold
- B. emerald
- C. platinum
- D. pearl

Answer : B

Explanation: These are all gemstones.

Identify the relationship between the word pair in the question.
Select the answer where the word pair shown has the most similar relationship.

23) submerge : dip

- A. avoid : evade
- B. dismiss : ban
- C. plead : ask
- D. crave : covet

Answer : C

Explanation: To submerge is the extreme of to dip. To plead is the extreme of to ask

24) bulky : streamlined

- A. cluttered : neat
- B. sleek : fast
- C. bloated : sink
- D. light : massive

Answer : A

Explanation: If something is bulky, it cannot be streamlined. If it is cluttered it cannot be neat.

25) rook : chess

- A. cricket : ball
- B. chip : poker
- C. football : goal
- D. swing : golf



Answer : B

Explanation: A rook is used in a game of chess. A chip is used in a game of poker.

26) satchel : bag

- A. foot : shoe
- B. cup : mug
- C. hand : glove
- D. top : hat

Answer : D

Explanation : A satchel is a type of bag. A top hat is a type of hat.

27) cohesion : unity

- A. belief : denial
- B. dearth : scarcity
- C. fear : unknown
- D. death : famine

Answer : B

Explanation: Cohesion leads to unity. Dearth leads to scarcity.

28) Choose the word most nearly opposite in meaning to - heed

- A. ignore
- B. express
- C. converse
- D. attend

Answer : A

30) Choose the word most nearly opposite in meaning to - frustrate

- A. mollify
- B. pacify
- C. encourage
- D. irritate

Answer : C



31) Choose the word most nearly opposite in meaning to - abandon

- A. keep
- B. discover
- C. recover
- D. locate

Answer : A

32) Choose the word most nearly opposite in meaning to - mordant

- A. serene
- B. gentle
- C. penetrating
- D. acerbic

Answer : B

33) Choose the word most nearly opposite in meaning to - dissonance

- A. note
- B. conformist
- C. chord
- D. harmony

Answer : D

34) Choose the word most nearly opposite in meaning to - refute

- A. believe
- B. prove
- C. allow
- D. contradict

Answer : B

35) Choose the word most nearly opposite in meaning to - sedentary

- A. exciting
- B. inanimate
- C. wearisome
- D. active

Answer : D



36) Choose the word most nearly opposite in meaning to - compromise

- A. confrontation
- B. concession
- C. indulgence
- D. allowance

Answer : A

37) Choose the word most nearly opposite in meaning to - opulence

- A. magnanimity
- B. abstinence
- C. moderation
- D. poverty

Answer : D

38) Choose the word most nearly opposite in meaning to - deliberate

- A. purposeful
- B. conscious
- C. accidental
- D. intentional

Answer : C

39) Choose the word most similar in meaning to - mesmerize

- A. contradict
- B. fascinate
- C. attack
- D. confuse

Answer : B

40) Choose the word most similar in meaning to - quirky

- A. appreciation
- B. ungrateful
- C. interruption
- D. peculiar

Answer : D



41) Choose the word most similar in meaning to - exonerate

- A. deteriorate
- B. convey
- C. deliberate
- D. absolve

Answer : D

42) Choose the word most similar in meaning to - consecrate

- A. dedicate
- B. decay
- C. appease
- D. plead

Answer : A

43) Choose the word most similar in meaning to - lament

- A. mourn
- B. impulse
- C. peril
- D. fraud

Answer : A

44) Choose the word most similar in meaning to - manipulate

- A. gerrymander
- B. condescend
- C. conciliate
- D. deviate

Answer : A

45) Choose the word most similar in meaning to - abstruse

- A. simple
- B. unadorned
- C. painful
- D. perplexing

Answer : D



46) Choose the word most similar in meaning to - incorporeal

- A. unbiased
- B. insubstantial
- C. deceptive
- D. agricultural

Answer : B

47) Choose the word most similar in meaning to - undermine

- A. subvert
- B. demand
- C. depreciate
- D. dishearten

Answer : A

48) Choose the word most similar in meaning to - ignominious

- A. thorough
- B. senseless
- C. discomfiting
- D. vague

Answer : C

49) Which word means - to waste away; to wither

- A. atrophy
- B. shrink
- C. desiccate
- D. contract

Answer : A

50) Which word means - to understand; to figure out

- A. dissemble
- B. improvise
- C. Cosset
- D. fathom

Answer : D



General (Physics, Chemistry, ICT) Past questions & Answers

1) Watt's law states the relationships of power to energy.

