In the following questions four alternatives are given for Idiom/Phrases in Capital. Chose the one which best expresses the meaning of the idioms/phrases given in Capital.

(1). The President was **BEATING AROUND THE BUSH** when the citizens demanded a reason for the forgery of legal documents.

   a) Beating someone
   b) Argumenting
   c) Avoiding questions
   d) Talking about papers

(2). He is in the habit of **PICKING HOLES IN** everything.

   a) causing trouble to
   b) asking questions about
   c) finding fault with
   d) delving deep into

(3). The member **TOOK EXCEPTION** to the secretary's remark about the current political situation in the State.

   a) laughed at
   b) accepted readily
   c) granted
   d) objected to

(4). The mother was right in **GIVING A PIECE OF MIND** to the daughter.

   a) Speaking kindly
   b) Speaking cheerfully
   c) Speaking sharply
   d) Speaking sadly

(5). The young servant **GOES ABOUT** with the old master.
a) adjust well  

b) mover around  

c) goes around  

d) tries to know more about  

Choose the word closest in meaning to the given word, from among the options: 

(6) Insistence  

(a) Relying  

(b) Urging  

(c) Lying  

(d) Recognizing  

(7) Queer  

(a) Strange  

(b) Peer  

(c) Peep  

(d) Quill  

(8) Emancipate  

(a) Liberate  

(b) Emit  

(c) Worn out  

(d) Old  

Fill in the blanks with appropriate, word chosen from the given alternatives: 

(9) The youth should believe _____ God.  

(a) upon  

(b) on  

(c) of
(d) in

(10) I have been looking for an apartment and I finally found the ____ one.
(a) airy
(b) good
(c) cheap
(d) perfect

(11) He was not a man ____ intelligence.
(a) absent of
(b) empty of
(c) devoid of
(d) lacking of

In the following questions some part of the sentence has errors and some are correct. Find out which part of a sentence (a), (b), (c) has an error. If a sentence is free from error, then (d) is your answer.

(12) The clients are waiting(a)/ outside since morning and(b)/ will continue to wait until you meet them.(c)/ No error (d)

(13) According to some estimates(a)/ there are(b)/ seven thousand type of plants. (c)/ No error(d)

(14) What would(a)/ you have done(b)/ if you have missed the train?(c)/ No error(d)

In the following questions, choose the alternative opposite in meaning of the given words:

(15) Pragmatic
(a) Vague
(b) Optimistic
(c) Idealistic
(d) Indefinite
(16) Fabricate
(a) Demolish
(b) Construct
(c) Unearth
(d) Renovate

(17) Gregarious
(a) Sociable
(b) Unsociable
(c) Societel
(d) Solitary

(18) Persuade
(a) Promote
(b) Dissolve
(c) Dissuade
(d) Pervade

Choose the wrongly spelt word from the following:

(19)
(a) Wellful
(b) Wilfull
(c) Wilful
(d) Willfull

(20)
(a) Inovation
(b) Innovation
(c) Innovasion
(d) Inovasion

(21)
(a) Concensus
(b) Concensas
(c) Consensus
(d) Consenzas

Change the following sentences into indirect speech:

(22) He said to his daughter, "Do you have fever?"
(a) He told his daughter whether she had fever.
(b) He questioned his daughter about the fever.
(c) He asked his daughter if she had fever.
(d) He asked his daughter did she have fever.

(23) He said, "What a handsome person is Nehru!"
(a) He exclaimed what a handsome person Nehru was.
(b) He wondered if Nehru was a handsome person.
(c) He wondered that Nehru is a handsome person.
(d) He exclaimed that Nehru was a handsome person.

(24) Kudankulam Nuclear Power Plant is located in which of the following states?
(a) Tamil Nadu
(b) Karnataka
(c) Kerala
(d) Maharashtra
(25) 'Majhi Kanya Bhagyashree' scheme' was launched by which of the following states?
(a) Haryana
(b) Maharashtra
(c) Madhya Pradesh
(d) Gujarat

(26) Who is appointed as the Bowling Coach the Indian Cricket team by the Board of Control for Cricket in India (BCCI)?
(a) Bharat Arun
(b) R Sridhar
(c) J Srinath
(d) Sanjay Bangar

(27) 10th Schedule of the Indian constitution is related to
(a) Classical Languages
(b) Rajya Sabha
(c) Lok Sabha
(d) Anti-Defection Law