- A. True
- B. False

Answer: Option B

Explanation:

Watt's law gives relationship between power to current, voltage and resistance.

2) Energy is equal to power multiplied by voltage.

- A. True
- B. False

Answer: Option B

Explanation:

Energy = Power*Time (not multiply by voltage).

$$P = VI.$$

$$P = (V^2)/R.$$

$$P = (I^2)*R.$$

3) The capacity of a battery is measured in milliamperes.

- A. True
- B. False

Answer: Option B

Explanation:

Battery capacity is measured in ampere-hours (amp-hours)

4) The power rating of a resistor determines the minimum power that it can handle safely

- A. True
- B. False

Answer: Option B



5) The joule is a unit of energy.

- A. True
- B. False

Answer: Option A

6) If you used 400 W of power for 30 h, you have used

- A. 1.3 kWh
- B. 13.3 kWh
- C. 1.2 kWh
- D. 12 kWh

Answer: Option D

Explanation:

The power is multiplied by time then the energy is:

$$E = P \cdot T.$$

$$E = 400 \cdot 30 = 12 \cdot 10^3.$$

$$= 12 \text{KWH.}$$

7) At the end of a 14 day period, your utility bill shows that you have used 18 kWh. What is your average daily power?

- A. 1.286 kWh
- B. 12.85 kWh
- C. 535 kWh
- D. 252 kWh

Answer: Option A

Explanation:

18 kwh for 14 days.

For one day power consumption is = $18/14$.

$$= 1.2857$$



- 8) A 15 V source is connected across a 12 Ω resistor. How much energy is used in three minutes?
- A. 938 Wh
 - B. 0.938 Wh
 - C. 56.25 Wh
 - D. 5.6 Wh

Answer: Option B

Explanation:

As per ohm's law,

$$\begin{aligned} R &= V / I \\ I &= V / R \\ &= 15 / 12 \\ &= 1.25 \text{ A} \end{aligned}$$

$$\begin{aligned} \text{And Power } P &= V * I \\ &= 15 * 1.25 \\ &= 18.75 \text{ w} \end{aligned}$$

Given duration is 3 minute i.e. 3 / 60 hour

$$\text{Therefore, Watt-hour} = 18.75 * (3 / 60) = 0.9375$$

- 9) A given power supply is capable of providing 6 A for 3.5 h. Its ampere-hour rating is
- A. 0.58 Ah
 - B. 2.1 Ah
 - C. 21 Ah
 - D. 58 Ah

Answer: Option C

Explanation:

The capacity of battery generally expressed in AH, so that in this case AH is $6\text{A} * 3.5\text{H} = 21\text{AH}$

- 10) A power supply produces a 0.6 W output with an input of 0.7 W. Its percentage of efficiency is
- A. 8.57%
 - B. 42.85%
 - C. 4.28%
 - D. 85.7%

Answer: Option D



Explanation:

Efficiency=output/input

$$= \frac{6}{7}$$

$$= 0.857$$

% efficiency = 0.857×100

$$= 85.7\%$$

11) A certain appliance uses 350 W. If it is allowed to run continuously for 24 days, how many kilowatt-hours of energy does it consume?