(28) Who is known as 'the Sahkespeare of India'?
(a) Maharishi Valmiki
(b) Surdas
(c) Kalidas
(d) Dhanvantri

(29) Who founded the Khilji Dynasty(1290-1320 AD)?
(a) Rehmat Khan Khilji
(b) Jalaluddin Khilji
(30) Who wrote the book 'The Indian War of Independence'?
(a) Karl Marx
(b) VD Savarkar
(c) RC Mazumdar
(d) SB Chowdhury

(31) The Rowlatt Act (1919) was passed during the Viceroyalty of
(a) Lord Chelmsford
(b) Lord Minto
(c) Lord Reading
(d) Lord Irwin

(32) Which of the following is not a metamorphic rock?
(a) Gneiss
(b) Homblend
(c) Marble
(d) Granite

(33) What is the capital of Hong Kong?
(a) Almati
(b) Jakarta
(c) Budapest
(d) Victoria

(34) Which one of the following acts of Company rule in India provided Supreme Court at Calcutta?
(a) Regulating Act of 1773
(b) Pitts India Act of 1784
(c) Charter Act of 1793
(d) Charter Act of 1813

(35) Who was the chairman of the Drafting Committee of the Constituent Assembly?
(a) KM Munshi
(b) Dr. BR Ambedkar
(c) Dr. Rajendra Prasad
(d) Pt. Jawaharlal Nehru

(36) Which of the following Part of the Indian Constitution deals with ‘Citizenship’?
(a) Part I
(b) Part II
(c) Part XII
(d) Part XVI

(37) Which of the following Constituent Amendment had inserted Bodo, Dogri, Maithili and Santhali in the 8th Schedule of the Constitution?
(a) 92nd Amendment
(b) 93rd Amendment
(c) 94th Amendment
(d) 95th Amendment

(38) Which one of the following is not a Primary Colour?
(a) Red
(b) Green
(c) Blue
(d) White

(39) Which of the following is not an ore of Iron?
(a) Haematite
(b) Lemonite
(c) Copper Pyrites
(d) All of the above

(40) Which of the following is not a Fat Soluble Vitamin?
(a) Vitamin A
(b) Vitamin D
(c) Vitamin E
(d) Vitamin C

(41) Which one of the following disease is caused due to Virus?
(a) Dengue
(b) Chicken Pox
(c) AIDS
(d) All of the above

(42) Who was the winner of Men’s Singles Wimbledon 2017 Title?
(a) Roger Federer
(b) Marin Cilic
(c) Lukas Kubot
(d) Rafael Nadal

(43) 12th G-20 2017 Summit was held in
(a) Germany
(b) China
(c) Australia
(d) France

(44) Which one of the following is not a member of G-7?
(a) USA
(b) China
(c) Japan
(d) Italy

(45) Which one of the following countries was not a participant of Malabar (Naval Exercise) 2017?
(a) USA
(b) Japan
(c) China
(d) India

(46) Who is the Chief Minister of Tamil Nadu?
(a) C. Vidyasagar Rao
(b) Edappadi K Palaniswami
(c) V. K. Sasikala
(d) None of the above

(47) If MOTHER is coded as NPUIFS, how can ZENITH be written in the code?
(a) AFOJUI
(b) AFOGHJ
(c) BPKVJ
(d) AFOGHI
(48) If WATIN is codes as TXVFK, how can LBUK be written in the code?
(a) IYRH
(b) KATJ
(c) JZSI
(d) NDWM

(49) Find the odd one out:
(a) Pathology
(b) Geology
(c) Radiology
(d) Cardiology

In the following questions, various terms of an alphabet series are given with one or more terms missing as shown by (?). Choose the missing terms out of the given alternatives.

(50) TMJ, QNL, NON, KPP, (?)
(a) HQQ
(b) JQR
(c) HQR
(d) IQS

In the following questions, which one of the given responses would be a meaningful order of the following words:

(51)
1. Birth
2. School
3. College
4. Job
5. Retirement
(a) 1, 4, 5, 2, 3
(b) 1, 2, 4, 3, 5
(c) 1, 2, 3, 4, 5
(d) 1, 3, 4, 5, 2

(52) I am facing West. I turn 100 degrees in the clockwise direction and then 145 degrees in the anti-clockwise direction. Which direction am I facing now?

(a) South East
(b) South West
(c) North
(d) East

Q.53 In a group of 75, If 20 people like tea and coffee, 45 people like coffee, then select the correct Venn diagram that shows

(1) How many like only milk?
(2) How many like only coffee?

Answer the question based on the following:

A.

B.

C.
(54) If in each number, first and the last digit are interchanged, which one of the following will be the lowest number?

(a) 462
(b) 892
(c) 234
(d) 867

(55) 'Gulp' is to Drink as 'Rush' is to

(a) Go
(b) Run
(c) Jump
(d) Hop

(56) Which word doesn't belong with the others?

(a) Smell
(b) Touch
(c) Taste
(d) Sweet
Which word doesn't belong with the others?
(a) Guwahati
(b) Dispur
(c) Mumbai
(d) Jaipur

Select the word which cannot be made with the letters THERMODYNAMICS using each letter only once in each word.
(a) MATHEMATICS
(b) MOTHER
(c) MODERN
(d) DYNAMO

Select the word which cannot be made with the letters DISTANCE using each letter only once in each word.
(a) DANCE
(b) STAND
(c) SANE
(d) TEAASE

Which of the following is not an input device?
(a) Touch Screen
(b) Plotter
(c) Touch pad
(d) Web Camera

Which of the following language is used in Scientific Applications?
(a) FORTRAN
(b) COBOL
(c) BASIC
(d) C++

(62) How many 'Bits' are equal to 1 Byte?
(a) 4 Bit
(b) 8 Bit
(c) 16 Bit
(d) 32 Bit

(63) Which of the following is an example of Secondary Memory?
(a) RAM
(b) ROM
(c) SRAM
(d) HDD

(64) What is the first 'E' stands for in the 'EEPROM'?
(a) Erasable
(b) Electrically
(c) Electronically
(d) Easily

(65) Which of the following is refer to as 'Volatile Memory'?
(a) HDD
(b) ROM
(c) RAM
(d) Optical Disk
Which of the following 'Networks' has maximum range?
(a) PAN
(b) LAN
(c) WAN
(d) MAN

'Nibble' is a combination of
(a) 4 bits
(b) 8 bits
(c) 16 bits
(d) 2 bits

Directions (Q.1-2): What should come in the place of question mark (?) in the following questions:

Q.68 3.333 + 33.3 + 3.3 + 333.3 = ? – 3.33
A. 269.363
B. 376.563
C. 258.639
D. 396.356

Q.69 1620 × 2 = ? × 4860
A. 3/5
B. 5/6
C. 3/4
D. 2/3

Q.70 If 2a + 4, a + 2 are complementary angles, then find a.
A. 30 degree
B. 20 degree
C. 25 degree
D. 28 degree
Q.71. The ratio between the volumes of two cones is 1:3 and the ratio between the radius of these two cone is 2:3. Find the ratio between the heights of these two cones.
A. 3:4
B. 5: 6
C. 1:2
D. 3:5

Q.72 25% of X is Y% of 350. Find the ratio of X and Y.
A. 21:16
B. 13:15
C. 14:1
D. 12:11

Q.73. If the average of the five consecutive even numbers is 24. What will be the difference of the smallest and the largest numbers?
A. 10
B. 8
C. 6
D. 4

Q.74 Distance between two places is 35 km. If two persons start running towards each other from these two places with the speed of 3 km/h and 4 km/h. at 7 AM. At what time do they meet?
A. 11 AM
B. 1 PM
C. 10 AM
D. 12 PM

Q.75 The perimeter of an equilateral triangle is 18cm. Find the area of the equilateral triangle.
A. 9√3
B. 4√2
C. 5√3
D. 8√3
Q.76 In a school of 259 students, the ratio of boys and girls is 3:4. What will be the difference between the numbers of boys and girls?
A. 52  
B. 26  
C. 37  
D. 42

Q.77 20 men worked for 10 hours daily and completed a work in 8 days. In how many days he can complete the half of the work if he worked for 8 hours daily?
A. 10 days  
B. 15 days  
C. 12 days  
D. 8 days

Q.78. Which is the largest 4 digit number exactly divisible by 49?
A. 9969  
B. 9967  
C. 9996  
D. 9981

Q.79 The HCF of two numbers is 7 and the LCM of two numbers is 392. The ratio of the two numbers is 7:8. Find the largest number.
A. 32  
B. 40  
C. 49  
D. 56