- A. 20.16 kWh
- B. 201.6 kWh
- C. 2.01 kWh
- D. 8.4 kWh

Answer: Option B

Explanation:

$$\text{Kwh} = \frac{350 \times 24 \times 24}{1000}$$

$$= 201.6 \text{ kWh}$$

12) In 0.025 W, there are

- A. 25 kW
- B. 0.00025 mW
- C. 2,500 μW
- D. 25 mW

Answer: Option D

Explanation:

$$0.025 \text{ W} = 25 \times 10^{-3} = 25 \text{ mW}$$

13) When the pointer of an analog ohmmeter reads close to zero, the resistor being measured is

- A. overheated
- B. shorted
- C. open
- D. reversed

Answer: Option B



Explanation:

$r=0$ when short circuited

$r=\infty$ (high) when open circuited.

14) A $33\ \Omega$ half-watt resistor and a $330\ \Omega$ half-watt resistor are connected across a 12 V source. Which one(s) will overheat?

- A. 33
- B. 330
- C. both resistors
- D. neither resistor

Answer: Option D

Explanation:

15) The current in a given circuit is not to exceed 24 A. Which value of fuse is best?

- A. a fuse is not necessary
- B. 10 A
- C. 24 A
- D. 20 A

Answer: Option C

Explanation:

Yes, answer is 24A. If current flow exceeds 24A then fuse works and breaks up the circuit, till then circuit is safe

16) An ohmmeter is an instrument for measuring

- A. current
- B. voltage
- C. resistance
- D. wattage

Answer: Option C

17) An ammeter is an electrical instrument used to measure

- A. current
- B. voltage
- C. resistance
- D. none of the above

Answer: Option A



- 18) A circuit breaker is a
- A. fuse
 - B. switch
 - C. resettable protective device
 - D. resistor

Answer: Option C

Explanation:

Circuit breaker break the circuit when it sense any abnormal condition in the circuit using relay. Relay is a very important component in a circuit breaker.

- 19) A neutral atom with an atomic number of five has how many electrons?
- A. 1
 - B. 5
 - C. none
 - D. depends on the type of atom

Answer: Option B

Explanation:

1 st orbit = 2 electrons
2 nd orbit = 3 electron
atomic no = no.of protons in nucleus
there fore $2+3=5$

- 20) A wiper is the sliding contact in a
- A. switch
 - B. photoconductive cell
 - C. thermistor
 - D. potentiometer

Answer: Option D

Explanation:

Wiper is connected on metal rod of potentiometer, we can vary it.



21) If there is 6 A of current through the filament of a lamp, how many coulombs of charge move through the filament in 1.75 s?

- A. 10.5 C
- B. 105 C
- C. 3.4 C
- D. 34 C

Answer: Option A

Explanation:

Charge(Q) = current/time(sec)=i/t

so $i = Q/t$

$Q = i \cdot t = (6 \cdot 1.75)$

$Q = 10.5$

22) A multimeter measures

- A. current
- B. voltage
- C. resistance
- D. current, voltage, and resistance

Answer: Option D

23) A material that does not allow current under normal conditions is a(n)

- A. insulator
- B. conductor
- C. semiconductor
- D. valence

Answer: Option A

24) The colored bands for a 4,700 ohm resistor with a ten percent tolerance are

- A. yellow, violet, red, gold
- B. yellow, violet, orange, gold
- C. yellow, violet, red, silver
- D. orange, violet, red, silver

[View answer](#) [Discuss in forum](#)

Answer: Option C

E



Explanation:

BLACK-0
BROWN-1
RED -2
ORANGE-3
YELLOW-4
GREEN-5
BLUE -6
VIOLET-7
GREY -8
WHITE-9

The first band gives the first digit.

The second band gives the second digit.

The third band indicates the number of zeros.

The fourth band is used to show the tolerance (precision) of the resistor

4700 means,

4 =yellow

7 =violet

00 =red(10^2)

Ten percent tolerance =silver

So, =4700.