Q.80 What will be the least number which when double will be exactly divisible by 16, 18, 24 and 30?
A. 1440  
B. 720  
C. 360  
D. 600
Q.81 In a camp, there is milk for 150 men or 200 women. If 100 women have taken the meal, how many men will be drink the remaining milk?
A. 120  
B. 75  
C. 100  
D. 60

Q.82 The length of the rectangle is decreased by 10% and the length of rectangle is increased by 8%. Find the % change in area.
A. 3.5% Decrease  
B. 1.6% Increase  
C. 2.8% Decrease  
D. 3% Increase

Q.83 Find the number of zeroes at the end of 16!.  
A. 3  
B. 5  
C. 6  
D. 4

Q.84. Insert the missing mathematical signs in the problem 7 2 7.5 = 11
A. ÷, +  
B. ×, +  
C. ÷, +  
D. +, -

Q.85 The speed of a car is 150 km/h. If he reduced the speed of car by 20% he takes 20 minutes more to reach the destination. Find the distance of the destination.
A. 210 km.  
B. 180 km.  
C. 150 km.
D. 200 km.

Q.86 What is the angle between the hands of the clock at 8 o’ clock?

A. 110 degree
B. 150 degree
C. 120 degree
D. 90 degree

Q.87 If x+y = 20 and 2y - x = 4, find the value of 2y.

A. 10
B. 14
C. 15
D. 16

Q.88 The thread of a kite is \(100\sqrt{3}\) m long and it is making 60° angular elevation with the ground. Find the height of the kite.

A. 100 m
B. 120 m
C. 150 m
D. 200 m

Q.89 Tap A can fill the tank in 8 hours, tap B can fill the tank in 6 hours and tap C can empty the tank in 4 hours. If the three tap is opened together in how much time the tank will be filled?

A. 15 hours
B. 12 hours
C. 24 hours
D. 21 hours

Q.90 A shopkeeper sold a mobile phone at a profit of 20% and gain Rs. 144. Find the cost price of the Mobile Phone.

A. 800 Rs.
B. 720 Rs.
C. 640 Rs.
D. 600 Rs.

**Descriptive Questions**

91. Write an essay on any of the following (about 400 words):

1. Effects of Pollution on Indian Cities.
2. Popularity of Sports in India.

92. Make a précis of the following passage.

English education and English language have done immense goods to India, inspite of their glaring drawbacks. The notions of democracy and self-government are the born of English education. Those who fought and died for mother India's freedom were nursed in the cradle of English thought and culture. The West has made contribution to the East. The history of Europe has fired the hearts of our leaders. Our struggle for freedom has been inspired by the struggles for freedom in England, America and France. If our leaders were ignorant of English and if they had not studied this language, how could they have been inspired by these heroic struggles for freedom in other lands? English, therefore, did us great good in the past and if properly studied will do immense good in future. English, therefore, did us great good in the past and if properly studied will do immense good in future. English is spoken throughout the world. For international contact our commerce and trade, for the development of our practical ideas, for the scientific studies, English is indispensable. “English is very rich in literature,” our own literature has been made richer by this foreign language. It will really be a fatal day if we altogether forget Shakespeare, Milton, Keats and Shaw.
(1). Answer: (c)

beat around the bush and beat about the bush: to avoid answering a question; to stall; to waste time. Stop beating around the bush and answer my question.

"Let's stop beating about the bush and discuss this matter."

(2). Answer: (c)

PICKING HOLES :Find ind fault with.

"it's really not too difficult to pick holes in the plan"

Synonyms:find fault with, criticize, attack, condemn.

(3). Answer: (d)

take exception (to something)

1. to take offense at something.
   "I must take exception to your remark. Sue took exception to Fred's characterization of Bill as a cheapskate."

2. to disagree with something.
   "I have to take exception to the figure you quoted. The manager took exception to the statement about having only three employees."

(4). Answer: (c)

Give someone a piece of one's mind: (idiomatic) To express one's opinion strongly; to voice one's disagreement or dissatisfaction, especially with another person; to scold or rebuke someone.

"That is the fourth time this week my neighbor's barking dog has woken me up. I'm going to go give her a piece of my mind about it."

(5). Answer: (a)
go about: to occupy oneself with; perform

"The shoemaker goes about his work with a smile."

(6) Answer: (b)

Insistence: the fact or quality of insisting that something is the case or should be done.

"Alison's insistence on doing the washing-up straight after the meal"

synonyms: demand, bidding, command, dictate, instruction, requirement, request, entreaty, urging, exhortation.