25) Eight-tenths coulomb passes a point in 4 s. The current in amperes is

- A. 1.6 A
- B. 16 A
- C. 2 A
- D. 0.2 A

Answer: Option D

Explanation:

$Q = 8/10$ given;

$t = 4$ s

Now current $i = Q / t$ $i = (8/10)/4$

$i = 2/10$;

$i = 0.2$ A



26) The tool material, for faster machining, should have

- A. wear resistance
- B. red hardness
- C. toughness
- D. all of the above

Answer D

27) Dielectric is used in

- A. electro-chemical machining
- B. ultra-sonic machining
- C. electro-discharge machining
- D. laser machining

Answer C

28) In a single point tool, the angle between the surface of the flank immediately below the point and a line drawn from the point perpendicular to the base, is known as

- A. side relief angle
- B. end relief angle
- C. back rake angle
- D. side rake angle

Answer B

29) The type of reamer used for reaming operation in a blind hole, is

- A. straight fluted reamer
- B. left hand spiral fluted reamer
- C. right hand spiral fluted reamer
- D. any one of the above

Answer C



30) In centreless grinders, the maximum angular adjustment of the regulating wheel is

- A. 5°
- B. 10°
- C. 15°
- D. 20°

Answer B

31) The lathe spindles are usually made hollow and provided with

- A. internal taper
- B. external taper
- C. internal and external taper
- D. no taper

Answer A

32) Which of the following parameters influence the axial feed rate in centreless grinding?

- A. Regulating wheel diameter
- B. Speed of the regulating wheel
- C. Angle between the axes of grinding and regulating wheels
- D. all of the above

Answer D

33) The example of snag grinding is

- A. trimming the surface left by sprues and risers on castings
- B. grinding the parting line left on castings
- C. removing flash on forgings
- D. all of the above

Answer D



34) internal gears can be made by

- A. hobbing
- B. shaping with pinion cutter
- C. shaping with rack cutter

Answer B

35) If the diameter of the hole is subject to considerable variation, then for locating in jigs and fixtures, the pressure type of locator used is

- A. conical locator
- B. cylindrical locator
- C. diamond pin locator
- D. vee locator

Answer A

36) Segmental chips are formed during machining

- A. mild steel
- B. cast iron
- C. high speed steel
- D. high carbon steel

Answer B

37) The leakage in a refrigeration system using ammonia is detected by

- A. halide torch
- B. sulphur sticks
- C. soap and water
- D. all of the above

Answer B



38) The process, generally used in summer air conditioning to cool and dehumidify the air, is called

- A. humidification
- B. dehumidification
- C. heating and humidification
- D. cooling and dehumidification

Answer D

39) The heat transfer from a hot body to a cold body is directly proportional to the surface area and difference of temperatures between the two bodies. This statement is called

- A. First law of thermodynamics
- B. Newton's law of cooling
- C. Newton's law of heating
- D. Stefan's law

Answer B

40) The rate of heat flow through a body is . The term x/kA is known as

- A. thermal coefficient
- B. thermal resistance
- C. thermal conductivity
- D. none of the above

Answer B

41) In counter-current flow heat exchangers

- A. both the fluids at inlet are in their hottest state
- B. both the fluids at inlet are in their coldest state
- C. both the fluids at exit are in their hottest state
- D. one fluid is coldest and the other is hottest at inlet

Answer A



42) The most commonly used method for the design of duct size is the

- A. velocity reduction method
- B. equal friction method
- C. static regain method
- D. dual or double method

Answer C

43) In a shell and tube heat exchanger, baffles are provided on the shell side to

- A. improve heat transfer
- B. provide support for tubes
- C. prevent stagnation of shell side fluid
- D. all of the above

Answer D

44) A refrigerant with the highest critical pressure is

- A. R-11
- B. R-12
- C. R-22
- D. Ammonia

45) A condenser of refrigeration system rejects heat at the rate of 120 kW, while its compressor consumes a power of 30 kW. The coefficient of performance of the system will be