(7) Answer: (a)

Queer: strange; odd.

"she had a queer feeling that they were being watched"

synonyms: odd, strange, unusual, funny, peculiar, curious, bizarre, weird, outlandish, eccentric, unconventional, unorthodox, uncanny, unexpected, unfamiliar, abnormal, anomalous, atypical, untypical.

(8) Answer: (a)

Emancipate: set free, especially from legal, social, or political restrictions.

"the citizen must be emancipated from the obsessive secrecy of government"

synonyms: liberated, independent, unconstrained, unpressed, uninhibited, free and easy, free, free-spirited.

(9) Answer: (b)

(10) Answer: (d)

(11) Answer: (c)

Devoid: entirely lacking or free from.

"Lisa kept her voice devoid of emotion"

(12) Answer: (a)
'are waiting' should be replaced with 'have been waiting'

Correct Tense: Present Perfect Continuous

For Example:
He must be tired as he is watching television since morning [Incorrect]
He must be tired as he has been watching television since morning. [Correct]

(13) Answer: (c)

'type' should be replaced with 'types'

(14) Answer: (c)

'have missed' should be replaced with 'had missed'

Rule: If + past perfect, subject + would have + V3

(15) Answer: (c)

Pragmatic: dealing with things sensibly and realistically in a way that is based on practical rather than theoretical considerations.

"a pragmatic approach to politics"

(16) Answer: (a)

Fabricate: invent (something) in order to deceive; construct or manufacture (an industrial product), especially from prepared components.

"officers fabricated evidence"

(17) Answer: (b)

Gregarious: (of a person) fond of company; sociable; (of animals) living in flocks or loosely organized communities.

"he was a popular and gregarious man"

(18) Answer: (c)

Persuade: induce (someone) to do something through reasoning or argument; cause (someone) to believe something, especially after a sustained effort; convince.
"it wasn't easy, but I persuaded him to do the right thing"

Dissuade: persuade (someone) not to take a particular course of action.

"his friends tried to dissuade him from flying"

(19) Answer: (c)

(20) Answer: (b)

(21) Answer: (c)

(22) Answer: (c)

(23) Answer: (d)

(24) Answer: (a)

Kudankulam Nuclear Power Plant is the single largest nuclear power station in India, situated in Koodankulam in the Tirunelveli district of the southern Indian state of Tamil Nadu.

(25) Answer: (b)

Maharashtra government approved a revised policy of the 'Majhi Kanya Bhagyashree' scheme, according to which families who have a yearly income of up to Rs 7.5 lakh will be benefited. The scheme was launched by the state government on April 1, 2016, in place of 'Sukanya' scheme. It is aimed at improving the skewed girl child ratio, prevent sex determination and female foeticide, and support female education. Families having an income up to Rs 7.5 lakh will be eligible for the scheme. After bearing the first girl child, if the mother or the father undergoes a family planning operation, a sum of Rs 50,000 shall be deposited in a bank in the name of the girl child. The scheme will be valid only if there are a maximum of two girl children born. In case a third child is born, the scheme shall become invalid for the first two as well.

(26) Answer: (a)

Board of Control for Cricket in India (BCCI) has appointed Bharat Arun as the Indian Cricket team's bowling coach. They also to retain Sanjay Bangar as an assistant coach and R Sridhar as fielding coach till the 2019 ODI World Cup.
(27) Answer: (d)

The 10th Schedule to the Indian Constitution, that is popularly referred to as the ‘Anti-Defection Law’ was inserted by the 1985 Amendment to the Constitution. ‘Defection’ has been defined as, “To abandon a position or association, often to join an opposing group” The Advanced Law Lexicon defines defection as, “crossing the floor by a member of a Legislature is called defection.” In short, defection is an act by a member of a particular party of disowning his loyalty towards that particular party and pledging allegiance to another party. This is what the Law Lexicon describes as ‘crossing the floor’.

(28) Answer: (c)

Kālidāsa was a Classical Sanskrit writer, widely regarded as the greatest poet and dramatist in the Sanskrit language. His plays and poetry are primarily based on the Indian Puranas.

(29) Answer: (b)

The Khilji dynasty or Khalji was a Muslim dynasty of Turkic origin, which ruled large parts of South Asia between 1290 and 1320. It was founded by Jalal ud din Firuz Khilji and became the second dynasty to rule the Delhi Sultanate of India. The dynasty is known for their faithlessness and ferocity, as well as their raids into the Hindu south and defending the Sultanate against the repeated Mongol invasions of India.