- A. 1/4
- B. 1/3
- C. 3
- D. 4

Answer D



46) If the energy radiated per second per sq. cm. of the surface for wave lengths lying between λ , and $\lambda + d\lambda$ is represented by $(e\lambda.d\lambda)$, then $e\lambda$ is called

- A. absorptive power
- B. emissive power
- C. emissivity
- D. none of the above

Answer B

47) The temperature of air recorded by a thermometer, when its bulb is surrounded by a wet cloth exposed to the air, is called

- A. wet bulb temperature
- B. dry bulb temperature
- C. dew point temperature
- D. none of the above

Answer A

48) R-12 is generally preferred over R-22 in deep freezers since

- A. it has low operating pressures
- B. it gives higher coefficient of performance
- C. it is miscible with oil over large range of temperatures
- D. all of the above

Answer C

49) The evaporator used in house-hold refrigerators is

- A. frosting evaporator
- B. non-frosting evaporator
- C. defrosting evaporator
- D. none of the above

Answer A



50) The pressure at the outlet of a refrigerant compressor is called

- A. suction pressure
- B. discharge pressure
- C. critical pressure
- D. back pressure

Answer B

51) The dry bulb temperature lines, on the psychrometric chart are

- A. vertical and uniformly spaced
- B. horizontal and uniformly spaced
- C. horizontal and non-uniformly spaced
- D. curved lines

Answer A

52) In electrolux refrigerator

- A. ammonia is absorbed in hydrogen
- B. ammonia is absorbed in water
- C. ammonia evaporates in hydrogen
- D. hydrogen evaporates in ammonia

Answer C

53) Which of the following statement is correct?

- A. The constant enthalpy lines are also constant wet bulb temperature lines.
- B. The wet bulb and dry bulb temperature are equal at saturation condition.
- C. The wet bulb temperature is a measure of enthalpy of moist air.
- D. all of the above

Answer D



54) Which of the following refrigerant has the maximum ozone depletion potential in the stratosphere?

- A. Ammonia
- B. Carbon dioxide
- C. Sulphur dioxide
- D. Fluorine

Answer D

55) A heat pump working on a reversed Carnot cycle has a C.O.P. of 5. It works as a refrigerator taking 1 kW of work input. The refrigerating effect will be

- A. 1 kW
- B. 2 kW
- C. 3 kW
- D. 4 kW

Answer D

56) The automobile radiator is a heat exchanger of

- A. parallel flow type
- B. counter flow type
- C. cross flow type
- D. regenerator type

Answer C

57) The centrifugal compressors are generally used for refrigerants that require

- A. small displacements and low condensing pressures
- B. large displacements and high condensing pressures
- C. small displacements and high condensing pressures
- D. large displacements and low condensing pressures

Answer D



58) The humidity ratio or specific humidity is the mass of water vapour present in

- A. 1 m³ of wet air
- B. 1 m³ of dry air
- C. 1 kg of wet air
- D. 1 kg of dry air

Answer D

59) In free convection heat transfer transition from laminar to turbulent flow is governed by the critical value of the

- A. Reynold's number
- B. Grashoff's number
- C. Reynold's number, Grashoff's number
- D. Prandtl number, Grashoff's number

Answer D

60) Which of the following statements is wrong?

- A. The heat transfer in liquid and gases takes place according to convection
- B. The amount of heat flow through a body is dependent upon the material of the body
- C. The thermal conductivity of solid metals increases with rise in temperature
- D. Logarithmic mean temperature difference is not equal to the arithmetic mean temperature difference.

Answer C

61) Which one of the following is the effect of blade shape on performance of a centrifugal compressor ?

- A. Backward curved blades has poor efficiency
- B. Backward curved blades lead to stable performance
- C. Forward curved blades has higher efficiency
- D. Forward curved blades produce lower pressure ratio

Answer D



62) In a series RLC circuit, the larger reactance determines the net reactance of the circuit.

- A. True
- B. False

Answer: Option A

Explanation:

In a series RLC circuit, the net reactance= inductive reactance X_L -capacitive reactance X_C . therefore if any one reactances is large enough then other can be neglected and that primarily determines almost the net reactance of the circuit....

63) Resonance is a condition in a series RLC circuit in which the capacitive and inductive reactances are equal in magnitude.

- A. True
- B. False

Answer: Option A

Explanation:

Because at resonance $X_L=X_C$.

64) A certain series resonant circuit has a bandwidth of 2 kHz. If the existing coil is replaced with one having a higher value of Q, the bandwidth will

- A. increase
- B. remain the same
- C. decrease
- D. be less selective

Answer: Option C

Explanation:

We know,

$$B_w = F/Q.$$

When Q increase, the bandwidth decreases.



65) In a certain series resonant circuit, $V_C = 125\text{ V}$, $V_L = 125\text{ V}$, and $V_R = 40\text{ V}$. The value of the source voltage is

- A. 125 V
- B. 250 V
- C. 290 V
- D. 40 V

Answer: Option D

Explanation:

$$V_s^2 = (V_r^2 + (V_l - V_c)^2),$$

For resonance, $V_l = V_c$,

So, $V_s = V_r$.

66) To tune a parallel resonant circuit to a higher frequency, the capacitance should be

- A. increased
- B. decreased
- C. left alone
- D. replaced with inductance

Answer: Option B

Explanation:

Because $f_r = 1/(2\pi\sqrt{LC})$.

67) A $24\ \Omega$ resistor, an inductor with a reactance of $120\ \Omega$, and a capacitor with a reactance of $120\ \Omega$ are in series across a 60 V source. The circuit is at resonance. The voltage across the inductor is

- A. 60 V
- B. 660 V
- C. 30 V
- D. 300 V

Answer: Option D

Explanation:

As in resonance impedance equal to resistance

$$\text{Current} = 60/24 = 2.5$$

$$V_t \text{ across inductor} = 120 \times 2.5 = 300\text{V}$$



68) If the value of C in a series RLC circuit is decreased, the resonant frequency

- A. is not affected
- B. increases
- C. is reduced to zero
- D. decreases

Answer: Option B

Explanation:

69) A resonant circuit has a lower critical frequency of 7 kHz and an upper critical frequency of 13 kHz. The bandwidth of the circuit is

- A. 7 kHz
- B. 13 kHz
- C. 20 kHz
- D. 6 kHz

Answer: Option D

Explanation:

$$B.W = f_2 - f_1$$

$$B.W = 13 - 7 = 6$$

70) A 90Ω resistor, a coil with 30Ω of reactance, and a capacitor with 50Ω of reactance are in series across a 12 V ac source. The current through the resistor is

- A. 9 mA
- B. 90 mA
- C. 13 mA
- D. 130 mA

Answer: Option D

Explanation:

$$V = IR$$

$$I = V/R$$

So.. R is nothing but Z ($R=Z$)

$$Z = \sqrt{R^2 + (X_L - X_C)} \text{ OR } \sqrt{R^2 + (X_C - X_L)}$$

$$z = \sqrt{90^2 + (50 - 30)^2}$$

$$Z = \sqrt{8100 + 400}$$

$$z = 92.195$$

$$I = V/Z = 12/92.195 = 0.13015 = 130 \text{mA}$$



71) _____ controls the way in which the computer system functions and provides a means by which users can interact with the computer.

- A. The operating system
- B. The motherboard
- C. The platform
- D. Application software

Answer: A

72) The difference between people with access to computers and the Internet and those without this access is known as the:

- A. digital divide.
- B. Internet divide.
- C. Web divide.
- D. cyberway divide.

Answer: A

73) Servers are computers that provide resources to other computers connected to a:

- A. mainframe
- B. supercomputer
- C. network
- D. client

Answer: C

74) Word processing, spreadsheet, and photo-editing are examples of:

- A. application software.
- B. system software.
- C. operating system software.
- D. platform software.