(30) Answer: (b)

The Indian War of Independence is an Indian nationalist history of the 1857 revolt by Vinayak Damodar Savarkar that was first published in 1909.

(31) Answer: (a)

Rowlatt Acts, (February 1919), legislation passed by the Imperial Legislative Council, the legislature of British India. The acts allowed certain political cases to be tried without juries and permitted internment of suspects without trial. Their object was to replace the repressive provisions of the wartime Defence of India Act (1915) by a permanent law. They were based on the report of Justice S.A.T. Rowlatt’s committee of 1918.

(32) Answer: (d)
A metamorphic rock is a result of a transformation of a pre-existing rock. The original rock is subjected to very high heat and pressure, which cause obvious physical and/or chemical changes. Examples of these rock types include marble, slate, gneiss, schist.

(33) Answer: (d)

(34) Answer: (a)

A supreme court was established at Fort William at Calcutta. British judges were to be sent to India to administer the British legal system that was used there.

(35) Answer: (b)

Dr. B R Ambedkar is one of the best legal minds produced by modern India. He singlehandedly struggled for the upliftment of the dalits and downtrodden low castes, giving them social equality, self respect and political empowerment. His contribution as chairman of constitution drafting committee of Constituent Assembly as earned him the epithet of “Father of Indian Constitution”.

(36) Answer: (b)

Constitution Part II has the following articles:

Article 5: Citizenship at the commencement of the Constitution.

Article 6: Rights of citizenship of certain persons who have migrated to India from Pakistan.

Article 7: Rights of citizenship of certain migrants to Pakistan.

Article 8: Rights of citizenship of certain persons of Indian origin residing outside India.

Article 9: Persons voluntarily acquiring citizenship of a foreign State not to be citizens.

Article 10: Continuance of the rights of citizenship.

Article 11: Parliament to regulate the right of citizenship by law.

(37) Answer: (a)

The Ninety-second Amendment of the Constitution of India, officially known as The Constitution (Ninety-second Amendment) Act, 2003, amended the Eighth Schedule to the
Constitution so as to include Bodo, Dogri, Maithili and Santhali languages, thereby raising the total number of languages listed in the schedule to 22.

(38) Answer: (d)

The spectral colours blue, green and red are called primary colours because all the colours can be produced by mixing these in proper proportion.

(39) Answer: (d)

Other ores are Magnetite, Siderite, Iron Pyrite.

(40) Answer: (d)

Vitamins can be classified based on their solubility.

Most are water-soluble, meaning they dissolve in water. In contrast, the fat-soluble vitamins are similar to oil and do not dissolve in water.

Fat-soluble vitamins are most abundant in high-fat foods and are much better absorbed into your bloodstream when you eat them with fat.

There are four fat-soluble vitamins in the human diet: Vitamin A, Vitamin D, Vitamin E, Vitamin K.

(41) Answer: (d)

(42) Answer: (a)

Roger Federer achieved his record eighth Wimbledon and 19th Grand Slam men's singles title, defeating Marin Čilić in the final, 6–3, 6–1, 6–4.[2] Federer thus became the only male player to win the Wimbledon singles title eight times.

(43) Answer: (a)

The G20 Summit 2017 was held in the Free and Hanseatic City of Hamburg, Germany. More than twenty Heads of State or Government as well as representatives of international organisations met at the Messehallen Convention Centre. It was the 12th G-20 Summit. The theme of this year's summit was 'shaping an interconnected world'.

(44) Answer: (b)
The Group of 7 (G7) is a group consisting of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States. These countries represent more than 64% of the net global wealth ($263 trillion) and all have a very high Human Development Index. The G7 countries also represent 46% of the global GDP evaluated at market exchange rates and 32% of the global purchasing power parity GDP.

(45) Answer: (c)

Exercise Malabar is a trilateral naval exercise involving the United States, Japan and India as permanent partners. Originally a bilateral exercise between India and the United States, Japan became a permanent partner in 2015. Past non-permanent participants are Australia and Singapore. The annual Malabar series began in 1992 and includes diverse activities, ranging from fighter combat operations from aircraft carriers through Maritime Interdiction Operations Exercises.