Answer: A



75) A _____ is approximately one billion bytes.

- A. bit
- B. kilobyte
- C. gigabyte
- D. megabyte

Answer: C

76) All of the following are examples of input devices EXCEPT a:

- A. scanner
- B. mouse
- C. printer
- D. keyboard

Answer: C

77) Computers use the _____ language to process data.

- A. relational
- B. megabyte
- C. binary
- D. processing

Answer: C

78) In the binary language each letter of the alphabet, each number and each special character is made up of a unique combination of:

- A. eight bytes.
- B. eight characters.
- C. eight bits.
- D. eight kilobytes.

Answer: C



79) _____ is data that has been organized or presented in a meaningful way.

- A. A process
- B. Information
- C. Software
- D. Storage

Answer: B

80) All of the following are examples of real security and privacy risks EXCEPT:

- A. Viruses
- B. Identity theft.
- C. Hackers
- D. Spam

Answer: D

81) Which of the following is an input device?

- A. Mouse
- B. Keyboard
- C. Scanner
- D. All the above

Answer: D

82) The set of instructions that tells the computer what to do is

- A. Softcopy
- B. Software
- C. Hardware
- D. Hardcopy

Answer: B



83) Which of the following stores more data?

- A. DVD
- B. CD ROM
- C. Floppy Disk
- D. CD RW

Answer: A

84) — is the heart of the computer and this is where all the computing is done.

- A. Keyboard
- B. Monitor
- C. Central Processing Unit
- D. Printer

Answer: C

85) One byte is equivalent to

- A. 8 bit
- B. 16 bit
- C. 32 bit
- D. 64 bit

Answer: A

86) To move forward through the tabs

- A. CTRL+TAB
- B. CTRL+SHIFT+TAB
- C. SHIFT+TAB
- D. None of these

Answer: A



87) Personal computers can be connected together to form a

- A. server
- B. network
- C. supercomputer
- D. Enterprise

Answer: B

88) Choose the smallest memory size

- A. kilobyte
- B. megabyte
- C. gigabyte
- D. terabyte

Answer: A

89) The steps and tasks needed to process data, such as responses to questions or clicking an icon, are called:

- A. instructions
- B. operating system
- C. application software
- D. system unit

Answer: A

90) The operating system is the most common type of _____ software.

- A. system
- B. communication
- C. application
- D. word-processing

Answer: A



91) The ability to recover and read deleted or damaged files from a criminals computer is an example of a law enforcement specialty called:

- A. simulation
- B. animation
- C. robotics
- D. computer forensics.

Answer: D

92) The base of the hexadecimal number system is

- A. 2
- B. 8
- C. 10
- D. 16

Answer: D

93) Computer software includes

- A. Packaged programs
- B. Application programs
- C. Operating system programs
- D. All of these

Answer: D

94) The Operating System Manages

- A. Processes
- B. Memory
- C. Disks and I/O devices
- D. All of the above

Answer: D

95) Allocation of a resources in a time dependent manner to several program simultaneously called

- A. multi user
- B. multi tasking
- C. time sharing
- D. None of these.

Answer: C



96) Data that are accumulated and processed in group called

- A. Group processing
- B. Batch Processing
- C. Time sharing
- D. None of these.

Answer: B

97) Multiprocessing supports more than one.....at the same time

- A. User
- B. Process
- C. Hardware
- D. None of these.

Answer: B

98) Which of the following are true about firewalls?

- A. Follows a set of rules
- B. Can be either a hardware or software device
- C. Filters network traffic
- D. All the above

Answer: D

99) What are the four things needed to connect to the Internet?

- A. Monitor, keyboard, mouse, modem
- B. Telephone line, PDA, modem and computer
- C. Telephone line, modem, computer, and an ISP
- D. Modem, computer, PDA and ISP

Answer: C

100) 1024 bytes equals:

- A. 1 KB
- B. 1 MB
- C. 1 GB
- D. 1 TB

Answer: A

NNPC PAST INTERVIEW QUESTIONS CULLED FROM NAIRALAND

<https://www.nairaland.com/2154372/nnpc-recruitment-interview>

Credit to Jimngam and Syenite

"Congrats to those that have received invitations. Over 4,000 candidates (can't remember the exact figure now) made it to the interview stage.

Firstly NNPC recruitment is based on a quota system. Almost an equal number of applicants will be taken from all the states and FCT. This implies that you are competing against people from your state. And this will in turn go down to LGA by LGA. So if you have a family member or a cousin in the race it means you are virtually fighting for one slot.

Under this system situations arise where a candidate from State A with 50% score in the interview will be employed while a candidate from State B with 80% score might not be employed. So those of you from educationally developed states should brace up for the challenge. I am sure you know those states.

What to equip yourself with:

When NNPC was established and under what decree

NNPC's Core Businesses

NNPC Subsidiaries and their operational functions

The Refineries and their various Refining capacities

Which of the NNPC subsidiaries u'll like to work with and why?

Why do you want to work with the NNPC.

Why do you want to work in the Oil industry

Why do you want to leave your former place of work(if you are already working)

Where do you hope to be in 10years time?

Understand your discipline and how you can apply it in the oil industry

Know the name of the current and immediate past GMD

Expect that you'll be asked atleast one basic question about your discipline

Know where the head quarters of each of the Subsidiaries are located say Benin, Warri, Lagos etc.

Research the operations of the Subsidiaries so you'll know which one you can fit in.(I am currently working with the subsidiary I mentioned during my interview so take your time to research,though it does not totally follow).

Look smart and composed. It's usually a friendly interview and note that your line of discussion will mostly go in line with your responses so be sure of what to say. But please don't be too confident else you'll sound arrogant.

I'm speaking from experience. The above where questions asked me and some of my colleagues who I am working with now. So expect most of the questions to come from them.

Know that NNPC will not take everybody.

Best of God. I hope to meet you as colleagues soon."

ANOTHER INTERVIEW EXPERIENCE

I attended the 2011 interview, below is my record of what transpired (I didn't remember all these now, am not Mike Ross from Suits.... lol. I posted it in one of the threads back then);

"I had mine yesterday, I'm an economist, the interview was cool, here is a summary: a panel of 7 people, headed by a chairman, they asked me to introduce (sell) myself, when I did and mentioned that I'm currently working with a bank, I was asked to comment on the Nigerian banking industry, as I was commenting I mentioned the global financial meltdown, and was asked whether I think the world was out of the woods yet, after responding, they asked a discipline related question, that what are the major components of microeconomics, I said Demand and Supply, was asked to define them, then I was asked what elasticity of Demand is, I told them and gave an example of a unitary elasticity of demand (insulin), was asked if elasticity of demand can be -ve, I told them it can be -ve, +ve or unitary, was asked when it is -ve (couldn't remember immediately), told them I can't really remember and don't want to mix them up, then I was asked the core business of NNPC, I said exploration and refining, was asked what subsidiaries carry out each, I said NPDC (exploration) and KRPC (refining). Then I was asked some products of

KRPC I said PMS, diesel, LPG, and Kero(domestic and aviation) I was asked my gross annual and net monthly salaries, den lastly how long notice do I need to give my employers, I said a month, I was given d opportunity to ask a question, I askd what the next stage was, they said rankin and selection of successful candidates then induction."

Wen introducing yourself, chip in where you are working(if are you are), if you don't want to be asked too many discipline related questions, if you noticed(from above) the interview takes the path of your responses, so u you are in control.

Meanwhile, things might have changed, just felt this will give an idea of how the experience was, back in 2011.

DMainMan wishes you the success in your test and interview InshaAllah

From DMainMan

PTDF Scholar

CEO DMainMan and Zeltney Enterprises/Consult,

<https://www.facebook.com/dmainmanfoundation/>

<https://www.dmainmanconsult.com/>