(46) Answer: (b)

(47) Answer: (a)

\[
\begin{align*}
M + 1 &= N \\
O + 1 &= P \\
T + 1 &= U \\
H + 1 &= I \\
E + 1 &= F \\
R + 1 &= S
\end{align*}
\]

Similarly,

\[
\begin{align*}
Z + 1 &= A \\
E + 1 &= F \\
N + 1 &= O \\
I + 1 &= J \\
T + 1 &= U \\
H + 1 &= I
\end{align*}
\]

(48) Answer: (a)
W -3= T
A -3= X
Y -3= V
I -3= F
N -3= K

Similarly,
L -3= I
B -3= Y
U -3= R
K -3= H

(49) Answer: (b)

Except Geology, all others are related with health and disease.

(50) Answer: (c)

T -3=Q, Q -3= N, N -3= K, K -3= H
M +1= N, N +1= O, O +1= P, P +1= Q
J +2= L, L +2= N, N +2= P, P +2= R

(51) Answer: (c)

(52) Answer: (b)

54 Ans. D.
Explanation:
Number of person who like only milk = 75 - 45 = 30
Number of person who like only coffee = 45 - 20 = 25

(54) Answer: (a)

462 => 264

(55) Answer: (a)
(56) Answer: (d)

Except 'Sweet', all others are senses.

(57) Answer: (a)

Except 'Guwahati', all others are capitals of Indian States.

(58) Answer: (a)

(59) Answer: (d)

(60) Answer: (b)

An input device is any hardware device that sends data to a computer, allowing you to interact with and control the computer. The picture shows a Logitech trackball mouse, an example of an input device. The most commonly used or primary input devices on a computer are the keyboard and mouse.

(61) Answer: (a)

Fortran: it is known as formula translation. It is used for scientific application.

(62) Answer: (b)

8 bit = 1 byte

1024 Byte = 1 KB (Kilo Byte)

1024 KB = 1 MB (Mega Byte)

1024 MB = 1 GB (Giga Byte)

1024 GB = 1 TB (Tera Byte)

1024 TB = 1 PB (Peta Byte)

1024 PB = 1 EB (Exa Byte)

1024 XB = 1 ZB (Zeta Byte)

1024 ZB = 1 YB (Yota Byte)

(63) Answer: (d)
HDD- Hard Disk Drive

(64) Answer: (b)

EEPROM - (electrically erasable programmable read-only memory). EEPROM is a special type of PROM that can be erased by exposing it to an electrical charge.

(65) Answer: (c)

RAM is referred to as volatile memory and is lost when the power is turned off. It also known as read/write memory as information can be read from and written onto it. The two main types of RAM are Static RAM and Dynamic RAM.

(66) Answer: (c)

Different types of network are: LAN, MAN and WAN.

A LAN (local area network) is a group of computers and network devices connected together, usually within the same building. By definition, the connections must be high speed and relatively inexpensive (e.g., token ring or Ethernet).

A MAN (metropolitan area network) is a larger network that usually spans several buildings in the same city or town.

A WAN (wide area network), in comparison to a MAN, is not restricted to a geographical location, although it might be confined within the bounds of a state or country. A WAN connects several LANs, and may be limited to an enterprise (a corporation or an organization) or accessible to the public. The technology is high speed and relatively expensive. The Internet is an example of a worldwide public WAN.

A personal area network (PAN) is a computer network used for data transmission amongst devices such as computers, telephones, tablets and personal digital assistants.

(67) Answer: (a)

NIBBLE - Combination of four bits

68 Ans. B.

Explanation:
3.333 + 33.3 + 3.3 + 333.3 = 3.33
3.333 + 33.3 + 3.3 + 333.3 + 3.33 = ?
? = 376.563

69 Ans. D.
Explanation:
1620 × 2 = ? × 4860
? = 3240 ÷ 4860
? = 2/3

70 Ans. D.
Explanation:
2a + 4 and a + 2 are complementary so
2a + 4 + a + 2 = 90
3a + 6 = 90
3a = 90 – 6
3a = 84
a = 28 degree

71. Ans. A.
Explanation:
Let volumes = x, 3x
Let radius = 2y, 3y
\[
\frac{\text{Volume}_1}{\text{Volume}_2} = \frac{\frac{1}{3} \pi r_1^2 h_1}{\frac{1}{3} \pi r_2^2 h_2}
\]
\[
\frac{x}{3x} = \frac{2y \times 2y \times h_1}{3y \times 3y \times h_2}
\]
h1:h2 = 3:4

72. Ans. C.
Explanation:
25% of X = Y% of 350
\[
\frac{X \times 25}{100} = \frac{Y \times 350}{100}
\]
X:Y = 14:1
73 Ans. B.
Explanation:
Let the five consecutive even number = x, x+2, x+4, x+6, x+8
Average = (x, x+2, x+4, x+6, x+8)/5
24 × 5 = 5x + 20
120 – 20 = 5x
5x = 100
x = 20
Difference between the largest and the smallest number = 28 – 20
= 8

74 Ans. D.
Explanation:
Relative speed = D/T
3 + 4 = 35/T
T = 35/7
T = 5 hour
7 AM + 5 hours = 12 PM

75 Ans. A.
Explanation:
Perimeter = 18cm
3 × side = 18
Side = 6 cm
Area = √3/4 × (Side)²
Area = √3/4 × 6 × 6
Area = 9√3

76. Ans. C.
Explanation:
Total students = 259
Boys = 259 × 3/7 = 111, girls = 259 × 4/7 = 148
Difference = 148 – 111
= 37

77. Ans. A.
Explanation:
\[
\frac{m_1 \times h_1 \times d_1}{w_1} = \frac{m_2 \times h_2 \times d_2}{w_2}
\]
\[
\frac{20 \times 10 \times 8}{1} = \frac{10 \times 8 \times x}{1} \times \frac{1}{2}
\]
\[x = 10 \text{ days}\]

78. Ans. C.
Explanation:
The largest number of 4 digit is 9999
When it is divided by 49 reminder = 4
So the number = 9999 – 4 = 9996

79. Ans. D.
Explanation:
Let the number = 7x, 8x
LCM \times HCM = 1^{\text{st}} \text{ number} \times 2^{\text{nd}} \text{ number}
392 \times 7 = 7x \times 8x
x^2 = 49
x = 7
Largest number = 7 \times 8 = 56

80. Ans. B.
Explanation:
LCM of 16, 18, 24 and 30 is 720.
The number = 720

81. Ans. B.
Explanation:
150m = 200w
75m = 100w
Milk for 75 men is remaining.

82. Ans. C.
Explanation:
\[ \% \text{ change} = 8 - 10 + \frac{10 \times -8}{100} \]
\[ \% \text{ change} = -2 - .8 \]
\[ \% \text{ change} = \text{decrease} 2.8\% \]

83 Ans. A.
Explanation:
\[ 16! = 16 \times 15 \times 14 \times 13 \times 12 \times 11 \times 10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 \]
\[ = 5 \times 2 \times 10 \times 5 \times 2 \times 8 \times 3 \times 14 \times 13 \times 12 \times 11 \times 9 \times 8 \times 7 \times 6 \times 4 \times 3 \times 1 \]
\[ = 1000 \times 8 \times 3 \times 14 \times 13 \times 12 \times 11 \times 9 \times 8 \times 7 \times 6 \times 4 \times 3 \times 1 \]
\[ = 3 \text{ zeroes} \]

84 Ans. C.
Explanation:
\[ 7 \div 2 + 7.5 = 11 \]
\[ 3.5 + 7.5 = 11 \]

85 Ans. D.
Explanation:
\[ S_1 = 150 \text{ km/h}, \quad S_2 = 150 \times 80\% = 120 \text{ km/h} \]
\[ T = \frac{D}{S} \]
\[ \frac{20}{60} = \frac{D}{120} - \frac{D}{150} \]
\[ \frac{1}{3} = \frac{5D-4D}{600} \]
\[ D = 200 \text{ km.} \]

86 Ans. C.
Explanation:
Hands make 360 degree in 12 hours so they make \(360/12 = 30\) degree in one hour.
Hands make \(30 \times 4 = 120\) degree at 8:00.
87 Ans. D.
Explanation:
x + y = 20
2x + 2y = 40 ....1
2y - x = 4 ..... 2
Equation 1 – equation 2
3x = 36
x = 12
y = 8
2y = 2 × 8 = 16

88 Ans.
Explanation:
Sin 60° = h/100√3
√3/2 = h/100√3
h = 150 m

89 Ans. C.
Explanation:
Tap A, B and C ‘s 1 hour work = \frac{1}{8} + \frac{1}{6} - \frac{1}{4}
= \frac{3 + 4 - 6}{24}
= 1/24
So they can fill the tank in 24 hours

90 Ans. B.
Explanation:
20% = 144 Rs.
100% = 144 / 20% × 100%
= 720 Rs.